UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 40-F

¨ REGISTRATION STATEMENT PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

OR

x ANNUAL REPORT PURSUANT TO SECTION 13(a) OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2020 **Commission File Number 001-15144**

TELUS Corporation

(Exact Name of Registrant as specified in its charter)

British Columbia, Canada
(Province or other jurisdiction of incorporation or organization)

4812
(Primary Standard Industrial Classification Code Number (if applicable))

7th Floor – 510 West Georgia Street
Vancouver, British Columbia V6B 0M3, Canada
(604) 697-8044
(Address and telephone number of Registrant's principal executive offices)

CT Corporation System, 28 Liberty Street
New York, New York 10005
(212) 590-9200
(Name, address (including zip code) and telephone number (including area code) of agent for service in the United States)

Securities registered pursuant to section 12(b) of the Act.

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Shares	**TU**	**New York Stock Exchange**

Securities registered or to be registered pursuant to Section 12(g) of the Act.

None
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None
(Title of Class)

For annual reports, indicate by check mark the information filed with this Form:
x Annual information form x Audited annual financial statements

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2020:

1,291,392,613 Common Shares

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files).

Yes x No ¨

Indicate by check mark whether the Registrant is an emerging growth company as defined in Rule 12b-2 of the Exchange Act.
Emerging Growth Company ¨

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

¨

†The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the Registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

x

This annual report on Form 40-F shall be incorporated by reference into or as an exhibit to, as applicable, each of the following of the Registrant's Registration Statements under the Securities Act of 1933, as amended: Form S-8s (File Nos. 333-125486 and 333-181463), Form F-3D (File No. 333-232967), and Form F-10 (File No. 333-238061).

TABLE OF CONTENTS

CONTROLS AND PROCEDURES	1
IDENTIFICATION OF THE AUDIT COMMITTEE	1
AUDIT COMMITTEE FINANCIAL EXPERT	1
CODE OF ETHICS	2
PRINCIPAL ACCOUNTANT FEES AND SERVICES	2
OFF-BALANCE SHEET ARRANGEMENTS	3
TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS	3
MINE SAFETY DISCLOSURE	3
SUMMARY OF SIGNIFICANT DIFFERENCES FROM NYSE CORPORATE GOVERNANCE RULES	3
UNDERTAKING AND CONSENT TO SERVICE OF PROCESS	4
EXHIBIT INDEX	5
SIGNATURES	6

CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Based on the evaluation by TELUS Corporation ("TELUS" or the "Registrant") as of December 31, 2020 of the effectiveness of the design and operation of the Registrant's disclosure controls and procedures under the supervision of the Audit Committee, including the Registrant's Chief Executive Officer and Chief Financial Officer, the Chief Executive Officer and Chief Financial Officer have concluded that the Registrant's disclosure controls and procedures as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act") are effective to a reasonable level of assurance to ensure that information required to be disclosed by the Registrant in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the United States Securities and Exchange Commission's (the "SEC") rules and forms, and to ensure that information required to be disclosed by the Registrant in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Registrant's management, including the Registrant's Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

It should be noted that while TELUS' Chief Executive Officer and Chief Financial Officer believe that TELUS' disclosure controls and procedures provide a reasonable level of assurance that they are effective, they do not expect that TELUS' disclosure controls and procedures or internal control over financial reporting will prevent all errors and fraud. A control system, no matter how well conceived or operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

Management's Annual Report on Internal Control Over Financial Reporting

The report of management on our internal control over financial reporting is located under the heading "Report of Management on Internal Control Over Financial Reporting" in our audited consolidated financial statements, which are filed as Exhibit 99.4 to this annual report on Form 40-F, and is incorporated by reference herein.

Attestation Report of Independent Registered Public Accounting Firm

The attestation report on our internal control over financial reporting is located under the heading "Report of Independent Registered Public Accounting Firm" in our audited consolidated financial statements, which are filed as Exhibit 99.4 to this annual report on Form 40-F, and is incorporated by reference herein.

Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the above evaluation that occurred during the period covered by this annual report on Form 40-F that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

IDENTIFICATION OF THE AUDIT COMMITTEE

TELUS has a separately designated standing Audit Committee established in accordance with section 3(a)(58)(A) of the Exchange Act. The current members of the Audit Committee are David Mowat (Chair), Christine Magee and Denise Pickett. All members of the Audit Committee are "independent" as such term is defined under applicable securities laws and applicable New York Stock Exchange ("NYSE") rules.

AUDIT COMMITTEE FINANCIAL EXPERT

The Board of Directors (the "Board") of TELUS has determined that David Mowat, the Audit Committee Chair, is the "audit committee financial expert" as such term is defined by U.S. securities laws and "independent" as noted

above. The information contained under the heading "Audit Committee" starting on page 28 of TELUS' year-end 2020 Annual Information Form, filed as Exhibit 99.3 to this annual report on Form 40-F, is incorporated by reference herein.

CODE OF ETHICS

The Registrant has adopted a Code of Ethics and Conduct (the "Code") that applies to all directors, officers, including the Chief Executive Officer and the Chief Financial Officer, and employees. The Code has been posted on the Registrant's Internet website at https://www.telus.com/en/about/policies-and-disclosures/code-of-ethics-and-conduct. The Code is also available to any person, upon request, without charge by contacting TELUS Investor Relations by telephone at 1-800-667-4871 or by mail at 510 W. Georgia Street, 8th Floor, Vancouver, B.C. V6B 0M3**.** The Code was amended in November 2019 to make minor clarifications to existing provisions.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table is a summary of billing by Deloitte LLP, as external auditor of TELUS (the "External Auditor"), during the period from January 1, 2020 to December 31, 2020 (all amounts are in Canadian dollars):

Type of work	$ (millions)	%
Audit fees[(1)]	2.415	27.2
Audit-related fees[(2)]	5.810	65.4
Tax fees[(3)]	0.405	4.6
All other fees[(4)]	0.247	2.8
Total	**8.877**	**100.0**

(1) Includes fees for services rendered by Deloitte in relation to the audit and review of our financial statements.
(2) Includes fees for audits in relation to our statutory and regulatory filings, audits and reviews of subsidiaries, pension-related audits, customer required reviews and translation services rendered by Deloitte in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by Deloitte that were not in relation to the audit or review of our financial statements, such as Board Effectiveness Assessment, M&A Due Diligence and other Specified Procedures.

The following table is a summary of billing by the External Auditor, during the period from January 1, 2019 to December 31, 2019 (all amounts are in Canadian dollars):

Type of work	$ (millions)	%
Audit fees[(1)]	2.776	38.7
Audit-related fees[(2)]	4.038	56.4
Tax fees[(3)]	0.060	0.8
All other fees[(4)]	0.296	4.1
Total	**7.170**	**100.0**

(1) Includes fees for services rendered by the External Auditor in relation to the audit and review of our financial statements.
(2) Includes fees for audits and reviews of subsidiaries, service organization control reports, pension-related audits and translation services that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by the External Auditor that were not in relation to the audit or review of our financial statements, such as the Human Capital Consulting Engagement and Diversity Benchmarking report.

All requests for non-prohibited audit, audit-related and non-audit services provided by the External Auditor and its affiliates to TELUS are required to be pre-approved by the Audit Committee of the Board. To enable this, TELUS has implemented a process by which all requests for services involving the External Auditor are routed for review by the VP Risk Management and Chief Internal Auditor to validate that the requested service is a non-prohibited service and to verify that there is a compelling business reason for the request. If the request passes this review, it is then forwarded to the Chief Financial Officer for further review. Pending the Chief Financial Officer's affirmation, the request is then presented to the Audit Committee for its review, evaluation and pre-approval or denial at its next scheduled quarterly meeting. If the timing of the request is urgent, it is provided to the Audit Committee Chair for his review, evaluation and pre-approval or denial on behalf of the Audit Committee (with the Audit Committee's review at the next scheduled quarterly meeting). Throughout the year, the Audit Committee monitors the actual versus approved expenditure for each of the approved requests. During the fiscal year ended December 31, 2020, the Audit Committee did not approve any of the fees captioned in the table above subject to waiver of pre-approval provisions set forth in Rule 2-01(c)(7)(i)(C) of Regulation S-X.

OFF-BALANCE SHEET ARRANGEMENTS

The Registrant has no off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on the financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The information provided under the heading "Commitments and contingent liabilities - Contractual obligations as at December 31, 2020" set forth on page 64 of the Management's Discussion and Analysis filed as Exhibit 99.4 to this annual report on Form 40-F, is incorporated by reference herein.

MINE SAFETY DISCLOSURE

Not applicable.

SUMMARY OF SIGNIFICANT DIFFERENCES FROM NYSE CORPORATE GOVERNANCE RULES

A summary of significant ways in which corporate governance practices followed by TELUS differ from the corporate governance practices required to be followed by U.S. domestic companies under the New York Stock Exchange's Listing Standards (disclosure required by section 303A.11 of the NYSE Listed Company Manual) is available on the Registrant's corporate governance website at https://www.telus.com/en/about/investor-relations/corporate-governance/statement-of-our-governance-practices.

UNDERTAKING AND CONSENT TO SERVICE OF PROCESS

A. Undertaking

The Registrant undertakes to make available, in person or by telephone, representatives to respond to inquiries made by the SEC staff, and to furnish promptly, when requested to do so by the SEC staff, information relating to: the securities registered pursuant to Form 40-F; the securities in relation to which the obligation to file an annual report on Form 40-F arises; or transactions in said securities.

B. Consent to Service of Process

The Registrant has previously filed with the SEC a Form F-X in connection with the class of securities in relation to which the obligation to file this annual report on Form 40-F arises.

EXHIBIT INDEX

The following documents are filed as exhibits to this annual report on Form 40-F:

Exhibit Number	Document
99.1	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act
99.2	Certifications of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act
99.3	Annual Information Form for the year ended December 31, 2020, dated February 11, 2021

99.4	Audited Consolidated Financial Statements as at and for the years ended December 31, 2020 and 2019 and Management's Discussion and Analysis
99.5	Consent of Independent Registered Public Accounting Firm
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Scheme Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Scheme Definition Linkbase
101.LAB	XBRL Taxonomy Extension Scheme Label Linkbase
101.PRE	XBRL Taxonomy Extension Scheme Presentation Linkbase

SIGNATURES

Pursuant to the requirements of the Exchange Act, the Registrant certifies that it meets all of the requirements for filing on Form 40-F and has duly caused this annual report to be signed on its behalf by the undersigned, thereto duly authorized.

Registrant: TELUS Corporation

By: */s/ Andrea Wood*
Andrea Wood
Chief Legal and Governance Officer

Date: February 11, 2021

Exhibit 99.1

Certification

I, Darren Entwistle, certify that:

1. I have reviewed this annual report on Form 40-F of TELUS Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: February 11, 2021

/s/ Darren Entwistle
Darren Entwistle
President and Chief Executive Officer

Certification

I, Doug French, certify that:

1. I have reviewed this annual report on Form 40-F of TELUS Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the issuer as of, and for, the periods presented in this report;

4. The issuer's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the issuer and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the issuer's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the issuer's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the issuer's internal control over financial reporting; and

5. The issuer's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the issuer's auditors and the audit committee of the issuer's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the issuer's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the issuer's internal control over financial reporting.

Date: February 11, 2021

/s/ Doug French
Doug French
Executive Vice President and Chief Financial Officer

Exhibit 99.2

Certifications

Pursuant to 18 U.S.C. §1350, each of the undersigned officers of TELUS Corporation ("TELUS") hereby certifies that to his knowledge, (a) the annual report for the period ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and (b) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of TELUS.

Date: February 11, 2021

/s/ Darren Entwistle
Darren Entwistle
President and Chief Executive Officer

Date: February 11, 2021

/s/ Doug French
Doug French
Executive Vice President and Chief Financial Officer

Exhibit 99.3

Annual Information Form for the year ended December 31, 2020, dated February 11, 2021

[previously filed on SEDAR]

TELUS Corporation
Annual Information Form for the year ended
December 31, 2020

February 11, 2021



---

1. CAUTION REGARDING FORWARD-LOOKING STATEMENTS

The terms *TELUS, the Company, we, us* and *our* refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries.

This document contains forward-looking statements about expected events and our financial and operating performance. Forward-looking statements include any statements that do not refer to historical facts. They include, but are not limited to, statements relating to our objectives and our strategies to achieve those objectives, our targets, outlook, updates, our plans and expectations regarding the impact of the COVID-19 pandemic and responses to it, and our multi-year dividend growth program. Forward-looking statements are typically identified by the words assumption, goal, guidance, objective, outlook, strategy, target and other similar expressions, or future or conditional verbs such as *aim*, *anticipate*, *believe*, *could*, *expect*, *intend*, *may*, *plan*, *predict*, *seek*, *should*, *strive* and *will*. These statements are made pursuant to the "safe harbour" provisions of applicable securities laws in Canada and the United States *Private Securities Litigation Reform Act of 1995* .

By their nature, forward-looking statements are subject to inherent risks and uncertainties and are based on assumptions, including assumptions about future economic conditions and courses of action. These assumptions may ultimately prove to have been inaccurate and, as a result, our actual results or events may differ materially from expectations expressed in or implied by the forward-looking statements. Our general outlook and assumptions for 2021 are presented in *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* in the 2020 annual Management's discussion and analysis (MD&A).

Risks and uncertainties that could cause actual performance or events to differ materially from the forward-looking statements made herein and in other TELUS filings include, but are not limited to, the following:

- The COVID-19 pandemic including its impacts on our customers, suppliers and vendors, our team members and our communities, as well as changes resulting from the pandemic to our business and operations including to the demand for and supply of the products and services that we offer and the channels through which we offer them.

- Regulatory decisions and developments including: changes to our regulatory regime (the timing of announcement or implementation of which are uncertain) or the outcomes of proceedings, cases or inquiries relating to its application, including but not limited to those set out in *Section 9.4 Communications industry regulatory developments and proceedings* in the 2020 annual MD&A, such as the potential for government intervention to further increase competition, for example, through mandated wholesale access; the potential for additional government intervention on pricing, including the March 2020 announcement by the federal government (reiterated in June 2020) targeting a 25% price reduction over a two-year period by the national wireless carriers in wireless plans using between two to six GB of data; federal and provincial consumer protection legislation and regulation including the introduction by the federal government of Bill C-11, the *Digital Charter Implementation Act, 2020*, which, aims to *give consumers new rights and imposes new monetary penalties for non-compliance* ; amendments to existing federal legislation; potential threats to unitary federal regulatory authority over communications in Canada; potential threats to the CRTC's ability to enforce the *Wholesale Code*, which aims to ensure the fair treatment by vertically integrated firms of rival broadcasting distributors and programming services; regulatory action by the Competition Bureau or other regulatory agencies; spectrum and compliance with licences, including our compliance with licence conditions, changes to spectrum licence fees, spectrum policy determinations such as restrictions on the purchase, sale, subordination and transfer of spectrum licences, the cost, availability and timing of spectrum, and ongoing and future consultations and decisions on spectrum licensing and policy frameworks, auctions and allocation; the impact on us and other Canadian telecommunications carriers of government or regulatory actions with respect to certain countries or suppliers, including U.S. federal regulations pertaining to certain technology transactions deemed to constitute national security risks and the imposition of additional licence requirements on the export, re-export and transfer of goods, services and technology to Huawei Technologies Co. Ltd. and its non-U.S. affiliates, and decisions of other foreign governments, which could result in a general shortage of chip sets and other equipment; restrictions on non-Canadian ownership and control of the common shares of TELUS Corporation (Common Shares) and the ongoing monitoring of and compliance with such restrictions; unanticipated changes to the current copyright regime; and our ability to comply with complex and changing regulation of the healthcare and medical devices industry in the jurisdictions in which we operate, including as an operator of health clinics. The jurisdictions in which we operate, as well as the contracts that we enter into (particularly those of TELUS International (Cda) Inc.'s (TELUS International or TI) business), require us to comply with or facilitate our clients' compliance with numerous, complex and sometimes conflicting legal regimes, both domestically and internationally. See TELUS International financial performance which impacts our financial performance.
- Competitive environment including: our ability to continue to retain customers through an enhanced customer service experience that is differentiated from our competitors, including through the deployment and operation of evolving wireless and wireline infrastructure; intense wireless competition, including the ability of industry competitors to successfully combine a mix of internet services and, in some cases, wireless services under one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services; the success of new products, services and supporting systems, such as home automation security and Internet of Things (IoT) services for internet-connected devices; wireline voice and data competition, including continued intense rivalry across all services among wireless and wireline telecommunications companies, cable companies, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on current and future mobile phone average billing per subscriber per month (ABPU), mobile phone average revenue per subscriber per month (ARPU), cost of acquisition, cost of retention and churn rate for all services, as do customer usage patterns, increased data bucket sizes or flat-rate pricing trends for voice and data, such as our Peace of Mind™ plans and comparable plans, inclusive rate plans for voice and data and availability of Wi-Fi networks for data; mergers and acquisitions of industry competitors; pressures on internet and TV ARPU and churn rate resulting from market conditions,

government actions and customer usage patterns; residential voice and business network access line losses; subscriber additions and retention volumes, and associated costs for wireless, TV and internet services; our ability to obtain and offer content on a timely basis across multiple devices on wireless and TV platforms at a reasonable cost as content costs per unit continue to grow; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services, and timely and effective enforcement of related regulatory safeguards; TI's ability to compete with professional services companies that offer consulting services, information technology companies with digital capabilities, and traditional contact center and business process outsourcing companies that are expanding their capabilities to offer higher-margin and higher-growth digital services; in our TELUS Health business, our ability to compete with other providers of electronic medical records and pharmacy management products, claims adjudicators, systems integrators and health service providers including those that own a vertically integrated mix of health services delivery, IT solutions, and related services, global providers that could achieve expanded Canadian footprints, and in the provision of virtual healthcare services, preventative health services and personal emergency response services; and in our TELUS Agriculture business, while we maintain a broad solution set as compared to other agriculture technology providers, our ability to compete with focused software and IoT competitors.
- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice services (local and long distance) resulting from impacts of OTT applications and wireless substitution; a declining overall market for TV services, including as a result of content piracy and signal theft, a rise in OTT direct-to-consumer video offerings and virtual multichannel video programming distribution platforms; the increasing number of households that have only wireless and/or internet-based telephone services; potential declines in mobile phone ABPU and ARPU as a result of, among other factors, substitution by messaging and OTT applications; substitution by increasingly available Wi-Fi services; and disruptive technologies, such as OTT IP services, including software-defined networks in the business market, that may displace or cause us to reprice our existing data services.

- Challenges to our ability to deploy technology including: high subscriber demand for data that challenges wireless networks and spectrum capacity levels and may be accompanied by increases in delivery cost; our reliance on information technology and our ability to streamline our legacy systems; the roll-out and evolution of wireless broadband technologies and systems, including video distribution platforms and telecommunications network technologies (broadband initiatives, such as fibre-to-the-premises (FTTP), wireless small-cell deployment, 5G wireless and availability of resources and our ability to build out adequate broadband capacity); our reliance on wireless network access agreements, which have facilitated our deployment of wireless technologies; our choice of suppliers and those suppliers' ability to maintain and service their product lines, which could affect the success of upgrades to, and evolution of, technology that we offer; supplier limitations and concentration and market power for products such as network equipment, TELUS TV® and wireless handsets; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data and our ability to utilize spectrum we acquire; deployment and operation of new wireline broadband network technologies at a reasonable cost and the availability and success of new products and services to be rolled out using such network technologies; network reliability and change management; and our deployment of self-learning tools and automation that may change the way we interact with customers.
- Capital expenditure levels and potential outlays for spectrum licences in auctions or purchases from third parties , affect and are affected by: our broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing deployment of newer wireless technologies, including wireless small cells to improve coverage and capacity; investments in network resiliency and reliability, including to address changes in usage resulting from restrictions imposed in response to COVID-19; the allocation of resources to acquisitions and future wireless spectrum auctions held by Innovation, Science and Economic Development Canada (ISED), including the 3500 MHz spectrum auction scheduled to take place in June 2021 and the millimetre wave spectrum auction, which the Minister of Innovation, Science and Industry stated is expected to commence in 2021, but we believe may not take place until 2022 or later, and the announcement of a formal consultation on the auctioning of the 3800 MHz spectrum, expected to take place in 2023. Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results or by changes to our regulatory environment.
- Operational performance and business combination risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations in a timely manner; our ability to manage the requirements of large enterprise deals; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations (such as our ability to successfully complete and integrate acquisitions into our operations and culture, complete divestitures or establish partnerships in a timely manner and realize expected strategic benefits, including those following compliance with any regulatory orders); our ability to identify and manage new risks inherent in new service offerings that we may provide, including as a result of acquisitions, which could result in damage to our brand, our business in the relevant area or as a whole, and additional exposure to litigation or regulatory proceedings; and our ability to effectively manage our infrastructure and team member expansion.
- Data protection including risks that malfunctions or unlawful acts could result in unauthorized access to, change, loss, or distribution of data, which may compromise the privacy of individuals and could result in financial loss and harm to our reputation and brand.
- Security threats including intentional damage or unauthorized access or attempted access to our physical assets or our IT systems and networks, which could prevent us from providing reliable service or result in unauthorized access to our information or that of our customers.
- Ability to successfully implement cost reduction initiatives and realize planned savings, net of restructuring and other costs, without losing customer service focus or negatively affecting business operations. Examples of these initiatives are: our operating efficiency and effectiveness program to drive improvements in financial results; business integrations; business product simplification; business process automation and outsourcing; offshoring and reorganizations; procurement initiatives; and real estate rationalization.

- Foreign operations and our ability to successfully manage operations in foreign jurisdictions, including managing risks such as currency fluctuations and exposure to various economic, international trade, political and other risks of doing business globally.
- Business continuity events including: our ability to maintain customer service and operate our network in the event of human error or human-caused threats, such as cyberattacks and equipment failures that could cause various degrees of network outages; technical disruptions and infrastructure breakdown; supply chain disruptions, delays and economics, including as a result of government restrictions or trade actions; natural disaster threats; extreme weather events; epidemics; pandemics (including the ongoing COVID-19 pandemic); political instability in certain international locations; information security and privacy breaches, including data loss or theft of data; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.
- TELUS International's financial performance which impacts our financial performance . Factors that may affect TI's financial performance are described in TI's public filings available on SEDAR and EDGAR and may include: intense competition from companies offering similar services; TI's ability to grow and maintain its profitability as changes in technology and client expectations outpace service offerings and internal tools and processes; TI maintaining its culture as it grows; effects of economic and geopolitical conditions on its clients' businesses and demand for its services; a significant portion of TI's revenue being dependent on a limited number of large clients; continued consolidation in many of the verticals in which TI offers services could result in the loss of a client; attracting and retaining qualified team members to support its operations; adverse impacts of COVID-19 on TI's business and financial results; TI's acquisition of Lionbridge AI remaining subject to review by the Committee on Foreign Investment in the United States; TI's business being adversely affected if certain independent contractors were classified as employees, and the costs associated with defending, settling or resolving any future lawsuits (including demands for arbitration) relating to the independent contractor classification; TI's ability to successfully identify, complete, integrate and realize the benefits of acquisitions and manage associated risks; cyberattacks or unauthorized disclosure resulting in access to sensitive or confidential information and data of its clients or their end customers could have a negative impact on its reputation and client confidence; business development not developing in ways it currently anticipates due to negative public reaction to offshore outsourcing, proposed legislation or otherwise; ability to meet client expectations regarding its content moderation services being adversely impacted due to factors beyond its control and its content moderation team members may suffer adverse emotional or cognitive effects in the course of performing their work; and TI's lack of history operating as a separate, publicly traded company. The price of the subordinate voting shares of TI (TI Subordinate Voting Shares) may be volatile and is likely to fluctuate due to a number of factors beyond its control, including actual or anticipated changes in profitability; general economic, social or political developments; changes in industry conditions; changes in governance regulation; inflation; the general state of the securities markets; and other material events. TI may choose to publicize targets or provide other guidance regarding its business and it may not achieve such targets. Failure to do so could results in a reduction in the trading price of the TI Subordinate Voting Shares. A reduction in the trading price of the TI Subordinate Voting Shares due to these or other factors could result in a reduction in the fair value of TI multiple voting shares held by TELUS.

- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry (including retention of team members leading recent acquisitions in emerging areas of our business), the level of our employee engagement, our ability to maintain our unique culture as we grow, challenges to the classification of the employees of TI's Lionbridge AI business as independent contractors, and the health of our team.
- Financing and debt requirements including: our ability to carry out financing activities, refinance our maturing debt, lower our net debt to EBITDA ratio to our objective range given the cash demands of spectrum auctions and/or maintain investment grade credit ratings in the range of BBB+ or the equivalent. Our business plans and growth could be negatively affected if existing financing is not sufficient to cover our funding requirements.
- Lower than planned free cash flow could constrain our ability to invest in operations, reduce leverage or return capital to shareholders, and could affect our ability to sustain our dividend growth program through 2022. This program may be affected by factors such as the competitive environment, economic performance in Canada, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, acquisitions, the management of our capital structure, regulatory decisions and developments, and business continuity events. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors based on our financial position and outlook. Common Shares may be purchased under a normal course issuer bid (NCIB) if and when we implement one and if we consider it opportunistic, based on our financial position and outlook, and the market price of our Common Shares. There can be no assurance that our dividend growth program or that any NCIB will be implemented, maintained, unchanged and/or completed.
- Taxation matters including: interpretation of complex domestic and foreign tax laws by the relevant tax authorities that may differ from our interpretations; the timing and character of income and deductions, such as tax depreciation and operating expenses; tax credits or other attributes; changes in tax laws, including tax rates; tax expenses being materially different than anticipated, including the taxability of income and deductibility of tax attributes; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and changes to the interpretation of tax laws, including those resulting from changes to applicable accounting standards or the adoption of more aggressive auditing practices by tax authorities, tax reassessments or adverse court decisions impacting the tax payable by us.
- Litigation and legal matters including: our ability to successfully respond to investigations and regulatory proceedings; our ability to defend against existing and potential claims and lawsuits (including intellectual property infringement claims and class actions based on consumer claims, data, privacy or security breaches and secondary market liability), or to negotiate and execute upon indemnity rights or other protections in respect of such claims and lawsuits; and the complexity of legal compliance in domestic and foreign jurisdictions, including compliance with competition, anti-bribery and foreign corrupt practices laws.

- Health, safety and the environment including: lost employee work time resulting from illness or injury; public concerns related to radio frequency emissions; environmental issues affecting our business, including climate-related risk (such as extreme weather events and other natural hazards), waste and waste recycling, risks relating to fuel systems on our properties, changing government and public expectations regarding environmental matters and our responses; and challenges associated with epidemics or pandemics including the COVID-19 pandemic and our response to it, which may add to or accentuate these factors.
- Economic growth and fluctuations including: the state of the economy in Canada, which may be influenced by economic and other developments outside of Canada, including potential outcomes of yet unknown policies and actions of foreign governments and the ongoing COVID-19 pandemic as well as public and private sector responses to the pandemic; expectations of future interest rates; inflation; unemployment levels; effects of fluctuating oil prices; effects of low business spending (such as reducing investments and cost structure); pension investment returns, funding and solvency discount rates; fluctuations in foreign exchange rates of the currencies in the regions in which we operate; sovereign credit ratings and effects of the cost of borrowing; the impact of tariffs on trade between Canada and the U.S., and global implications of the trade dynamic between major world economies.

These risks are described in additional detail in *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* and *Section 10 Risks and risk management* in the 2020 annual MD&A. Those descriptions are incorporated by reference in this cautionary statement but are not intended to be a complete list of the risks that could affect the Company.

Many of these factors are beyond our control or our current expectations or knowledge. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also have a material adverse effect on our financial position, financial performance, cash flows, business or reputation. Except as otherwise indicated in this document, the forward-looking statements made herein do not reflect the potential impact of any non-recurring or special items or any mergers, acquisitions, dispositions or other business combinations or transactions that may be announced or that may occur after the date of this document.

Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements in this document describe our expectations, and are based on our assumptions, as at the date of this document and are subject to change after this date. Except as required by law, we disclaim any intention or obligation to update or revise any forward-looking statements.

This cautionary statement qualifies all of the forward-looking statements in this Annual Information Form.

2. TABLE OF CONTENTS

Item			Page reference		
				Incorporated by reference from the 2020 annual	
			Annual Information Form	Management's discussion and analysis[1]	Financial statements[1]
1	CAUTION REGARDING FORWARD-LOOKING STATEMENTS		2		
2	TABLE OF CONTENTS		6		
3	CORPORATE STRUCTURE				
	3.1	Name, address and incorporation	7		
	3.2	Intercorporate relationships	7		Note 28(d)
4	GENERAL DEVELOPMENT OF BUSINESS				
	4.1	Three-year history	8	7, 19. 20, 36	
5	DESCRIPTION OF BUSINESS				
	5.1	Who we are	13		
		(a) Organization	14	36	
		(b) Our strategy	14	19	
		(c) Business overview	14	7, 26, 29,38, 46, 50, 70	
		(d) Competitive environment	14	26, 88	
		(e) Corporate social responsibility	14		
		(f) Employee relations	14	29	
	5.2	Climate-related Risks and Opportunities	14		
	5.3	Risk factors	20	82	
	5.4	Regulation	20	78, 85	
6	DIVIDENDS AND DISTRIBUTIONS		20	61	
7	DESCRIPTION OF CAPITAL STRUCTURE				
	7.1	General description of capital structure	20	34, 78, 85	
	7.2	Constraints	22		
	7.3	Ratings	23	61, 63	
8	MARKET FOR SECURITIES				
	8.1	Trading price and volume	25		
	8.2	Prior sales	25		Note 26(b)
9	DIRECTORS AND OFFICERS				
	9.1	Name, occupation and security holding	25		
	9.2	Cease trade orders, bankruptcies, penalties or sanctions	27		
10	LEGAL PROCEEDINGS AND REGULATORY ACTIONS		27	109	Note 29(a)
11	INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS		27		
12	TRANSFER AGENT AND REGISTRAR		27		
13	MATERIAL CONTRACTS		28		
14	INTERESTS OF EXPERT		28		
15	AUDIT COMMITTEE		28		
16	ADDITIONAL INFORMATION		29		
APPENDIX A: TERMS OF REFERENCE FOR THE AUDIT COMMITTEE			30		

(1) As filed on SEDAR on February 11, 2021

Each Section of the Management's Discussion and Analysis for the fiscal year ended December 31, 2020 (2020 annual MD&A), referred to in this Annual Information Form (AIF) is incorporated by reference and filed on SEDAR at sedar.com. For greater certainty, notwithstanding references to TELUS' information circular, consolidated financial statements, sustainability report and the telus.com website, these documents and website are not incorporated into this AIF.

In this AIF, except where otherwise indicated, all references to dollars or $ are to Canadian dollars.

3. CORPORATE STRUCTURE

3.1 Name, address and incorporation

TELUS was incorporated under the *Company Act* (British Columbia) (the B.C. Company Act) on October 26, 1998, under the name BCT.TELUS Communications Inc. (BCT). On January 31, 1999, pursuant to a court-approved plan of arrangement under the *Canada Business Corporations Act* among BCT, BC TELECOM Inc. (BC TELECOM) and the former Alberta-based TELUS Corporation (TC), BCT acquired all of the shares of BC TELECOM and TC in exchange for common shares, and non-voting shares of BCT and BC TELECOM were dissolved. On May 3, 2000, BCT changed its name to TELUS Corporation and in February 2005, the Company transitioned under the *Business Corporations Act* (British Columbia), successor to the B.C. Company Act. On February 4, 2013, in accordance with the terms of a court approved plan of arrangement

under the *Business Corporations Act* (British Columbia), TELUS exchanged all of its issued and outstanding Non-Voting Shares into Common Shares on a one-for-one basis. On April 16, 2013, TELUS subdivided its Common Shares on a two-for-one basis. On March 17, 2020, TELUS subdivided its issued and outstanding Common Shares on a two-for-one basis.

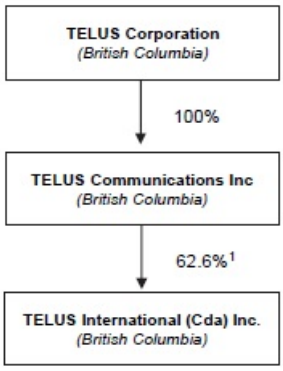
TELUS maintains its registered office at Floor 7, 510 West Georgia Street, Vancouver, British Columbia (B.C.) and its executive office at Floor 23, 510 West Georgia Street, Vancouver, B.C.

3.2 Intercorporate relationships and TELUS subsidiaries

TELUS' wireless and wireline businesses are primarily operated through TELUS Communications Inc (TCI). TELUS International (Cda) Inc. (TI) is a digital customer experience innovator that designs, builds and delivers next-generation solutions for global and disruptive brands, supporting their clients' digital transformation journeys and enabling clients to swiftly more quickly embrace next-generation digital technologies to deliver better business outcome.

As set out in Note 28(d) of the Consolidated financial statements, in February 2021, TELUS International made an initial public offering (IPO) of subordinate voting shares (TI Subordinate Voting Shares); both TELUS Corporation and a TELUS International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6 billion from the offering were used to reduce the amount of outstanding TI credit facility indebtedness and $0.2 billion (comprised of net proceeds on disposition of TI Subordinate Voting Shares by TELUS Corporation) from the offering was included in Cash and temporary investments, net.

TCI and TI are the only subsidiaries that owned assets constituting more than 10 per cent of the consolidated assets of TELUS and that generated sales and operating revenues that exceeded 10 per cent of the consolidated sales and operating revenues of TELUS for the year ended December 31, 2020. In addition, all of the assets, sales and operating revenues of TELUS' other subsidiaries (other than TCI and TI), together did not exceed 20 per cent of TELUS' total consolidated assets or 20 per cent of TELUS' total consolidated sales and operating revenues as at December 31, 2020.



[1] As of February 5, 2021 following the initial public offering of TELUS International (Cda) Inc. (TI), TELUS Communications Inc. retained approximately 67% of the combined voting interest attached to all issued and outstanding shares in TI.

4. GENERAL DEVELOPMENT OF THE BUSINESS

4.1 Three-year history

During the three-year period ended on December 31, 2020, we continued to advance our national growth strategy, guided by our six strategic imperatives.

For a review of the events and conditions that influenced our general development during 2020, and how our business has continued to evolve, please see *Section 1.2 - The environment in which we operate*, *Section 2.2 - Strategic imperatives*, as well as progress on our corporate priorities in *Section 3 - Corporate priorities* and *Section 5 – Discussion of operations* of our 2020 annual MD&A which is hereby incorporated by reference.

The following discussion relates to 2018 and 2019 events and conditions.

Strategic imperative: Focusing relentlessly on growth markets of data, IP and wireless

External wireless revenues and wireline data revenues were $13.4 billion in 2019, up $492 million or 3.8 per cent from 2018. In total, 2019 external wireless revenues and wireline data revenues combined represented 91 per cent of our consolidated revenues in 2019, up from 90 per cent in 2018. The increase in wireless network revenue reflected growth in our subscriber base, partly offset by declining mobile phone ARPU. The increase in mobile phone subscriber net additions resulted from the success of our promotions; the effects of market growth arising from a growing population, changing population demographics and an increasing number of customers with multiple devices; and continuous improvements in the speed and quality of our networks, combined with our low churn rate, which reflect our focus on customers first initiatives.

The increase in wireline data services revenue reflected growth in TELUS International's customer care and business services (CCBS), internet and third wave data services, health revenues, home and business smart technology (including security) revenues, and TV revenues. Increased CCBS revenues were primarily related to growth in business volumes resulting from expanded services for existing customers, as well as customer growth. Increased internet and third wave data service revenues were being generated by subscriber growth and higher internet revenue per customer from upgrades to faster speeds, larger data usage rate plans and rate changes. Higher health revenues were driven by expanded services for existing customers and growth in business volumes. Increased revenues from home and business smart technology (including security) were generated by business acquisitions and expanded services. The increase in TV revenues reflected subscriber growth. Growth in wireline data services revenue was partly offset by the ongoing decline in legacy wireline data service revenues.

Strategic imperative: Providing integrated solutions that differentiate TELUS from our competitors

Throughout 2018, we continued to invest in our leading-edge broadband technology, which has enabled the success of our internet, Optik TV and Pik TV offerings and business services, as well as our Mobility solutions.

- Our 4G LTE infrastructure covered 99% of Canada's population at December 31, 2019 and December 31, 2018.
- Our high-speed broadband footprint covered approximately 3.2 million households and businesses in B.C., Alberta and Eastern Quebec at December 31, 2019, including 2.22 million households and businesses covered with fibre-optic cable (representing approximately 70% of our total high-speed broadband footprint), which provided these premises with immediate access to our fibre-optic infrastructure. This is up from 1.89 million households and businesses at December 31, 2018.

In 2018, TELUS International, TELUS' global CCBS and digital services provider had more than 32,000 team members in 10 countries across North and Central America, Asia and Europe supporting customers in more than 40 languages. TELUS International offers voice and non-voice customer interaction services and designs, builds and delivers next-generation digital solutions covering digital transformation, IT lifecycle, advisory and digital consulting, risk management, and back-office support. This was provided across fast-growing technology, financial services, communications, gaming, travel/hospitality and healthcare industries.

In the third quarter of 2019, we launched TELUS Home Assistant, a platform that enables Optik TV customers the ability to control their entertainment experience hands-free using voice commands, at no additional cost.

Upon the opening of the O-Train Confederation line in Ottawa in September 2019, we commenced providing free Wi-Fi service in three downtown, underground Line 1 station's platforms and door-to-door cellular service, including through the downtown tunnel. This continuous cellular connection between stations and in the tunnel ensures that customers will not miss calls or be disconnected during their time underground.

In September 2019, we entered into a long-term arrangement with Zú, a Montreal-based organization with the mission to develop leading-edge innovative projects in the entertainment sector, to launch an experimental 5G laboratory entirely dedicated to the creative and entertainment industry.

In September 2019, we launched our TELUS IoT Shop, a self-serve online portal that enables businesses to easily purchase and manage prepaid Internet of Things (IoT) connectivity. Ideal for businesses such as start-ups and developer labs, the TELUS IoT Shop makes it easy for them to connect their IoT devices to our network.

In the fourth quarter of 2019, we launched a new Managed Detection and Response service, which provides mid-sized Canadian organizations with technology that delivers rapid detection and targeted responses to cybersecurity threats.

Strategic imperative: Building national capabilities across data, IP, voice and wireless

In February 2018, the Digital Technology Supercluster, with TELUS as the lead applicant, was one of the winners in the government of Canada's Innovation Superclusters Initiative and will receive significant funding to further develop Canada's strengths in data collection, analytics and visualization technologies for diverse industries. The Digital Technology Supercluster was officially launched in November 2018.

In April 2018, we became the first provider in Canada to offer 4K HDR content, which is available on Optik TV via Netflix and On Demand. 4K HDR dramatically enhances the picture quality of existing 4K technology by improving the colour contrast range with millions of additional colour options to each individual pixel.

In July 2018, we launched TELUS SmartHome Security and TELUS Secure Business in B.C., Alberta and Saskatchewan, with TELUS SmartHome Security also offered in Eastern Quebec. TELUS SmartHome Security provides security and automation technology for residential customers. TELUS Secure Business offers security solutions that help small businesses run safely and smoothly through a suite of integrated smart automation, intrusion monitoring and video surveillance solutions.

In August 2018, we were ranked as having the fastest overall download speeds nationally for the second year in a row according to OpenSignal's *State of Mobile Networks: Canada (August 2018)* report. Additionally, we were ranked first in LTE speeds in two key markets – Toronto and Montreal.

In August 2018, we announced the debut of Travelxp 4K HDR, a global travel and lifestyle channel, available for Optik TV customers in B.C. and Alberta. This is the first time a network broadcasting 24/7 4K HDR has been available in Canada. Customers who do not yet have 4K HDR-capable TVs can still enjoy Travelxp in 4K, HD or standard definition.

In September 2018, we unveiled our Bring-It-Back upgrade program, which allows customers to upgrade to higher-tier smartphones with lower upfront payments and, at the end of the term, choose to either return the device or repay the original Bring-It-Back program amount.

In PCMag's *Fastest Mobile Network Canada 2018* report released in September 2018, we were named as having the fastest mobile network nationally, for the second year in a row. We were also ranked as having the fastest network in certain markets across Canada, including Vancouver, Calgary, Edmonton, Winnipeg, Toronto, Ottawa, Montreal, Quebec and Halifax. Additionally, Koodo was recognized as having the best wireless plan in Canada.

In September 2018, TELUS was recognized as providing Canadians with the best mobile video experience in OpenSignal's State of Mobile Video report.

In October 2018, we launched our first LTE-M low-power wide-area (LPWA) technology deployment, which delivers a strong wireless connection to IoT (Internet of Things) devices while requiring minimal power for each transmission, helping to prolong the battery life of connected devices. It will extend the reach of our 4G LTE infrastructure further for compatible devices, penetrate deeper into buildings and underground, and enable simpler and more cost-efficient connected solutions to run efficiently on battery power for years.

In October 2018, we provided customers with an improved wireless calling experience enabling voice calls using LTE technology instead of HSPA technology while roaming in the U.S.

Through 2018, we continued to invest in our leading-edge broadband technology, which has enabled the success of our internet, Optik TV and Pik TV offerings, business services, and Mobility solutions and helped ready our network for 5G deployment. Our 4G LTE infrastructure covered 99 per cent of Canada's population at December 31, 2018.

In the J.D. Power *2018 Canadian Wireless Network Quality Study*, TELUS was ranked Highest Wireless Network Quality Performance in Ontario for four years in a row and in the West (including British Columbia, Alberta, Saskatchewan and Manitoba) for three years in a row.

In 2018, we won Ookla's Mobile Speedtest Award for fastest mobile network in Canada for the second year in a row and according to Ookla's *Speedtest Global Index* for December 2018, TELUS ranked third in the world for the fastest mobile network, while Canada as a country also ranked third fastest behind Iceland and Norway.

In 2018, we advanced our Pik TV offering which can be accessed directly from an internet browser, from Apple TV (fourth generation and above) or through our Android or iOS mobile applications, enabling streaming on computers, smartphones and tablets. Our Pik TV media box and its support for Google Play Store applications is an optional, complementary component of the Pik TV experience.

Throughout 2018, we made a series of announcements regarding the connection of additional homes and businesses to our TELUS PureFibre infrastructure, including:

- Further investments to connect additional homes and businesses in Eastern Quebec by the end of 2021. These investments were made with support from the federal government's Connect to Innovate program and the provincial government's Québec branché program. With this support, we are continuing to deploy our TELUS PureFibre network in Eastern Quebec.
- An investment within Port Moody, B.C. to connect by the end of 2020
- An investment in the city of Delta, B.C., including Tilbury and Annacis Island
- An investment in the district of North Vancouver, B.C.
- An investment within Richmond, B.C., including Steveston, to connect by the spring of 2019
- An investment within Langley City, B.C. to connect by the spring of 2019
- An investment within Princeton, B.C. to connect by the end of 2019

By the end of 2018, we had connected more than 100 communities in the Greater Quebec City and Eastern Quebec region to our TELUS PureFibre infrastructure.

In December 2018, we launched Gigabit Internet and Internet 750/750, offering 940 Mbps symmetrical download and upload speeds, and 750 Mbps symmetrical download and upload speeds, respectively. These plans are available to all TELUS PureFibre customers in Western Canada.

In Opensignal's *Mobile Network Experience Canada* report released in February 2019, we were recognized as being number one for LTE download speeds, latency and network availability, and we tied for number one for LTE upload speeds and video experience. In Opensignal's *Mobile Network Experience: Canada Report* (August 2019), we won the top spot in four awards (4G Availability, Video Experience, Download Speed Experience and Latency Experience) and tied for number one in the fifth award (Upload Speed Experience). We were also the first Canadian operator to surpass the 90% milestone in 4G Availability.

In the report *Canada: State of Mobile Networks March 2019*, published by Tutela, a Canadian independent mobile network data company, TELUS was ranked as number one for latency and tied for first place for consistent quality.

In the J.D. Power *2019 Canada Wireless Network Quality Study*, TELUS was recognized for the Highest Wireless Network Quality Performance.

In 2019, we won two Speedtest Awards from Ookla for Canada's Fastest Mobile Network and Canada's Best Mobile Coverage.

In April 2019, we announced that we were the successful bidder on 12 wireless spectrum licences in B.C., Alberta, Saskatchewan, Ontario and Quebec in the Innovation, Science and Economic Development Canada (ISED) 600 MHz wireless spectrum auction. The 600 MHz band is important for its ability to travel long distances in rural areas and infiltrate barriers to better reach in-building locations, such as elevators and parking garages, making it highly conducive to 5G deployment. The licences, acquired for $931 million ($2.35 per MHz-pop, where pop refers to the population in a licence area), equate to a national average of 11.3 MHz and will enable us to deliver enhanced mobile broadband connectivity as the industry transitions from 4G LTE to 5G. The design of the combinatorial clock auction (CCA), coupled with a 30 MHz set-aside for regional carriers (representing 43% of the spectrum at auction), led to national carriers paying a 134% premium over regional operators, and according to our analysis, the highest prices for 600 MHz spectrum in the world. Outside of Canada, set-asides are very rare, and in the few instances of CCAs with set-asides, the set-asides have represented only approximately 5% of the spectrum at auction.

During the third quarter of 2019, we obtained the use of certain AWS-4 spectrum licences from the original licensee (for approximately $1.16 per MHz-pop) and have accounted for them as intangible assets with indefinite lives; such subordination of licences has been approved by ISED. Additionally, we obtained AWS-1 and AWS-3 spectrum licences in Northern Ontario.

According to PCMag's *Fastest Mobile Network Canada 2019* report released in September 2019, we were recognized as having the fastest mobile network nationally, for the third consecutive year. We were also recognized as having the fastest network in Victoria, Calgary, Edmonton, Regina, Winnipeg, Toronto, Ottawa, Montreal, Quebec City, Saint John, Halifax and Prince Edward Island. Additionally, TELUS was recognized as having the best wireless plan in Canada.

In the fourth quarter of 2019, we built a new cell site in Ahousaht, a remote community off Tofino on the west coast of Vancouver Island, and were the first provider to bring high-speed wireless voice, text and internet service to the community.

In November 2019, we announced that, thanks to an innovation based on LTE advanced technology, we provided families and businesses from the communities of Brador, Middle Bay, Pakua Shipu, Saint-Augustin and Old Fort in Quebec's Lower North Shore with access to high-speed internet and wireless phone services.

Together with MobiledgeX, in November 2019, we announced the MobiledgeX Early Access Program, which allows developers to build, experiment and test applications and experiences using next-generation, low-latency edge computing powered by MobiledgeX.

Throughout 2019, we made a series of announcements regarding the connection of more homes and businesses to our TELUS PureFibre infrastructure, including:

- The city of Nanaimo and district of Lantzville, B.C., including the Snuneymuxw and Snaw-Naw-As Nations, to connect by the spring of 2021
- The city of Airdrie, Alberta to connect by the end of 2020
- The city of Nelson, B.C.
- A further investment in our wireless and fibre-optic infrastructure across rural communities in the Greater Quebec City and Eastern Quebec regions. This investment was made with support from the federal government's Connect to Innovate program and the provincial government's Québec branché program. With this support, we will connect 34,000 new families and businesses in 80 remote communities
- The city of St. Albert, Alberta, including neighbouring communities in Sturgeon County, to connect by the end of 2020
- The city of Prince George, B.C., including the North Side of Lheidli T'enneh First Nation's Fort George 2 reserve, to connect by the beginning of 2022
- The city of Pitt Meadows, B.C., including Katzie First Nation's IR #1 reserve, to connect by the end of the summer of 2020

Strategic imperative: Partnering, acquiring and divesting to accelerate the implementation of our strategy and focus our resources on core business

In February 2018, through our TELUS International (Cda) Inc. subsidiary, we closed an acquisition of a 65 per cent interest in Xavient Information Systems, a group of information technology consulting and software services companies with facilities in the U.S. and India. The investment was made with a view to enhancing our ability to provide complex and higher-value information technology services, improving our related sales and solutioning capabilities, and acquiring multi-site redundancy in support of other facilities. During fiscal 2020, we acquired the remaining 35% interest.

In July 2018, we acquired Medisys Health Group Inc., a leading provider of preventative healthcare and wellness services for workplaces across Canada. The total purchase price was approximately $84 million. The investment was made with a view to growing the delivery of employee-centred workplace health and wellness services. With this acquisition, TELUS Health is able to deliver employee-centred care, backed by TELUS' broadband network and supported by digital tools such as patient portals, virtual care, wellness and mental health applications, electronic prescribing, electronic benefit claims and secure messaging. The Medisys Health Group network serves as an innovation hub for next-generation technology, as well as preventative care and wellness programs, so that patient outcomes can be measured.

Throughout 2018, we completed home and business security acquisitions, including our January 2018 acquisition of the customers, assets and operations of AlarmForce Industries Inc. in B.C., Alberta and Saskatchewan. These acquisitions, combined with our growing gigabit-capable TELUS PureFibre infrastructure, were made with a view to accelerating our position in smart home and security services, and provide us with the ability to offer our customers additional services as part of a bundle.

In the fourth quarter of 2019, our TELUS International (Cda) Inc. subsidiary acquired the remaining 45% interest of Voxpro Limited.

On January 14, 2019, we acquired a company providing managed network, cloud, security and voice services for consideration consisting of cash and accounts payable and accrued liabilities of $75 million and TELUS Corporation Common Shares of $38 million. The investment was made with a view to growing our managed network, cloud, security and unified communications services.

In August 2019, we acquired a company providing custom data and program management solutions for consideration consisting of cash and accounts payable and accrued liabilities of $135 million.

In November 2019, we acquired the customers, assets and operations of ADT Security Services Canada, Inc. (ADT Canada) for approximately $700 million. This acquisition furthers our commitment to leverage the power of technology to enhance convenience, control and safety in the lives, homes and businesses of more Canadians.

Strategic imperative: Going to market as one team under a common brand, executing a single strategy

Our team works together to implement our top corporate priority: putting customers first, as we strive to consistently deliver exceptional client experiences and become the most recommended company in the markets we serve. The Commission for Complaints for Telecom-television Services (CCTS) annual reports have indicated the successful results of this strategy.

In November 2018, the CCTS issued its annual report for the 12-month period ended July 31, 2018, and TELUS continued to receive the fewest customer complaints among the national carriers, while Koodo again received the fewest complaints among the national flanker brands. TELUS, Koodo and Public Mobile were the subjects of 6.6 per cent, 2.5 per cent and 1.0 per cent of the total customer complaints accepted by the CCTS, respectively, or 10.1 per cent of total customer complaints, in aggregate, when approximately 28 per cent of Canadian wireless customers chose us as their wireless service provider.

In November 2019, the CCTS issued its annual report for the 12-month period ended July 31, 2019, and TELUS again was the subject of the fewest customer complaints among national carriers, while Koodo again was the subject of the fewest complaints among the national flanker brands. TELUS, Koodo and Public Mobile were named in 8.3%, 3.9% and 1.0% of the total customer complaints accepted by the CCTS, respectively, or 13.2% of total customer complaints, in aggregate. Additionally, TELUS had the highest rate of complaint resolution of any national carrier at 91.5%.

In 2018, we committed to a donation of $118 million to the TELUS Friendly Future Foundation to help ensure vulnerable youth thrive in our digital society through better access to technology, health and educational opportunities. Of this $118 million, we donated $101 million in 2018, including an initial donation of $100 million that was made in the third quarter of 2018 in TELUS Common Shares acquired in the market. The remainder of the committed donation was committed over a 10-year period.

We extended the reach of our Mobility for Good program in 2018 to Ontario and Alberta, and launched a pilot program in Quebec, in partnership with the Children's Aid Foundation of Canada and Fondation du Centre Jeunesse. Mobility for Good provides qualifying youth transitioning from foster care with fully subsidized smartphones and data plans from TELUS, enabling them to stay connected to their vital support networks.

In November 2018, we expanded our Internet for Good program by participating in the federal government's new Connecting Families initiative to help bridge the digital divide for Canadian families who may struggle to afford internet access. Internet for Good provides access to low-cost high-speed internet, training and tools to low-income families.

During 2018, we expanded our Health for Good program to Vancouver, Victoria and Calgary to provide healthcare to vulnerable and underserved Canadians by deploying specially equipped mobile health clinics into communities where frontline care is urgently needed. In September 2018, we announced a $5 million commitment to expand our Health for Good program nationally.

In September 2018, we were recognized for corporate social responsibility by being named to the Dow Jones Sustainability North America Index for the 18th consecutive year. Additionally, we were named to the Dow Jones Sustainability World Index for the third year in a row.

In 2018, we continued to promote safe and responsible behaviour online through the delivery of TELUS Wise digital citizenship workshops to more than 52,000 youth, adults and seniors. We also continued our partnership with the WE organization and focused on our shared goal to #EndBullying. As part of our commitment to end bullying, we ask citizens to join us in our mission to promote positive behaviour online by signing the TELUS Wise Digital Pledge.

In 2019, we expanded our Mobility for Good program to support 10,000 more youth in B.C., Alberta, Manitoba and New Brunswick. Mobility for Good provides youth transitioning out of foster care with fully subsidized smartphones and data plans to stay connected to their vital support networks.

Through our Internet for Good program and in support of the federal government's Connecting Families program, in 2019, an additional 198,000 Internet for Good offers were mailed to eligible households in B.C., Alberta and Quebec. Internet for Good offers low-income families access to low-cost high-speed internet and a computer.

We piloted our Welcome to Canada initiative in 2019, which offers our Internet and Mobility for Good programs to government-assisted refugees arriving in B.C. TELUS provides refurbished phones, wireless plans and internet service to enable refugees to stay in touch with family abroad and access support networks and employment opportunities in Canada. The program aims to ensure a warmer welcome and smoother

transition, enabling better outcomes for newcomers to Canada.

In 2019, we expanded our Health for Good program by establishing seven new strategic partnerships to deploy new mobile health clinics. Our Health for Good program funds TELUS Mobile Health Clinics, powered by TELUS Health technology, to improve the way health practitioners deliver care to the most vulnerable among us.

In 2019, we introduced our Tech for Good program to help Canadians with disabilities use smartphones and wireless devices so they can live more independent, connected lives. Currently available in B.C. and Alberta, this program is designed to help people with disabilities who require a customized solution involving assistive technology to independently access their TELUS smartphone or tablet.

At the end of 2019, close to 65,000 Canadians had participated in our Connecting for Good programs.

Close to 64,000 Canadians participated in TELUS Wise workshops in 2019, up from 52,000 in 2018. These workshops are free of charge and help foster the safe and responsible use of technology in our digital world. Approximately 88% of participants felt more empowered to stay safe online as a result of attending the workshop.

In 2019, we launched online versions of our youth workshops, enabling educators and students, especially those in rural communities, to more easily access program information.

We also continued to work with our peers in TELUS International in 2019, extending TELUS Wise messaging and resources to youth around the world, and delivering 15 workshops in other countries, including the Philippines, Bulgaria, Romania, El Salvador and Guatemala.

We launched a new workshop for teens, TELUS Wise happiness, in February 2019. In August 2019, the workshop became available online, coinciding with the start of the new school year. The workshop engages teens in grades 9 through 12 in a conversation about building and maintaining a healthy relationship with technology and offers tips on ensuring resiliency and well-being.

Throughout 2019, TELUS inspired Canadians from coast to coast to join Team #EndBullying and partnered with 2019 World Juniors Team Canada captain Maxime Comtois, who was cyberbullied after the hockey tournament and showcased The Code – a program developed in partnership between TELUS and Hockey Canada – designed specifically for the hockey community. The Code is an extension of the TELUS Wise program, offering customized education tools, resources and workshops to help hockey fans, players and families safely and respectfully navigate digital spaces.

In the second half of 2019, we launched #EndBullying All-Stars with our five Canadian Football League (CFL) partner teams. #EndBullying All-Stars is an umbrella program that promotes the importance of good sportsmanship both on the field and online, while bringing TELUS Wise workshops to local schools.

During 2019, over 40,000 global volunteers participated in our TELUS Days of Giving and collectively contributed 1.1 million volunteer hours. Both results represent year-over-year increases of 10%.

In the third quarter of 2019, we launched our integrated Pride campaign under our TELUS #ShareLove platform, promoting and celebrating our long-standing commitment to fostering a diverse and inclusive culture. Close to 43,000 team members, family and friends celebrated diversity in nearly 20 Pride events in communities from coast to coast. Last year marked our 13th year of being an active sponsor and participant in Pride events and activities across Canada.

In September 2019, we were recognized for corporate social responsibility by being named to the Dow Jones Sustainability North American Index for the 19th consecutive year. Additionally, we were named to the Dow Jones Sustainability World Index for the fourth year in a row, one of only nine telecommunications companies globally and the only North American telecommunications company included in the World Index this year.

In 2019, we received the BEST Award for excellence in employee learning and development from the Association for Talent Development for the 14th consecutive year.

The TELUS Quebec team earned the 2019 Highest Customer Service by Industry Award in the telecommunications/TV sector, a North American distinction awarded by SQM Group.

In 2019, we successfully celebrated the first year of the TELUS Friendly Future Foundation. Together with the 13 Canadian TELUS Community Boards, the foundation provided nearly $8 million in support of more than 500 projects for vulnerable youth in Canada.

In December 2019, we launched TELUS' Donate the Change program. Donate the Change is a unique, self-serve program that allows customers to automatically round up their monthly TELUS bill and donate 100% of the difference to the TELUS Friendly Future Foundation. This program is available for both mobility and home solutions customers.

Strategic imperative: Investing in internal capabilities to build a high-performance culture and efficient operation

Each year, we conduct team member Pulsecheck engagement surveys to gather confidential team member feedback about TELUS as a place to work and measure our progress in establishing a high-performance culture. Following each survey, business units and departments make use of their Pulsecheck results to review their current action plans and prioritize their ongoing actions. In 2018, our employee engagement score increased by 1 percentage point to 85 per cent, continuing to place our Company within the top 10 per cent of all employers surveyed on a global

basis. In 2019, our employee engagement score was 84 per cent, which was an encouraging accomplishment against a backdrop of change across our organization over the course of the year and maintained our Company within the top 10 per cent of all employers surveyed on a global basis.

5. DESCRIPTION OF BUSINESS

5.1 Who we are

TELUS is one of Canada's largest telecommunications and information technology companies, providing a wide range products and services, spanning wireless, data, IP, voice, television, entertainment, video, and security. TELUS International is a leading digital customer experience innovator that designs, builds and delivers next-generation solutions for global and disruptive brands, supporting the full lifecycle of its clients' digital transformation journeys and enabling clients to swiftly embrace next-generation digital technologies to deliver better business outcomes. TELUS Health is Canada's leader in digital health technology, improving access to care and revolutionizing the flow of information while facilitating collaboration, efficiency, and productivity so people can live healthier lives. TELUS Agriculture provides innovative digital solutions to the agriculture industry by connecting each piece of the agriculture value chain, leveraging advanced data systems and artificial intelligence to streamline operations, improve food traceability, and provide consumers globally with more sustainable with fresher and healthier food sources. In 2020, we generated $15.5 billion in revenue and had 16.0 million subscriber connections. This included 9.0 million mobile phone subscribers, 1.8 million mobile connected device subscribers, 2.1 million internet subscribers, 1.2 million residential voice subscribers, 1.2 million TV subscribers and 707,000 security subscribers.

(a) Organization

Please see *Section 5 - Discussion of Operations* of our 2020 annual MD&A which is hereby incorporated by reference and describes our operating segments – wireless and wireline.

(b) Our strategy

Please see *Section 2 - Core business and strategy* of our 2020 annual MD&A which is hereby incorporated by reference.

(c) Business overview

Please see *Section 4 - Capabilities* of our 2020 annual MD&A which is hereby incorporated by reference and which describes our principal markets, products and services and our distribution channels and the effects of the COVID-19 pandemic on our business.

Our assets and resources, including employees, brand and distribution methods, tangible properties (such as our telecommunications networks and network facilities), intangible properties (such as brand and wireless spectrum licences) and an overview of foreign operations are discussed in *Section 4.2 - Operational resources* in the 2020 annual MD&A.

For revenue and other financial information on the two most recently completed financial years with respect to our wireless and wireline businesses, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment* in the 2020 annual MD&A.

An overview of the Canadian economic environment and the telecommunications industry can be found in *Section 1.2 The environment in which we operate* and *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* in the 2020 annual MD&A. Seasonal trends that have impacted us are described in *Section 5.2 Summary of consolidated quarterly results, trends and fourth quarter recap* and in *Section 5.4 Wireless segment* in the 2020 annual MD&A.

(d) Competitive environment

Please see *Sections 4.1 - Principal markets addressed and competition* and *10.4 - Competitive environment* of our 2020 annual MD&A which is hereby incorporated by reference

(e) Corporate social responsibility and environment

We are committed to following sustainable and responsible business practices and to making decisions that balance economic growth with healthy communities and social and environmental benefits. More information about our corporate social responsibility and environmental compliance can be found in our annual Sustainability Report.

We have a strong foundation of sustainability governance which supports our commitment to environmental stewardship and social capitalism – how we are using our core business to serve a greater social purpose that benefits our stakeholders. This governance includes developing and implementing effective strategies, assessing and managing risks (including climate-related risks), setting targets and objectives as well as reporting on our progress and performance.

We offer a number of communication and information technology solutions and programs that support social opportunities within our communities including our Connecting for Good programs. Through these programs and additional community focused initiatives and strategies, we impact two million youth and 4,000 community organizations each year, volunteer one million hours in our communities annually and have seen our team members and retirees donate more than $153 million to charitable and community organizations since 2000. Additionally, TELUS committed $150 million to COVID-19 response efforts. Details can be found at community.telus.com.

We also understand our operations can have an impact on the environment and our Environmental Policy and Environmental Management System ISO 14001:2015 certified in Canada, act as a guide and framework, respectively, in which we manage and report on environmental risk.

(f) Employee relations

Please see *Section 4.2 - Operational resources* of our 2020 annual MD&A which is hereby incorporated by reference.

5.2 Climate-related Risks and Opportunities

We understand there can be a financial impact on our operations from climate-related risks and opportunities. Therefore, we support the Task Force on Climate-related Financial Disclosures (TCFD) and have disclosed below climate-related information in accordance with its recommendations published in June 2017. In 2021 our Sustainability and Environment, Investor Relations, Enterprise Risk Management and Finance teams will continue to collaborate to identify opportunities to strengthen our climate strategy, and we will continue to disclose this climate-related information in accordance with the TCFD recommendations.

Governance

We have a long-standing foundation of sustainability governance which supports our commitment to environmental stewardship and responsible corporate citizenship.

Board Oversight of Climate-related Risks and Opportunities

Our Board of Directors (Board) is responsible for the stewardship of the Company, which includes risk oversight and management.

The Board has delegated to its Corporate Governance Committee oversight of corporate social responsibility and sustainability, including climate-related risks. Our Sustainability and Environment and Enterprise Risk Management teams provide quarterly reports to the Corporate Governance Committee. These reports contain pertinent information regarding our environmental and climate-related risks, and related compliance activities and potential liability. The Corporate Governance Committee also oversees climate-related opportunities as they arise or are otherwise identified and discussed during quarterly Committee meetings. This Committee also reviews and makes a recommendation to our Board regarding approval of our annual Sustainability Report.

Our Board succession planning process involves an ongoing assessment of Board member skills which helps the Corporate Governance Committee and the Board identify any gaps in the skills and competencies considered most relevant for the Company. As part of this process, Board members are asked to identify their experience or education as it relates to sustainability, environment and climate risk management.

Management Oversight of Climate-related Risks and Opportunities

Our Chief Executive Officer and Executive Team are responsible for the approval of the overall strategic direction of our sustainability programs, which includes assessing and managing climate-related risk and mitigation as well as identifying climate-related opportunities.

Our Sustainability and Environment Team reports to our Executive Vice-President and Chief Financial Officer, who is responsible for the development and governance of our sustainability strategy.

When new projects of significant value or impact are initiated, the Sustainability and Environment Team seeks to assess climate-related risks and opportunities, by integrating sustainability considerations and implementing projects across the business, delivering in-house training and awareness on sustainability, and managing our Environmental Management System (EMS) (ISO 14001:2015 certified in Canada). This process includes benchmarking through formal and informal materiality assessments, data and scenario analysis, considering internal and external stakeholder input and reviewing the regulatory environment in which we operate (see details on the examples of risks and opportunities identified in the Strategy section below). Results of these activities are reported to the Corporate Governance Committee of the Board on a quarterly basis.

Additionally, we link organizational sustainability performance to compensation through our corporate scorecard, which affects the company-wide performance bonus structure. The social capitalism index within the scorecard contains metrics which measure our performance in reducing greenhouse gas (GHG) emissions as well as social impact metrics. In addition, our Sustainability and Environment team's performance bonus structure is linked more broadly to our 2025 and 2030 environmental goals (see details in the Metrics and Targets section below).

Strategy

Climate-related Risks Identified

We identify, and are exposed to, climate-related physical risks, such as those resulting from the increasing severity and frequency of extreme weather events and rising global temperatures, in our operations, our supply chain, and in our communities. Ongoing risk-based optimization of our disaster recovery capabilities for our IT and telecommunication network assets is a key focus for preventing outages and limiting their impact on our operations and customers.

In addition, we identify transition risks related to climate change, such as the impact of changes in policy or implementation of lower-emission technology. We are impacted by carbon tax and levy mechanisms in the areas in which we operate that directly impact the cost of motor fuels and natural gas consumption, particularly in British Columbia and Alberta. We anticipate and budget for known and forecasted cost increases and

seek opportunities to reduce costs through lower energy consumption and forward supply contracts.

These identified risks may impact us over the short, medium or long-term.

Climate-related Opportunities Identified

Our business investments connect our country's dispersed population digitally, and as a result, attract customers who are looking to reduce their carbon footprint. Furthermore, our Sustainability and Environment team regularly seeks opportunities to invest in climate technologies, implement trials and seek out new, financially sound opportunities to reduce our GHG impact. In addition, we continue to focus on investments in network optimization, infrastructure upgrades, real estate space reduction and lighting retrofits to drive future savings and absolute energy reductions.

The following are examples of climate-related opportunities that TELUS is pursuing over the short, medium and long term:

- TELUS has signed four power purchase agreements totaling over 150 MW of renewable energy capacity in Alberta.
- TELUS has built a broadband network that enables our customers to live and work in locations of their choosing while minimizing their travel-related environmental footprint and optimizing productivity.
- For over a decade, TELUS Health has been working with health authorities, community partners and stakeholders to build a more sustainable healthcare system leveraging the power of technology. TELUS offers healthcare products that allow customers to connect virtually with healthcare practitioners, which improves efficiency of services offered, limits physical travel-related climate impacts, and increases accessibility to prevention and wellness services for those who seek it.
- TELUS launched TELUS Agriculture in 2020, to provide innovative solutions to empower a sustainable agriculture industry through technology, securely linking together the food value chain and leveraging data to increase efficiencies, production and yields.
- TELUS continues to develop new LEED certified buildings that incorporate world-leading technology, energy efficient and sustainable solutions and contemporary workstyles. In 2020, we opened the doors to TELUS Sky, our latest LEED platinum building in downtown Calgary.
- We continue to expand our Work Styles program that allows over 90% of our domestic team members to work from home, eliminating the emissions associated with commuting and powering office space.

Scenario Analysis

We conducted scenario analyses in 2020 to better understand the potential risks of climate change to our company in different climate scenarios. Performing and disclosing the outcome of the various scenarios help us determine how our operations can be resilient to changes in climate, as new climate regulations, technologies and other impacts emerge and evolve. At the same time, these analyses also help us identify new opportunities for our business and help us inform our stakeholders about how our organization is positioning itself in light of these risks and opportunities.

The two types of climate change risks we have assessed in our scenario analyses include:

Transition risks: Transition scenarios typically present plausible assumptions about the development of climate policies and the deployment of "climate-friendly" technologies to limit GHG emissions. Transition scenarios draw conclusions about how policy and technology regarding energy supply and GHG emissions interact with economic activity, energy consumption, and Gross Domestic Product among other key factors.

Physical risks: Physical climate scenarios typically present the results of global climate models that show the response of the earth's climate to changes in atmospheric GHG concentrations. Physical scenarios of climate change may include impacts such as flooding or drought.

Scenario selection and assumptions

We have chosen to use the following climate scenarios to assess our risks and opportunities. They include:

- Low-carbon adaptation (global temperature rises approximately 1.5° Celsius): In this scenario, our global temperature is on a pathway to rise approximately 1.5° Celsius above pre-industrial levels by 2100 and is aligned with achieving the Paris Agreement goals. Across the world, countries adapt to a low-carbon economy, which greatly reduces the potential rises in our global temperature. This is achieved by pervasive regulatory changes supporting clean economic growth.
- Extreme global warming (global temperature rises approximately 4° Celsius): In this scenario, our global temperature is on a pathway to rise approximately 4° Celsius above pre-industrial levels by 2100. The extreme rise in temperature is a result of limited action from societies, large emitters and lack of regulatory changes supporting clean economic growth. As a result, extreme weather patterns emerge, causing displacement of large populations, primary resource scarcity, poor air quality and resulting health impacts.

Please note that these scenarios were produced as a tool to envision a future of two divergent climate scenarios, so that we can outline plausible

risks and opportunities, and plan for resilience. They are not future predictions.

Low-carbon adaptation (1.5° Celsius)

	Enterprise Risks	Potential impacts	TELUS resilience
Transition Risk	Supply chain resiliency	Rapid changes to limit carbon emissions may create significant changes to our suppliers' practices. Suppliers who fail to transition to a low-carbon economy for products, components, service delivery or support may impact the ability to meet constantly changing and increasing customer expectations while maintaining the quality of service.	We are working to increase climate awareness throughout our supply chain by implementing increased weighting on sustainability practices in our supplier selection processes, enhancing monitoring processes for our current suppliers'' environmental performance, and increasing engagement with our suppliers to support them to improve their environmental practices.
	Regulatory decisions & political intervention	Limiting global warming to 1.5° Celsius may result in significant regulatory and policy changes both domestically and internationally to draw down carbon emissions.	Given the nature of our business and our current target to be net carbon neutral in our operations by 2030, we are prepared for possible carbon emission regulatory changes.
	Corporate sustainability & social purpose (brand and reputation)	Evolving stakeholder expectations to address environmental concerns, influenced by competitive, regulatory, social and environmental developments in a low-carbon economy, as well as our disclosure and transparency on our strategies and progress, may impact our brand and reputation.	Given our social purpose commitment and broad recognition from our customers, stakeholders and independent third parties for our leading sustainability practices and governance, we are well positioned to meet stakeholder expectations to adapt to a low-carbon future.
Physical Risk	Environmental management & hazards	Shifting strategies for management of environmental risks (including, but not limited to, fuel storage, regulatory reporting, recycling and waste management) and compliance with increased environmental legislation may impact our reputation through media attention or third-party claims. Climate-related impacts to our operations, such as extreme weather events, can impact our ability to serve our customers and keep our team members and communities safe.	We have an ISO 14001:2015 certified Environmental Management System (EMS) for our Canadian operations, audited annually, that helps us manage environmental risks with a strong governance framework. We also implement mitigation initiatives to address severe environmental threats and we have operationalized enhanced severe weather and environmental monitoring, stakeholder notification, and incident management processes. We have created climate incident playbooks that leverage learnings from prior events, which are shared with local government agencies. With our EMS and business continuity planning, we anticipate less risk from environmental hazards.
	Systems and processes, including network reliability	Effectiveness of network design, maintenance, change management processes, event monitoring, and incident response, management and investigation may impact network reliability and the frequency and duration of outages.	As network performance and reliability is core to the success of our business, we maintain robust monitoring and maintenance programs to support sustained network operations and expect relatively limited impacts under this scenario. We deploy best practices in network engineering and design and test our network regularly.

Extreme global warming (4° Celsius)

	Enterprise Risks	Potential impacts	TELUS resilience
Transition Risk	Supply chain resiliency	Extreme global warming may cause impacts and disruptions to our supply chain by impacting the cost of materials and equipment due to rising supplier insurance and manufacturing costs. This may impact availability of our products, components, service delivery, and support network.	Under this scenario, we may have to devote increased resources to further develop a diverse network of suppliers that have robust mitigation plans in place for an extreme global warming scenario.

	Regulatory decisions & political intervention	In this scenario, regulatory and policy changes both domestically and abroad failed to draw down carbon emissions, and therefore we may experience limited impacts.	We remain committed towards our current target to have net carbon neutral operations by 2030.
	Corporate sustainability & social purpose (brand and reputation)	In this scenario, there may be limited changes to stakeholder expectations to address environmental concerns that could impact our brand and reputation.	As we remain committed to strong sustainability practices and net carbon neutral operations, our commitment to our social purpose and other long-term environmental and social targets will continue to positively impact our brand and reputation under a 4°Celsius scenario.
Physical Risk	Environmental management & hazards	With extreme global warming, the International Energy Association has predicted significant severe environmental and weather impacts, which may affect our network maintenance and operation, our real estate assets, team member safety, supply chain and productivity.	Under this scenario, we may have to devote increased resources, as described above, towards environmental monitoring, stakeholder notification, incident management processes and business continuity management program elements, which could have financial impacts.
	Network reliability	Extreme global warming may affect network reliability and the frequency and duration of outages. In addition, rising temperature may result in increased costs for cooling our network equipment.	Under this scenario, we may have to devote increased resources to enhance the design and protection of our network equipment to limit impacts and disruptions.

Risk Management

Identifying Climate-related Risk

Our multi-level enterprise risk and control assessment process solicits and incorporates the input of team members from all areas of our business to track multi-year trends in key risks, as well as the control environment, across the organization. Our enterprise risks arise primarily from our business environment and risk identification and assessment drives our strategies and business objectives.

We also maintain an enterprise-wide, award-winning, business continuity management program that is aligned with our corporate priorities, including prioritizing the safety of our team members, minimizing the impacts of threats to our facilities, business operations and supply chain, maintaining service to our customers and keeping our communities connected.

Our process for identifying climate-related risks are incorporated into the above mentioned enterprise-wide risk management practices.

Managing Climate-related Risk

We mitigate all risk-types, including climate, through contract terms, contingency planning and other risk response strategies, as appropriate. We strive to avoid taking on undue risk whenever possible and work to align risks with business strategies, objectives, values and risk tolerances. Residual exposure for certain risks are mitigated through insurance coverage, where we judge this to be efficient and commercially viable. Our specific strategy for managing climate-related risk strategy includes three key components:

- Mitigation: focusing on reducing energy use and carbon dioxide equivalent (CO_2e) emissions
- Adaptation: focusing on business continuity planning and readiness for the potential physical risks of a changing climate on our operations
- Innovation: helping customers realize their climate change goals through product and service solutions such as video conferencing.

Severe weather risk is a primary aspect of our climate-related risk management framework and is categorized as either having team member impacts, facility impacts or service delivery impacts. These risks are categorized and reported to the Audit Committee of the Board on a quarterly basis where such risks may impact regions in which we operate.

Mitigation initiatives to address severe weather threats have been an increasing focus and we have operationalized enhanced processes with respect to severe weather monitoring, notification of key stakeholders, and incident management in addition to updating climate incident playbooks that leverage learnings from prior events. These measures occur in both short-term planning and long-term planning.

Short-Term Risk Mitigation

On a weekly basis, TELUS' Corporate Business Continuity Office (CBCO) publishes a severe weather outlook for all operating jurisdictions to highlight severe weather events which could pose a threat to our operations, complemented by daily severe weather threat monitoring and notifications for key internal stakeholders.

The CBCO also hosts biannual seasonal preparedness workshops to create awareness and enhance our preparedness for anticipated seasonal threats. The workshops focus on upcoming seasonal trends, potential threats, and reviewing lessons learned from past incidents.

We maintain a property risk governance program that systematically identifies, evaluates, manages and monitors property related risks at critical network facilities. This program also assists in the identification of natural catastrophic hazards.

Long-Term Risk Mitigation

TELUS conducts flood and seismic studies every five to seven years to identify the most vulnerable sites and assist in possible future mitigation strategies. We also support various municipalities on climate change adaptation initiatives by representing the telecommunications industry in advising how the changing risk landscape, as a result of climate change, could affect the delivery of our services to citizens, businesses and communities.

Our ISO 14001:2015 certified EMS, used to identify and control the environmental impacts associated with our operations, is audited annually to assess compliance with standard applicable regulatory requirements.

Metrics and Targets

Metrics Used to Identify Climate-related Risks and Opportunities

We assess climate-related risks and opportunities by tracking and disclosing our GHG emissions and energy consumption. Our most significant sources of GHG emissions and energy consumption consist of direct energy and indirect energy for owned and leased real estate properties in Canada, cell tower sites, vehicle fleet, and remote generator fuel that are within our operational control. Annual disclosure of our Scope 1, Scope 2 and Scope 3 GHG emissions, as well as data and performance details, can be found in our annual Sustainability Report.

Climate-related Targets

Having surpassed our previous climate-related targets, we established the following targets in 2020:

- Procure 100 per cent of our electricity requirements from renewable or non-emitting sources by 2025
- Enable our operations to become net carbon neutral by 2030
- Improve our energy intensity by 50 per cent from 2020 levels by 2030
- Commit to set science-based targets in 2021. Science-based targets are a scientific approach to sustainability target setting that would help us assess our obligation to reduce our emissions, as well as our value chain related emissions, in order to help meet the Paris Agreement commitments and keep global temperature rise at or below 1.5 degrees Celsius.

We report our performance against these targets in our annual Sustainability Report.

Furthermore, our environmental policy keeps us focused on building an environmentally friendly future by collaborating across the Company to:

- Monitor, measure and reduce our overall GHG emissions
- Improve our energy intensity as we grow our business

- Minimize spills and halocarbon releases
- Enhance our EMS
- Align with green building certifications, such as LEED, within our real estate development projects.

5.3 Risk factors

Please see *Section 10 - Risks and risk management* of our 2020 annual MD&A which is hereby incorporated by reference.

5.4 Regulation

Please see *Sections 9.4 - Communications industry regulatory developments and proceedings and 10.3 - Regulatory matters* of our 2020 annual MD&A which is hereby incorporated by reference.

6. DIVIDENDS AND DISTRIBUTIONS

The dividends per Common Share declared with respect to each quarter by TELUS, during the three-year period ended December 31, 2020, are shown below:

Quarter ended [1]	2020	2019	2018
March 31	$ 0.29125	$ 0.27250	$ 0.25250
June 30	$ 0.29125	$ 0.28125	$ 0.26250
September 30	$ 0.29125	$ 0.28125	$ 0.26250
December 31	$ 0.31120	$ 0.29125	$ 0.27250
Total	**$ 1.18495**	**$ 1.12625**	**$ 1.05000**

(1) Paid on or about the first business day of the next month.

Our shareholders received a total of $1.18495 per share in declared dividends in 2020, an increase of 5.2 per cent from 2019. Our Board reviews the dividend rate quarterly. Our quarterly dividend rate will depend on an ongoing assessment of free cash flow generation and financial indicators including leverage, dividend yield and payout ratio. On February 10, 2021, a first quarter dividend of $0.3112 per share was declared, payable on April 1, 2021, to shareholders of record at the close of business on March 11, 2021. The first quarter dividend for 2021 reflects a cumulative increase of $0.01995 per share from the $0.29125 per share dividend paid in April 2020, consistent with our multi-year dividend growth program.

We first announced our dividend growth program in May 2011. In May 2019, we announced our intention to target ongoing semi-annual dividend increases, with the annual increase in the range of 7 to 10 per cent from 2020 through to the end of 2022, thereby extending the policy first announced in May 2011. Notwithstanding this target, dividend decisions will continue to be subject to our Board's assessment and the determination of our financial position and outlook on a quarterly basis In May 2020, given the uncertain magnitude, duration and potential outcomes of the OVID-19 pandemic, the Board determined to sustain the current dividend per share and defer any dividend increase until the release of our third quarter 2020 results. On November 5, 2020, as we continued supporting our Canadian and other shareholders, the Board elected to declare a dividend of $0.3112 per share payable on January 4, 2021, reflecting a cumulative increase of $0.01995 per share or 6.8% from the dividend declared one year earlier. Our long-term dividend payout ratio target guideline was 65 to 75 per cent of net earnings per share for 2019. So as to be consistent with the way we manage our business, effective January 1, 2020, we revised our target guideline to be calculated as 60 to 75 per cent of prospective free cash flow. See *Section 7.5 - Liquidity and capital resources measures* of our 2020 annual MD&A which is hereby incorporated by reference. Based on dividends announced as of February 10, 2021, and 1.29 million TELUS Corporation Common Shares outstanding at December 31, 2020, dividend declarations would total approximately $1.6 billion in 2021, before taking into account any Common Shares purchased and cancelled under any normal course issuer bid that we may implement. There can be no assurance that we will maintain a dividend growth program through 2021.

7. DESCRIPTION OF CAPITAL STRUCTURE

7.1 General description of capital structure

The authorized capital of TELUS consists of 6,000,000,000 shares, divided into: (1) 4,000,000,000 Common Shares without par value; (2) 1,000,000,000 First Preferred shares without par value, issuable in series and; (3) 1,000,000,000 Second Preferred shares without par value, issuable in series. The Common Shares are listed for trading on the Toronto Stock Exchange (TSX) and the New York Stock Exchange (NYSE).

Common Shares

Subject to the prior rights of the holders of First Preferred shares and Second Preferred shares, the Common Shares are entitled to participate with respect to the payment of dividends as declared by the Board and the distribution of assets of TELUS on the liquidation, dissolution or winding up of TELUS.

The holders of the Common Shares are entitled to receive notice of, attend, be heard and vote at any general meeting of the shareholders of TELUS on the basis of one vote per Common Share held. Holders of Common Shares are entitled to vote by a separate resolution for each director rather than a slate.

The Common Shares are subject to constraints on transfer to ensure our ongoing compliance with the Canadian ownership and control requirements of the Telecommunications Act and the Direction to the CRTC *(Ineligibility of Non-Canadians)* under the Broadcasting Act as noted in *Constraints – Canadian ownership and control requirements* on page 21.

Please see *Sections 9.4 - Communications industry regulatory developments and proceedings* and *10.3 - Regulatory Matters* of our 2020 annual MD&A which is hereby incorporated by reference.

First Preferred shares

The First Preferred shares may be issued from time to time in one or more series, each series comprising the number of shares, and having attached thereto the designation, rights, privileges, restrictions and conditions which the Board determines by resolution and subject to filing an amendment to the Notice of Articles and Articles of TELUS. No series of First Preferred shares may have attached thereto the right to vote at any general meeting of TELUS or the right to be convertible into or exchangeable for Common Shares. Except as required by law, the holders of the First Preferred shares as a class are not entitled to receive notice of, attend or vote at any meeting of the shareholders of TELUS. The First Preferred shares rank prior to the Second Preferred shares and Common Shares with respect to priority in payment of dividends and in the distribution of assets in the event of liquidation, dissolution or winding up of TELUS.

Second Preferred shares

The Second Preferred shares may be issued from time to time in one or more series, each series comprising the number of shares, and having attached thereto the designation, rights, privileges, restrictions and conditions, which the Board determines by resolution and subject to filing an amendment to the Notice of Articles and Articles of TELUS. No series of Second Preferred shares may have attached thereto the right to vote at any general meeting of TELUS or the right to be convertible into or exchangeable for Common Shares. Except as required by law, the holders of the Second Preferred shares as a class are not entitled to receive notice of, attend or vote at any meeting of the shareholders of TELUS. The Second Preferred shares rank, subject to the prior rights of the holders of the First Preferred shares, prior to the Common Shares with respect to priority in payment of dividends and in the distribution of assets in the event of liquidation, dissolution or winding up of TELUS.

As of February 11, 2021 there are no preferred shares outstanding.

Shareholder rights plan

TELUS has had a shareholder rights plan in place since March 2000. Our current shareholder rights plan (Rights Plan) was adopted by the Board on March 13, 2019 (Effective Date) and ratified and confirmed by the shareholders at our annual meeting on May 9, 2019.

Under the current Rights Plan, TELUS issued one right (Right) in respect of each Common Share outstanding as at the Effective Date. The Rights Plan has a term of just over nine years, subject to shareholder confirmation every three years (in 2022 and 2025). Each Right, other than those held by an Acquiring Person (as defined in the Rights Plan) and certain of its related parties, entitles the holder in certain circumstances following the acquisition by an Acquiring Person of 20 per cent or more of the Common Shares of TELUS (otherwise than through the "Permitted Bid" requirements of the Rights Plan) to purchase from TELUS $320 worth of Common Shares for $160 (i.e. at a 50 per cent discount) respectively. For further details, please refer to the Rights Plan, a copy of which is available on SEDAR at sedar.com on EDGAR at www.sec.gov as an exhibit to TELUS' registration statement on Form 8-A filed with the U.S. Securities and Exchange Commission on May 10, 2019 (Commission File No. 001-15144) or available from TELUS' Corporate Governance office, 7th Floor, 510 West Georgia Street, Vancouver, British Columbia, V6B 0M3.

Normal course issuer bid and shelf prospectus

Please see *Section 4.3 - Liquidity and capital resources* of our 2020 annual MD&A which is hereby incorporated by reference.

7.2 Constraints

Canadian ownership and control requirements

Certain subsidiaries of TELUS Corporation are Canadian carriers, holders of radio authorizations and holders of broadcasting licences, and are required by the *Telecommunications Act* (Canada) (Telecommunications Act) and the *Direction to the CRTC (Ineligibility of Non-Canadians)* issued pursuant to the *Broadcasting Act* (Canada) (Broadcasting Act) to be Canadian-owned and controlled. Under the Telecommunications Act, a Canadian carrier, such as TCI is considered to be Canadian-owned and controlled if:

(i) not less than 80 per cent of the members of its board of directors are individual Canadians;
(ii) Canadians beneficially own not less than 80 per cent of its voting interests; and
(iii) it is not otherwise controlled in fact by persons who are not Canadians.

Substantially the same rules apply in relation to broadcasting undertakings but an additional requirement set out in the *Direction to the CRTC (Ineligibility of Non-Canadians)* is that the chief executive officer of a company that is a licensed broadcasting undertaking must be a Canadian citizen or a permanent resident of Canada. TELUS Corporation has filed with the CRTC the requisite documentation affirming TCI's status as a Canadian carrier. We further intend that TCI will remain controlled by TELUS Corporation and that it will remain "Canadian" for the purposes of Canadian ownership requirements.

The *Canadian Telecommunications Common Carrier Ownership and Control Regulations* (Ownership and Control Regulations), made pursuant to the Telecommunications Act, further provide that in order for a company that holds shares in a carrier (carrier holding corporation) to be considered Canadian, not less than 66-2/3 per cent of the issued and outstanding voting shares of that company must be beneficially owned by Canadians and that such company must not otherwise be controlled in fact by non-Canadians. To the best of our knowledge, Canadians beneficially own and control in the aggregate not less than 66-2/3 per cent of the issued and outstanding Common Shares of TELUS Corporation and TELUS Corporation is not otherwise controlled in fact by non-Canadians. For the purposes of these regulations, "Canadian" means among other things:

(i) a Canadian citizen who is ordinarily resident in Canada;
(ii) a permanent resident of Canada who is ordinarily resident in Canada and has been so for not more than one year after the date he or she was eligible to apply for Canadian citizenship;
(iii) a corporation with not less than 66-2/3 per cent of the issued and outstanding voting shares of which are beneficially owned and controlled by Canadians and which is not otherwise controlled in fact by non-Canadians; or
(iv) a pension fund society the majority of whose members of its board of directors are individual Canadians, and that is established under applicable federal legislation or any provincial legislation relating to the establishment of pension fund societies.

The *Direction to the CRTC (Ineligibility of Non-Canadians)* provides a similar definition of "Canadian" but also includes a "qualified corporation" which can be a subsidiary corporation whose parent corporation or its directors do not exercise control or influence over any programming decisions of the subsidiary corporation where

(a) Canadians beneficially own and control less than 80 per cent of the issued and outstanding voting shares of the parent corporation and less than 80 per cent of the votes,
(b) the chief executive officer is a non-Canadian, or
(c) less than 80 per cent of the directors of the parent corporation are Canadian.

On August 10, 2017, in response to levels of foreign ownership of shares exceeding 20 per cent and in order to meet the requirements of a "qualified corporation" in accordance with the *Direction to the CRTC (Ineligibility of Non-Canadians)*, the Board appointed an independent programming committee to make all programming decisions relating to its licensed broadcasting undertakings.

The Ownership and Control Regulations provide Canadian carriers and carrier holding corporations, such as TELUS Corporation, with the time and ability to rectify ineligibility resulting from insufficient Canadian ownership of voting interests. Under the Ownership and Control Regulations, such corporations may refuse the subscription, issuance, transfer or purchase of voting interests, if necessary, to ensure that they and their subsidiaries remain eligible under such legislation. For such purposes, in particular but without limitation, a company may, in accordance with the provisions contained in the Ownership and Control Regulations:

(i) refuse to accept any subscription for voting shares;
(ii) refuse to allow any transfer of voting shares to be recorded in its share register;
(iii) suspend the rights of a holder of voting shares to vote at a meeting of its shareholders; and
(iv) sell, repurchase or redeem excess voting shares.

To ensure that TELUS Corporation remains Canadian and that any subsidiary of TELUS Corporation, including TCI, is and continues to be eligible to operate as a Canadian carrier under the Telecommunications Act, to be issued radio authorizations under the *Radiocommunication Act* (Canada) (Radiocommunication Act), or to be issued broadcasting

licences under the Broadcasting Act, provisions substantially similar to the foregoing have been incorporated into the Articles of TELUS Corporation permitting its directors to make determinations to effect any of the foregoing actions.

In addition, TELUS has systems in place to monitor the level of Canadian ownership of its Common Shares. For registered shareholders and shares trading on the TSX, a reservation and declaration system requires non-Canadian purchasers of Common Shares to obtain a reservation number from our transfer agent and registrar, Computershare Trust Company and to declare whether or not the purchaser is a Canadian or non-Canadian. For Common Shares trading on the NYSE, non-Canadian ownership is monitored by utilizing the Depository Trust & Clearing Corporation's SEG-100 Account program. All TELUS Common Shares held by non-Canadians must be transferred to this account (no reservation application is required).

The *Telecommunications Act* was amended in June 2012 to remove foreign ownership restrictions for telecommunications common carriers that hold less than a 10 per cent share of the total Canadian telecommunications services revenues. This change was made to enable non-Canadian owned entities to start up or acquire Canadian carriers that hold less than a 10 per cent share of total Canadian telecommunications services revenues. However, given that TELUS and its affiliates exceed this 10 per cent threshold, we remain subject to the pre-existing Canadian ownership and control restrictions outlined above. Canadian ownership requirements for licensees under the Broadcasting Act remain unchanged.

7.3 Ratings

The following information relating to our credit ratings is provided as it relates to our financing costs, liquidity and operations. Additional information relating to credit ratings is contained in *Section 7.5 - Liquidity and capital resource measures* to *Section 7.8 - Credit ratings* in the 2020 annual MD&A.

Credit ratings are important to our borrowing costs and ability to obtain short-term and long-term financing and the cost of such financing. Credit ratings are intended to provide investors with an independent measure of the credit quality of an issue of securities and are indicators of the likelihood of payment and of the capacity of a company to meet its financial commitment on the rated obligation in accordance with the terms of the rated obligation. A reduction in the current rating on our debt by rating agencies, particularly a downgrade below investment grade ratings or a negative change in ratings outlook could adversely affect our cost of financing and our access to sources of liquidity and capital. We believe our investment grade credit ratings, coupled with our efforts to maintain constructive relationships with banks, investors and credit rating agencies, continue to provide TELUS with reasonable access to capital markets. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and when we seek to engage in certain transactions including transactions involving over-the-counter derivatives. As at December 31, 2020, TCI is a party to an agreement expiring in December 2021, with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain trade receivables up to a maximum of $500 million. TCI is required to maintain at least a BB credit rating by DBRS Ltd. (DBRS) or the securitization trust may require the sale program to be wound down.

The rating agencies regularly evaluate TELUS and TCI, and their ratings of our long-term and short-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, including conditions affecting the telecommunications industry generally, and the wider state of the economy. The Company's credit ratings are outlined in the chart below. Credit ratings are not

recommendations to purchase, hold or sell securities and do not address the market price or suitability of a specific security for a particular investor. In addition, real or anticipated changes in the rating assigned to a security will generally affect the market value of that security. There can be no assurance that a rating will remain in effect for any given period of time or that a rating will not be revised or withdrawn entirely by a rating agency in the future.

Credit rating summary	DBRS Ltd.	Standard & Poor's Rating Services	Moody's Investor Services	Fitch Ratings
TELUS Corporation				
Notes	BBB (high)	BBB+	Baa1	BBB+
Commercial paper	R-2 (high)	A-2	P-2	—
TELUS Communications Inc.				
Debentures	BBB (high)	BBB+	—	BBB+

Institution	Rating
DBRS	The DBRS long-term rating scale provides an opinion on the risk of default. That is, the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an obligation has been issued. Ratings are based on quantitative and qualitative considerations relevant to the issuer, and the relative ranking of claims. All rating categories, other than "AAA" and "D", also contain subcategories "(high)" and "(low)". The absence of either a "(high)" or "(low)" designation indicates the rating is in the middle of the category. A "BBB" rating denotes adequate credit quality. The capacity for the payment of financial obligations is considered acceptable. May be vulnerable to future events.
S&P	A S&P issue credit rating is a forward-looking opinion about the creditworthiness of an obligor with respect to a specific financial obligation, a specific class of financial obligations, or a specific financial program (including ratings on medium-term note programs and commercial paper programs). It takes into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhancement on the obligation and takes into account the currency in which the obligation is denominated. The opinion reflects S&P's view of the obligor's capacity and willingness to meet its financial commitments as they come due, and may assess terms, such as collateral security and subordination, which could affect ultimate payment in the event of default. An obligation rated "BBB" exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation. The ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or minus (-) sign to show relative standing within the major rating categories.
Moody's	Moody's long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default. Obligations rated "Baa" are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics. Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from "Aa" through "Caa". The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category. A Moody's rating outlook is an opinion regarding the likely rating direction over the medium term. A stable outlook indicates a low likelihood of a rating change over the medium term. A negative, positive or developing outlook indicates a higher likelihood of a rating change over the medium term.
Fitch	Rated entities in a number of sectors, including financial and non-financial corporations, sovereigns and insurance companies are generally assigned issuer default ratings (IDRs). IDRs opine on an entity's relative vulnerability to default on financial obligations. The "threshold" default risk addressed by the IDR is generally that of the financial obligations whose non-payment would best reflect the uncured failure of that entity. As such, IDRs also address relative vulnerability to bankruptcy, administrative receivership or similar concepts, although the agency recognizes that issuers may also make pre-emptive and therefore voluntary use of such mechanisms. In aggregate, IDRs provide an ordinal ranking of issuers based on the agency's view of their relative vulnerability to default, rather than a prediction of a specific percentage likelihood of default. "BBB" ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity. The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating categories. Such suffixes are not added to the "AAA" Long-Term IDR category, or to Long-Term IDR categories below "B".

As is common practice, during the last two years, each of the above-noted credit rating agencies charged TELUS for their rating services which include annual surveillance fees covering our outstanding long-term and short-term debt securities, in addition to one-time rating fees for certain agencies when debt is initially issued. We reasonably expect that such payments will continue to be made for rating services in the future.

8. MARKET FOR SECURITIES

8.1 Trading Price and Volume

TELUS' Common Shares are listed on the TSX under the symbol "T" and on the NYSE under the symbol "TU". Monthly share prices and volumes for 2020 are listed below:

	TSX – Common Shares			NYSE – Common Shares		
Month	**High ($)**	**Low ($)**	**Volume**	**High ($U.S.)**	**Low ($U.S.)**	**Volume**
January	26.85	25.03	41,056,344	20.36	19.18	16,101,738
February	27.74	24.04	68,877,802	20.91	17.87	28,884,624
March	25.83	18.55	126,316,527	19.27	13.54	45,233,523
April	23.79	21.51	57,102,701	17.04	15.20	28,515,909
May	23.91	22.02	34,023,677	17.37	15.60	26,240,380
June	25.42	22.33	64,043,826	19.02	16.34	29,908,083
July	24.03	22.04	42,316,728	17.70	16.22	26,071,100
August	24.70	23.30	36,921,178	18.79	17.32	17,322,311
September	24.74	23.13	46,525,880	18.90	17.39	27,053,847
October	24.29	22.58	43,519,446	18.50	16.87	22,524,773
November	25.33	22.50	55,105,176	19.55	16.98	26,586,577
December	26.02	24.93	51,327,158	20.31	19.27	20,425,771

8.2 Prior Sales

In 2020, we undertook three debt offerings of $400 million, $600 million, and $500 million. These offerings lowered our weighted average cost of long-term debt from 3.94 per cent to 3.80 per cent and brought our average term to maturity from 12.8 years to 12.2 years, providing us with additional flexibility to manage and grow our business.

Please refer to TELUS Corporation's 2020 year-end audited consolidated financial statements - Note 26(b) TELUS Corporation Notes for details on our past debt offerings.

In addition, in the ordinary course of business, the Company has the capability to issue commercial paper with maturities of less than 12 months. As at December 31, 2020, the Company had $731 million of commercial paper outstanding, all of which was denominated in U.S. dollars (US$574 million).

9. DIRECTORS AND OFFICERS

9.1 Name, occupation and security holding

Directors

The names, municipalities of residence and principal occupations of the directors of TELUS as at February 11, 2021, the date each such person became a director of TELUS and committee membership are as set out below. Currently, there are 12 directors on the Board. Each was elected at TELUS' annual general meeting on May 7, 2020. Each director's term of office will expire immediately before the election of directors at the upcoming annual general meeting on May 7, 2021.They have, however, all been nominated for re-election at the upcoming annual general meeting.

Directors of TELUS (Name and municipality of residence)	**Director since**	**Principal occupation**
R.H. (Dick) Auchinleck Victoria, B.C.	2003	Chair, TELUS Corporation
Raymond T. Chan [2, 4 - Chair] Vancouver, B.C.	2013	Corporate Director
Lisa de Wilde [3, 4] Toronto, Ontario	2015	Corporate Director
Darren Entwistle Vancouver, B.C.	2000	President and Chief Executive Officer, TELUS Corporation

Directors of TELUS (Name and municipality of residence)	Director since	Principal occupation
Thomas E. Flynn Toronto, Ontario	2020	Vice Chair, BMO Financial Group
Mary Jo Haddad [2 – Chair, 3] Niagara-on-the-Lake, Ontario	2014	Founder and President, MJH & Associates (strategic leadership and healthcare advisory services)
Kathy Kinloch [2, 3] Vancouver, B.C.	2017	President, British Columbia Institute of Technology
Christine Magee [1] Toronto, Ontario	2018	Co-Founder and Chair, Sleep Country Canada
John Manley [2, 3 – Chair] Ottawa, Ontario	2012	Senior Business Advisor, Bennett Jones LLP
David Mowat [1 – Chair] Vancouver, B.C.	2016	Corporate Director
Marc Parent [2, 4] Montreal, Quebec	2017	President and Chief Executive Officer, CAE Inc.
Denise Pickett [1] Toronto, Ontario	2018	President, Global Services Group, American Express

(1) Member of Audit Committee
(2) Member of Human Resources and Compensation Committee
(3) Member of Corporate Governance Committee
(4) Member of Pension Committee

All of the directors of TELUS have held the principal occupations set forth above or executive positions with the same companies or firms referred to, or with affiliates or predecessors thereof, for the past five years except as follows: David Mowat was President and CEO of ATB Financial from June 2007 to June 2018; Ray Chan was Chair of Baytex Energy Corp from 2014 to 2018 and Lead Independent Director from 2018 to 2019; John Manley was President and Chief Executive Officer of the Business Council of Canada from 2010 to 2018; Lisa de Wilde was CEO of the Ontario Educational Communications Authority (TVO) from 2005 to 2019; Thomas Flynn was CFO of BMO Financial Group from March 2011 to December 2020.

Executive officers

The name, municipality of residence and principal occupations of each of the executive officers of TELUS, as of February 11, 2021, are as follows:

Executive Officers of TELUS (Name and municipality of residence)	Position held with TELUS
Darren Entwistle Vancouver, B.C.	President and Chief Executive Officer
Doug French Whitby, Ontario	Executive Vice President and Chief Financial Officer
Navin Arora Calgary, Alberta	President, TELUS Business Solutions
Tony Geheran Vancouver, B.C.	Executive Vice President and Chief Customer Officer
Francois Gratton Montreal, Quebec	Executive Vice President, Group President and Chair, TELUS Québec
Stephen Lewis Vancouver, B.C.	Senior Vice President and Treasurer
Zainul Mawji Edmonton, Alberta	President, Home and Small Business Solutions

Executive Officers of TELUS (Name and municipality of residence)	Position held with TELUS
Sandy McIntosh Toronto, Ontario	Executive Vice President, People and Culture and Chief Human Resources Officer
Jim Senko Toronto, Ontario	President, Mobility Solutions
Eros Spadotto Oakville, Ontario	Executive Vice President, Technology Strategy and Business Transformation
Andrea Wood Toronto, Ontario	Chief Legal and Governance Officer

All of the executive officers of TELUS have held their present positions or other executive positions with the Company during the past five years or more.

TELUS shares held by directors and executive officers

As at February 9, 2021, the directors and executive officers of TELUS, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 1,343,611 Common Shares, which represented approximately 0.1 per cent of the outstanding Common Shares.

9.2 Cease trade orders, bankruptcies, penalties or sanctions

For the 10 years ended February 11, 2021, we are not aware that any current director or executive officer of TELUS had been a director or executive officer of any issuer which, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt or made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

For the 10 years ended February 11, 2021, we are not aware that any current director or executive officer of TELUS had been a director, chief executive officer or chief financial officer of any issuer which was the subject of a cease trade order, an order similar to a cease trade order or an order that denied such issuer access to any exemption under securities legislation, and that was in effect for a period of more than 30 consecutive days, (in each such case, an "Order") while that person was acting in that capacity, or was subject to such an Order issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and resulted from an event that occurred while that person was acting in that capacity.

10. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Legal proceedings are described in *Section 10.16 - Litigation and legal matters* in the 2020 annual MD&A and in the Company's December 31, 2020, consolidated financial statements *Note 29(a) Claims and lawsuits.*

From time to time, in the ordinary course of business, the Company and its subsidiaries are assessed fees or fines by securities regulatory authorities in relation to administrative matters, including late filing or reporting fees, which may be considered penalties or sanctions pursuant to Canadian securities regulations but which are not, individually or in the aggregate, material to the Company. In addition, the Company and its subsidiaries are subject to numerous regulatory authorities around the world, and fees, administrative penalties, settlement agreements and sanctions may be categorized differently by each regulator. However, during the most recently completed financial year, the Company is not aware of any material (i) penalties or sanctions imposed against us by a court relating to securities legislation or by a securities regulatory authority; (ii) penalties or sanctions imposed by a court or regulatory body against us that would likely be considered important to a reasonable investor in making an investment decision; or (iii) settlement agreements entered into by us before a court relating to securities legislation or with a securities regulatory authority.

11. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

To the best of our knowledge, there were no directors or executive officers, or any associate or affiliate of a director or executive officer with a material interest in any transaction within the three most recently completed financial years or during the current financial year that has materially affected or is reasonably expected to materially affect us.

12. TRANSFER AGENT AND REGISTRAR

Our transfer agent and registrar is Computershare Trust Company of Canada. Computershare maintains the Company's registers at 600, 530 - 8th Avenue SW, Calgary, Alberta T2P 3S8.

13. MATERIAL CONTRACTS

TCI is a party to a three-year agreement (expiry December 31, 2021) with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain of its trade receivables up to a maximum of $500 million. TCI is required to maintain at least a BB credit rating by DBRS Ltd. or the securitization trust may require the sale program to be wound down. The necessary credit rating was exceeded throughout its term.

TELUS holds a five-year $2.25 billion unsecured credit facility (2018 Credit Facility) with a syndicate of financial institutions which will mature in May 2023. The 2018 Credit Facility may be used for general corporate purposes including the backstop of commercial paper. The material terms of the 2018 Credit Facility are substantively the same as TELUS' previous credit facility other than an extension of the term to May 2023.

TELUS has also entered into material contracts in connection with the following financings in 2020:

- On May 29, 2020, TELUS issued: (1) $600 million aggregate principal amount of 2.35% Notes, Series CAC, due January 27, 2028; and (2) $400 million aggregate principal amount of 3.95% Notes, (re-opened) Series CAB, due February 16, 2050.
- On October 5, 2020, TELUS issued $500 million aggregate principal amount of 2.05% Notes, Series CAD, due October 7, 2030.

The applicable trust indenture and supplemental indenture documents in relation to these notes have been filed on SEDAR at www.sedar.com and on EDGAR at www.sec.gov. The terms of the indenture are fully described in our final short form base shelf prospectus dated May 13, 2020 filed on SEDAR. The terms of the various notes issued in 2020 and the applicable supplemental indenture are as set forth in the shelf prospectus supplements dated May 21 and September 29, 2020 filed on SEDAR. The base shelf prospectus dated May 13, 2020 has been filed as part of a registration statement on Form F-10 filed with the U.S. Securities and Exchange Commission (Commission File No. 333-238061).

14. INTERESTS OF EXPERT

Deloitte LLP, Chartered Professional Accountants, is the auditor of the Company and is independent of the Company within the meaning of the Rules of Professional Conduct of the Chartered Professional Accountants of British Columbia.

15. AUDIT COMMITTEE

The Audit Committee of the Company supports the Board in fulfilling its oversight responsibilities regarding the integrity of our accounting and financial reporting, internal controls and disclosure controls, legal and regulatory compliance, ethics policy and timeliness of filings with regulatory authorities, the independence and performance of our external and internal auditors, the management of our risk, credit worthiness, treasury plans and financial policy and whistleblower and complaint procedures. A copy of the Audit Committee's Terms of Reference is attached as Appendix A to this AIF.

The current members of the Audit Committee are David Mowat (Chair), Christine Magee and Denise Pickett. Each member of the Audit Committee is independent and financially literate within the meaning of Multilateral Instrument 52-110 "Audit Committees" and the Board has determined that David Mowat is the audit committee financial expert and has the required accounting or related financial management expertise. The following lists the relevant education and experience of the members of TELUS' Audit Committee that is relevant to their role on the committee.

David Mowat is the Chair of the Audit Committee. He is the former President and CEO of ATB Financial, a position he has held from June 2007 to June 2018. Prior to that, he was the CEO of Vancouver City Savings Credit Union from 2000 until 2007. In 2015, he was named chair of the Alberta Royalty Review panel. David holds a Bachelor of Commerce from the University of British Columbia. In 2015, he received an Honorary Bachelor of Business Administration from the Southern Alberta Institute of Technology and in 2017 he received an honorary doctorate of laws from the University of Alberta.

Christine Magee is the Co-Founder and Chair of Sleep Country Canada, a company she co-founded in 1994. From 1982 to 1994 Christine held positions at the National Bank of Canada and Continental Bank of Canada in both the commercial and corporate sectors. Christine earned an Honours Degree in Business and Administration from the University of Western Ontario and holds an Honorary Doctorate from Ryerson University.

Denise Pickett is the President, Global Services Group of American Express, a position she has held since September 2019. From 1992 to the present, Denise has held a series of progressively senior roles throughout American Express. She was Country Manager for American Express Canada and President and CEO of Amex Bank of Canada. Denise subsequently relocated to the United States where most recently she served as the President of American Express OPEN,

the small business division, followed by the President of U.S. Consumer Services and most recently as American Express' Chief Risk Officer. Denise holds an MBA in marketing from the Schulich School of Business at York University and a Bachelor of Science (Honours) from the University of Toronto.

Audit, audit-related and non-audit services

All requests for non-prohibited audit, audit-related and non-audit services provided by TELUS' external auditor and its affiliates to TELUS are required to be pre-approved by TELUS' Audit Committee. To enable this, we have implemented a process by which all requests for services involving the external auditor are routed for review by the VP Risk Management and Chief Internal Auditor to validate that the requested service is a non-prohibited service and to verify that there is a compelling business reason for the request. If the request passes this review, it is then forwarded to the Chief Financial Officer for further review. Pending the Chief Financial Officer's affirmation, the request is then presented to the Audit Committee for its review, evaluation and pre-approval or denial at its next scheduled quarterly meeting. If the timing of the request is urgent, it is provided to the Audit Committee Chair for his or her review, evaluation and pre-approval or denial on behalf of the Audit Committee (with the full committee's review at the next scheduled quarterly meeting). Throughout the year, the Audit Committee monitors the actual versus approved expenditure for each of the approved requests.

The following table is a summary of billings by Deloitte LLP (Deloitte), as external auditor of TELUS, during each of the years ended December 31, 2020 and 2019.

	Year ended December 31, 2020		Year ended December 31, 2019	
Type of work	**$ millions**	**%**	**$ millions**	**%**
Audit fees [1]	2.415	27.2	2.776	38.7
Audit-related fees [2]	5.810	65.4	4.038	56.4
Tax fees [3]	0.405	4.6	0.060	0.8
All other fees [4]	0.247	2.8	0.296	4.1
Total	**8.877**	**100.0**	**7.170**	**100.0**

(1) Includes fees for services rendered by Deloitte in relation to the audit and review of our financial statements.
(2) Includes fees for audits in relation to our statutory and regulatory filings, audits and reviews of subsidiaries, pension-related audits, customer required reviews and translation services rendered by Deloitte in relation to the audit or review of our financial statements that were not part of audit fees.
(3) Relates to tax compliance, tax advice and tax planning.
(4) Includes fees for services rendered by Deloitte that were not in relation to the audit or review of our financial statements, such as Board Effectiveness Assessment, M&A Due Diligence and other Specified Procedures.

16. ADDITIONAL INFORMATION

Additional information relating to TELUS may be found on SEDAR at sedar.com and EDGAR at sec.gov. Additional information regarding directors' and officers' remuneration, and securities authorized for issuance under equity compensation plans, will be contained in TELUS' information circular for the annual meeting to be held on May 7, 2021. Additional financial information is provided in the Company's consolidated financial statements and MD&A for the year ended December 31, 2020. All of the above information can also be found at telus.com. Additional information about our TELUS International (Cda) Inc. subsidiary, including discussion of its business and results, can be found in its public filings available on SEDAR at sedar.com and EDGAR at sec.gov.

APPENDIX A: TERMS OF REFERENCE FOR THE AUDIT COMMITTEE

The Board has established an Audit Committee (the "Committee") to assist the Board in fulfilling its oversight responsibilities regarding the integrity of the Company's accounting and financial reporting, the Company's internal controls and disclosure controls, the Company's legal and regulatory compliance, the Company's Code of Ethics and Conduct and timeliness of filings with regulatory authorities, the independence and performance of the Company's external and internal auditors, the identification and management of the Company's risks, the Company's credit worthiness, treasury plans and financial policy and the Company's whistleblower and complaint procedures.

1. MEMBERSHIP

1.1 The Committee will have a minimum of three members, including the chair of the Committee. The Board, upon the recommendation of the Corporate Governance Committee, will appoint and remove the members of the Committee by a majority vote. The members will sit on the Committee at the pleasure of the Board.
1.2 The Board, upon the recommendation of the Corporate Governance Committee, will appoint the chair of the Committee from the Committee's members by a majority vote. The chair of the Committee will hold such position at the pleasure of the Board.
1.3 All members of the Committee will be Independent Directors.
1.4 All members of the Committee will be financially literate, as defined in accordance with applicable securities laws and standards of the stock exchanges on which the Company's securities are listed.
1.5 At least one member of the Committee will be an audit committee financial expert, as defined in accordance with applicable securities laws, and at least one member of the Committee will have accounting or related financial management expertise, as defined in accordance with applicable securities laws.

2. MEETINGS

2.1 The Committee will meet at least once each quarter and otherwise as necessary. Any member of the Committee may call meetings of the Committee.
2.2 All directors of the Company, including management directors, may attend meetings of the Committee provided, however, that no director is entitled to vote at such meetings and is not counted as part of the quorum for the Committee if he or she is not a member of the Committee.

2.3 Notwithstanding section 2.2 above, the Committee will, as a regular feature of each regularly scheduled meeting, hold an in-camera session with the external auditors and separately with the internal auditors, and an in-camera session without management or management directors present. The Committee may, however, hold other in-camera sessions with such members of management present as the Committee deems appropriate.
2.4 The Chief Governance Officer or his or her nominee will act as secretary to the Committee.
2.5 The Committee will report to the Board on its meetings and each member of the Board will have access to the minutes of the Committee's meetings, regardless of whether the director is a member of the Committee.
2.6 The external auditors of the Company will receive notice of every meeting of the Committee and may request a meeting of the Committee be called by notifying the chair of the Committee of such request.

3. QUORUM

The quorum necessary for the transaction of business at Committee meetings will be a majority of the members of the Committee. A quorum once established is maintained even if members of the Committee leave the meeting prior to conclusion.

4. DUTIES

The Board hereby delegates to the Committee the following duties to be performed by the Committee on behalf of and for the Board:

4.1 Financial Reporting

Prior to public disclosure, the Committee will review and recommend to the Board, and where applicable, to the boards of the Company's subsidiaries which are reporting issuers, for approval:

(a) the annual audited consolidated financial statements and interim unaudited consolidated financial statements of the Company and those of its subsidiaries that are reporting issuers, as defined in accordance with applicable securities laws;
(b) the interim and annual management's discussion and analysis of financial condition and results of operations (MD&A) of the Company and those of its subsidiaries that are reporting issuers, as defined in accordance with applicable securities laws;
(c) earnings press releases and earnings guidance, if any; and
(d) all other material financial public disclosure documents of the Company and those of its subsidiaries that are reporting issuers, including prospectuses, press releases with financial results and the annual information form.

4.2 External Auditors

The external auditors will report directly to the Committee and the Committee will:

(a) appoint the external auditors, subject to the approval of the shareholders, and determine the compensation of the external auditors;
(b) conduct an annual review of the external auditors;
(c) oversee the work of the external auditors and review and approve the annual audit plan of the external auditors, including the scope of the audit to be performed and the degree of co-ordination between the plans of the external and internal auditors.
(d) discuss with the internal auditors, the external auditors and management, the adequacy and effectiveness of the disclosure controls and internal controls over financial reporting of the Company and elicit recommendations for the improvement of such controls or particular areas where new or more detailed controls or procedures are desirable. Particular emphasis will be given to the adequacy of internal controls to prevent, identify or detect fraud, or any payments, transactions or procedures that might be deemed illegal or otherwise improper;
(e) meet regularly with the external auditors without management present and ask the external auditors to report any significant disagreements with management regarding financial reporting, the resolution of such disagreements and any restrictions imposed by management on the scope and extent of the audit examinations conducted by the external auditors;
(f) pre-approve all audit, audit-related and non-audit services to be provided to the Company or any of its subsidiaries, by the external auditors (and its affiliates), in accordance with applicable securities laws. The Committee may also delegate the pre-approval of audit, audit-related and non-audit services to any one member of the Committee, provided, however, a report is made to the Committee on any pre-approval of such services at the Committee's first scheduled meeting following the pre-approval;
(g) annually review the qualifications, expertise and resources and the overall performance of the external audit team and, if necessary, recommend to the Board the termination of the external auditors or the rotation of the audit partner in charge;
(h) at least annually, obtain and review a report by the external auditors describing: the firm's internal quality-control procedures; any material issues raised by the most recent internal quality control review, or peer review of the firm, or by any inquiry or investigation by governmental or professional authorities, within the preceding five years, respecting one or more independent audits carried out by the firm, and any steps taken to deal with such issues; and all relationships between the external auditors and the Company;
(i) annually, or more frequently as appropriate assess and confirm the independence, objectivity and professional skepticism of the external auditors and require the external auditors to deliver an annual report to the Committee regarding its independence, such report to include disclosure regarding all engagements (and fees related thereto) by the Company and relationships which may impact the objectivity and independence of the external auditors;
(j) require the external auditors to deliver an annual acknowledgement in writing to the Committee that the shareholders, as represented by the Board and the Committee, are its primary client;
(k) review post-audit or management letters, containing recommendations of the external auditors and management's response;
(l) review reports of the external auditors; and
(m) pre-approve the hiring of employees and former employees of current and former auditors in accordance with applicable securities laws and TELUS policies.

4.3 Internal Auditors

The internal auditors will report functionally to the Committee and administratively to the Chief Financial Officer and the Committee will:

(a) review and approve management's appointment, termination or replacement of the Chief Internal Auditor;
(b) review and consider the annual performance objectives, performance evaluation and compensation treatment of the Chief Internal Auditor;
(c) oversee the work of the internal auditors including reviewing and approving the annual internal audit plan and updates thereto;
(d) review the report of the internal auditors on the status of significant internal audit findings, recommendations and management's responses and review any other reports of the internal auditors;
(e) review the scope of responsibilities and effectiveness of the internal audit team, its reporting relationships, activities, organizational structure and resources, its independence from management, its credentials and its working relationship with the external auditors; and
(f) review and approve the internal audit charter and updates thereto at a minimum on a biennial basis.

The internal auditors will report quarterly to the Committee on the results of internal audit activities and will also have direct access to the chair of the Committee when the internal auditors determine it is necessary.

4.4 Whistleblower, Ethics and Internal Controls Processes

The Committee will ensure that the Company has in place adequate procedures for:

(a) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal controls or auditing matters; and
(b) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

The CEO, CFO or the Chief Internal Auditor will report to the Committee, and the Committee will review such reports, on any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls. Where the CEO, CFO and/or the Chief Internal Auditor are named in a complaint, the Director of Ethics will speak directly with the Chair of the Committee.

The Committee will review:

(a) annually and recommend to the Board for approval, together with the Human Resources and Compensation Committee, the Code of Ethics and Conduct and material changes thereto;
(b) quarterly reports on ethics breaches including any pertaining to internal controls over financial reporting or fraud involving management or other employees who have a role in the Company's internal controls over financial reporting;

The Chief Internal Auditor will report to the Committee, and the Committee will consider such reports, on the results of the investigation of whistleblower, ethics and internal controls complaints.

4.5 Accounting and Financial Management

The Committee will review:

(a) with management and the external auditors, the Company's major accounting policies, including the impact of alternative accounting policies and key management estimates, risks and judgments that could materially affect the financial results and whether they should be disclosed in the MD&A;
(b) emerging accounting issues and their potential impact on the Company's financial reporting;
(c) significant judgments, assumptions and estimates made by management in preparing financial statements;
(d) the evaluation by either the internal or external auditors of management's internal control systems, and management's responses to any identified weaknesses;
(e) the evaluation by management of the adequacy and effectiveness in the design and operation of the Company's disclosure controls and internal controls for financial reporting;
(f) audits designed to report on management's representations on the effectiveness and efficiency of selected projects, processes, programs or departments;
(g) management's approach for safeguarding corporate assets, data and information systems, the adequacy of staffing of key financial functions and their plans for improvements; and
(h) internal interim and post implementation reviews of major capital projects.

4.6 Credit Worthiness, Treasury Plans and Financial Policy

The Committee will review with management:

(a) the Company's financial policies and compliance with such policies;
(b) the credit worthiness of the Company;
(c) the liquidity of the Company; and

(d) important treasury matters including financing plans.

4.7 Legal/Regulatory Matters

The Committee will review:

(a) with management, the external auditors and legal counsel, any litigation, claim or other contingency, including any tax assessment, that could have a material effect upon the financial position or operating results of the Company;
(b) annually, management's relationships with regulators, and the accuracy and timeliness of filings with regulatory authorities;
(c) quarterly reports from the Chief Governance Officer on compliance with laws and regulations;
(d) quarterly reports from the Vice-President, Chief Data and Trust Officer ("Chief Compliance Officer") on legal, privacy and regulatory compliance activities; and
(e) the anti-bribery and corruption policy and recommend to the Board for approval any material changes thereto.

4.8 Risk Management

The Committee will:

(a) consider reports on the annual enterprise risk assessment and updates thereto;
(b) except to the extent that responsibility is reserved to the Board or delegated to another Board committee, review management's implementation of risk policies and procedures, and assess the appropriateness and comprehensiveness of those policies and procedures;
(c) consider reports on security;
(d) consider reports on financial risk management including derivative exposure and policies;
(e) consider reports on tax risk management and governance;

(f) consider reports on business continuity disaster recovery planning and external threat / hazard monitoring for the Company; and
(g) review other risk management matters from time to time as the Committee may consider suitable or the Board may specifically direct.

4.9 Other

The Committee will review:

(a) the expenses of the Board and CEO;
(b) significant related party transactions and actual and potential conflicts of interest relating thereto to verify their propriety and that disclosure is appropriate;
(c) the disclosure policy of the Company and recommend any material changes thereto to the Board for approval;
(d) and evaluate, at least once annually, the adequacy of these Terms of Reference and the Committee's performance, and report its evaluation and any recommendations for change to the Corporate Governance Committee.

The Committee will also have such other duties and responsibilities as are delegated to it and review such other matters as, from time to time, are referred to it by the Board.

5. AUTHORITY

The Committee, in fulfilling its mandate, will have the authority to:

(a) engage and set compensation for independent counsel and other advisors;
(b) communicate directly with the Chief Financial Officer, internal and external auditors, Chief Compliance Officer, Chief Governance Officer — and any other member of management the Committee deems appropriate;
(c) delegate tasks to Committee members or subcommittees of the Committee; and access appropriate funding as determined by the Committee to carry out its duties.

Exhibit 99.4

Audited Consolidated Financial Statements as at and for the years ended December 31, 2020 and 2019 and Management's Discussion and Analysis

[previously filed on SEDAR]

TELUS CORPORATION

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2020

report of management on internal control over financial reporting

Management of TELUS Corporation (TELUS, or the Company) is responsible for establishing and maintaining adequate internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting.

TELUS' President and Chief Executive Officer and Executive Vice-President and Chief Financial Officer have assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2020, in accordance with the criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Internal control over financial reporting is a process designed by, or under the supervision of, the President and Chief Executive Officer and the Executive Vice-President and Chief Financial Officer and effected by the Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Due to its inherent limitations, internal control over financial reporting may not prevent or detect misstatements on a timely basis. Also, projections of any evaluation of the effectiveness of internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Based on the assessment referenced in the preceding paragraph, management has determined that the Company's internal control over financial reporting is effective as of December 31, 2020. In connection with this assessment, no material weaknesses in the Company's internal control over financial reporting were identified by management as of December 31, 2020.

Deloitte LLP, an Independent Registered Public Accounting Firm, audited the Company's Consolidated financial statements for the year ended December 31, 2020, and as stated in the Report of Independent Registered Public Accounting Firm, they have expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting as of December 31, 2020.

/s/ "Doug French"

Doug French
Executive Vice-President
and Chief Financial Officer
February 11, 2021

/s/ "Darren Entwistle"

Darren Entwistle
President
and Chief Executive Officer
February 11, 2021

report of independent registered public accounting firm

To the Shareholders and Board of Directors of TELUS Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of TELUS Corporation and subsidiaries (the Company) as at December 31, 2020 and 2019, the related consolidated statements of income and other comprehensive income, changes in owners' equity and cash flows, for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements").

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2020 and 2019, and its financial performance and its cash flows for each of the two years in the period ended December 31, 2020, in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 11, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Goodwill Impairment Analysis – Refer to Note 1(f) and Note 18 to the financial statements

Critical Audit Matter Description

The Company assesses goodwill impairment by comparing the recoverable amounts of its cash-generating units to their carrying values. The Company determined the recoverable amounts of the cash-generating units based on a fair value less costs of disposal calculation. The fair value less costs of disposal calculation uses discounted cash flow projections that employ the following key assumptions:

- Future cash flows and growth projections.
- Associated economic risk assumptions and estimates of the likelihood of achieving key operating metrics and drivers.
- Weighted average cost of capital.

Changes in these assumptions could have a significant impact on either the fair value less costs of disposal, the amount of any goodwill impairment charge, or both. Given the significant judgments made by management, auditing the key assumptions required a high degree of auditor judgment and an increased extent of effort, including the need to involve a fair value specialist.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the key assumptions included the following, among others:

- Evaluated the effectiveness of controls over the key assumptions used by management.



- Compared management's historical cash flow forecasts to actual historical results.
- Evaluated the reasonableness of management's forecasts of future cash flows and growth projections; associated economic risk assumptions; and estimates of the likelihood of achieving key operating metrics and drivers by comparing the forecasts to:
    - Historical revenues,
    - Analyst and industry reports for the Company and certain of its peer companies,
    - Known changes in the Company's operations and/or telecommunication industry, which are expected to impact future operating performance, and
    - Internal communications to management and the Board of Directors.
- With the assistance of a fair value specialist, evaluated the reasonableness of the weighted average cost of capital and growth projections by:
    - Testing the source information underlying the determination of the weighted average cost of capital.

- Developing a range of independent estimates for the weighted average cost of capital and growth projections and comparing those to the rates selected by management.

Valuation of Intangible Assets Acquired in Business Combinations – Refer to Note 1(b) and Note 18(b) to the financial statements

Critical Audit Matter Description

The Company completed business combinations of Competence Call Center (CCC) and the data annotation business of Lionbridge Technologies, Inc. (Lionbridge AI) and recognized the assets acquired and liabilities assumed at their acquisition-date fair values, including intangible assets for customer relationships and crowdsource asset. The fair value measurement of these intangible assets required management to make significant estimates and assumptions in forecasting future cash flows.

While there are many estimates and assumptions that management makes to determine the fair value of the customer relationships acquired for both CCC and Lionbridge AI and the crowdsource asset acquired for Lionbridge AI, the estimates and assumptions with the highest degree of subjectivity are the forecasts of future revenue arising from existing customers and discount rates used in valuing the customer relationships, and the approximate time to replace the workforce used in valuing the crowdsource asset. Performing audit procedures to evaluate these estimates and assumptions required a high degree of auditor judgment and an increased extent of audit effort, including the involvement of fair value specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the forecasts of future revenue, discount rates, and time-to-replace assumptions used to determine the fair value of intangible assets acquired included the following, among others:

- Evaluated the effectiveness of controls over the determination of the fair value of customer relationships and the crowdsource asset at the time of acquisition, including management's controls over key assumptions used in the valuations.
- Evaluated the reasonableness of management's forecasts of future revenue by:
  - Inspecting contracts with customers to substantiate the existence of legally enforceable contracts in place, as well as inspecting and assessing management's business plans to grow revenue with these customers,
  - Assessing the reasonableness of management's forecasts of future revenue by comparing the projections to historical results and external sources, including industry trends and peer companies' historical data.
- With the assistance of fair value specialists, evaluated the reasonableness of the discount rates by testing the source information underlying the determination of the discount rates and by developing a range of independent rates based on industry data and comparing them to the discount rates used by management.
- With the assistance of fair value specialists, assessed the appropriateness of the valuation methodology and performed an independent assessment of the time-to-replace assumption used in valuing the crowdsource asset, including recalculating the approximate value of the crowdsource workforce in place and performing a sensitivity analysis to substantiate the value of the lost opportunity.

/s/ "Deloitte LLP"

Chartered Professional Accountants
February 11, 2021
Vancouver, Canada

We have served as the Company's auditor since 2002.



report of independent registered public accounting firm

To the Shareholders and Board of Directors of TELUS Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of TELUS Corporation and subsidiaries (the Company) as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020, of the Company and our report dated February 11, 2021, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal

securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ "Deloitte LLP"

Chartered Professional Accountants
February 11, 2021
Vancouver, Canada

consolidated statements of income and other comprehensive income

Years ended December 31 (millions except per share amounts)	*Note*	**2020**	2019
OPERATING REVENUES			
Service		**$ 13,277**	$ 12,400
Equipment		**2,064**	2,189
Operating revenues (arising from contracts with customers)	*6*	**15,341**	14,589
Other income	*7*	**122**	69
Operating revenues and other income		**15,463**	14,658
OPERATING EXPENSES			
Goods and services purchased		**6,268**	6,070
Employee benefits expense	*8*	**3,701**	3,034
Depreciation	*17*	**2,107**	1,929
Amortization of intangible assets	*18*	**905**	648
		12,981	11,681
OPERATING INCOME		**2,482**	2,977
Financing costs	*9*	**771**	733
INCOME BEFORE INCOME TAXES		**1,711**	2,244
Income taxes	*10*	**451**	468
NET INCOME		**1,260**	1,776
OTHER COMPREHENSIVE INCOME (LOSS)	*11*		
Items that may subsequently be reclassified to income			
Change in unrealized fair value of derivatives designated as cash flow hedges		**(111)**	84
Foreign currency translation adjustment arising from translating financial statements of foreign operations		**113**	20
		2	104
Items never subsequently reclassified to income			
Change in measurement of investment financial assets		**14**	12
Employee defined benefit plan re-measurements		**(312)**	(338)
		(298)	(326)
		(296)	(222)
COMPREHENSIVE INCOME		**$ 964**	$ 1,554
NET INCOME ATTRIBUTABLE TO:			
Common Shares		**$ 1,207**	$ 1,746

Non-controlling interests		**53**	30
		$ 1,260	$ 1,776
COMPREHENSIVE INCOME ATTRIBUTABLE TO:			
Common Shares		**$ 893**	$ 1,516
Non-controlling interests		**71**	38
		$ 964	$ 1,554
NET INCOME PER COMMON SHARE*	*12*		
Basic		**$ 0.95**	$ 1.45
Diluted		**$ 0.94**	$ 1.45
TOTAL WEIGHTED AVERAGE COMMON SHARES OUTSTANDING*			
Basic		**1,275**	1,204
Diluted		**1,278**	1,204

The accompanying notes are an integral part of these consolidated financial statements.

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

consolidated statements of financial position

As at December 31 (millions)	*Note*	**2020**	2019
ASSETS			
Current assets			
Cash and temporary investments, net		**$ 848**	$ 535
Accounts receivable	*6(b)*	**2,355**	1,962
Income and other taxes receivable		**148**	127
Inventories	*1(l)*	**407**	437
Contract assets	*6(c)*	**439**	737
Prepaid expenses	*20*	**484**	547
Current derivative assets	*4(h)*	**2**	8
		4,683	4,353
Non-current assets			
Property, plant and equipment, net	*17*	**15,014**	14,232
Intangible assets, net	*18*	**15,026**	12,846
Goodwill, net	*18*	**7,235**	5,307
Contract assets	*6(c)*	**268**	328
Other long-term assets	*20*	**1,106**	919
		38,649	33,632
		$ 43,332	$ 37,985
LIABILITIES AND OWNERS' EQUITY			
Current liabilities			
Short-term borrowings	*22*	**$ 100**	$ 100
Accounts payable and accrued liabilities	*23*	**2,962**	2,749
Income and other taxes payable		**135**	55
Dividends payable	*13*	**403**	352
Advance billings and customer deposits	*24*	**772**	675
Provisions	*25*	**73**	288
Current maturities of long-term debt	*26*	**1,432**	1,332
Current derivative liabilities	*4(h)*	**32**	23
		5,909	5,574
Non-current liabilities			
Provisions	*25*	**924**	590
Long-term debt	*26*	**18,856**	17,142
Other long-term liabilities	*27*	**1,265**	806
Deferred income taxes	*10*	**3,776**	3,214
		24,821	21,752
Liabilities		**30,730**	27,326
Owners' equity			

Common equity	*28*	**12,074**	10,548
Non-controlling interests		**528**	111
		12,602	10,659
		$ 43,332	$ 37,985
Contingent liabilities	*29*		

The accompanying notes are an integral part of these consolidated financial statements.

Approved by the Directors:

/s/ “David L. Mowat”

David L. Mowat
Director

/s/ “R.H. Auchinleck”

R.H. Auchinleck
Director

consolidated statements of changes in owners’ equity

		Common equity							
		Equity contributed				Accumulated other			
		Common Shares *(Note 28)*						Non-controlling	
(millions)	*Note*	Number of shares*	Share capital	Contributed surplus	Retained earnings	comprehensive income	Total	interests	Total
Balance as at January 1, 2019		1,197	$ 5,390	$ 383	$ 4,321	$ 11	$ 10,105	$ 74	$ 10,179
Net income		—	—	—	1,746	—	1,746	30	1,776
Other comprehensive income (loss)	*11*	—	—	—	(338)	108	(230)	8	(222)
Dividends	*13*	—	—	—	(1,358)	—	(1,358)	—	(1,358)
Dividends reinvested and optional cash payments	*13(b), 14(c)*	8	184	—	—	—	184	—	184
Equity accounted share-based compensation		1	13	20	—	—	33	—	33
Share option award net-equity settlement feature		—	1	(1)	—	—	—	—	—
Issue of Common Shares in business combination		3	72	—	—	—	72	—	72
Change in ownership interests of subsidiary		—	—	(4)	—	—	(4)	(1)	(5)
Balance as at December 31, 2019		1,209	$ 5,660	$ 398	$ 4,371	$ 119	$ 10,548	$ 111	$ 10,659
Balance as at January 1, 2020		**1,209**	**$ 5,660**	**$ 398**	**$ 4,371**	**$ 119**	**$ 10,548**	**$ 111**	**$ 10,659**
Net income		**—**	**—**	**—**	**1,207**	**—**	**1,207**	**53**	**1,260**
Other comprehensive income (loss)	*11*	**—**	**—**	**—**	**(312)**	**(2)**	**(314)**	**18**	**(296)**
Dividends	*13*	**—**	**—**	**—**	**(1,520)**	**—**	**(1,520)**	**—**	**(1,520)**
Dividends reinvested and optional cash payments	*13(b), 14(c)*	**23**	**541**	**—**	**—**	**—**	**541**	**—**	**541**
Equity accounted share-based compensation	*14(b)*	**1**	**15**	**82**	**—**	**—**	**97**	**—**	**97**
Issue of Common Shares in business combination	*18(b)*	**—**	**8**	**—**	**—**	**—**	**8**	**—**	**8**
Common Shares issued	*28(a)*	**58**	**1,453**	**—**	**—**	**—**	**1,453**	**—**	**1,453**
Change in ownership interests of subsidiary	*28(d)*	**—**	**—**	**54**	**—**	**—**	**54**	**346**	**400**
Balance as at December 31, 2020		**1,291**	**$ 7,677**	**$ 534**	**$ 3,746**	**$ 117**	**$ 12,074**	**$ 528**	**$ 12,602**

The accompanying notes are an integral part of these consolidated financial statements.

** Amounts reflect retrospective application of March 17, 2020, share split (see Note 28(b)).*

consolidated statements of cash flows

Years ended December 31 (millions)	*Note*	**2020**	2019
OPERATING ACTIVITIES			
Net income		**$ 1,260**	$ 1,776
Adjustments to reconcile net income to cash provided by operating activities:			
Depreciation and amortization		**3,012**	2,577
Deferred income taxes	*10*	**76**	115
Share-based compensation expense, net	*14(a)*	**27**	(2)
Net employee defined benefit plans expense	*15(a)*	**102**	78
Employer contributions to employee defined benefit plans		**(51)**	(41)
Non-current contract assets		**60**	130
Non-current unbilled customer finance receivables	*20*	**(136)**	(178)
Loss from equity accounted investments	*7, 21*	**29**	(4)
Other		**(75)**	(192)
Net change in non-cash operating working capital	*31(a)*	**270**	(332)
Cash provided by operating activities		**4,574**	3,927
INVESTING ACTIVITIES			
Cash payments for capital assets, excluding spectrum licences	*31(a)*	**(2,822)**	(2,952)
Cash payments for spectrum licences		**—**	(942)
Cash payments for acquisitions, net	*18(b)*	**(3,205)**	(1,105)
Advances to, and investment in, real estate joint ventures and associate	*21*	**(100)**	(35)
Real estate joint venture receipts	*21*	**5**	7
Proceeds on disposition		**86**	16
Investment in portfolio investments and other		**(129)**	(33)
Cash used by investing activities		**(6,165)**	(5,044)
FINANCING ACTIVITIES	*31(b)*		
Common Shares issued		**1,495**	—
Dividends paid to holders of Common Shares	*13(a)*	**(930)**	(1,149)
Issue (repayment) of short-term borrowings, net		**(8)**	(1)
Long-term debt issued	*26*	**4,882**	7,705
Redemptions and repayment of long-term debt	*26*	**(3,863)**	(5,261)
Shares of subsidiary issued to non-controlling interests	*28(d)*	**400**	(9)
Other		**(72)**	(47)
Cash provided by financing activities		**1,904**	1,238
CASH POSITION			
Increase in cash and temporary investments, net		**313**	121
Cash and temporary investments, net, beginning of period		**535**	414
Cash and temporary investments, net, end of period		**$ 848**	$ 535
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS			
Interest paid		**$ (740)**	$ (714)
Interest received		**$ 13**	$ 7
Income taxes paid, net			
In respect of comprehensive income		**$ (397)**	$ (629)
In respect of business acquisitions		**(33)**	(15)
		$ (430)	$ (644)

The accompanying notes are an integral part of these consolidated financial statements.

notes to consolidated financial statements

DECEMBER 31, 2020

TELUS Corporation is one of Canada's largest telecommunications companies, providing a wide range of telecommunications services and products, including wireless and wireline voice and data. Data services include: internet protocol; television; hosting, managed information technology and cloud-based services; healthcare solutions; customer care and business services; and home and business smart technology (including security and agriculture).

TELUS Corporation was incorporated under the *Company Act* (British Columbia) on October 26, 1998, under the name BCT.TELUS Communications Inc. (BCT). On January 31, 1999, pursuant to a court-approved plan of arrangement under the *Canada Business Corporations Act* among BCT, BC TELECOM Inc. and the former Alberta-based TELUS Corporation (TC), BCT acquired all of the shares of BC TELECOM Inc. and TC in exchange for Common Shares and Non-Voting Shares of BCT, and BC TELECOM Inc. was dissolved. On May 3, 2000, BCT changed its name to TELUS Corporation and in February 2005, TELUS Corporation transitioned under the *Business Corporations Act* (British Columbia), successor to the *Company Act* (British Columbia). TELUS Corporation maintains its registered office at Floor 7, 510 West Georgia Street, Vancouver, British Columbia, V6B 0M3.

The terms "TELUS", "we", "us", "our" or "ourselves" refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries.

Notes to consolidated financial statements		Page
General application		
1.	Summary of significant accounting policies	11
2.	Accounting policy developments	20
3.	Capital structure financial policies	21
4.	Financial instruments	24
Consolidated results of operations focused		
5.	Segment information	31
6.	Revenue from contracts with customers	32
7.	Other income	33
8.	Employee benefits expense	34
9.	Financing costs	34
10.	Income taxes	35
11.	Other comprehensive income	37
12.	Per share amounts	38
13.	Dividends per share	38
14.	Share-based compensation	39
15.	Employee future benefits	42
16.	Restructuring and other costs	48
Consolidated financial position focused		
17.	Property, plant and equipment	49
18.	Intangible assets and goodwill	50
19.	Leases	54
20.	Other long-term assets	55
21.	Real estate joint ventures and investment in associate	55
22.	Short-term borrowings	57
23.	Accounts payable and accrued liabilities	57
24.	Advance billings and customer deposits	58
25.	Provisions	58
26.	Long-term debt	59
27.	Other long-term liabilities	63
28.	Owners' equity	63
29.	Contingent liabilities	65
Other		
30.	Related party transactions	67
31.	Additional statement of cash flow information	68

notes to consolidated financial statements

1 summary of significant accounting policies

Accounting policy	Accounting policy requiring a more significant choice among policies and/or a more significant application of judgment: Yes	No
General application		
(a) Consolidation		X
(b) Use of estimates and judgments	X	
(c) Financial instruments – recognition and measurement		X
(d) Hedge accounting		X
Results of operations focused		
(e) Revenue recognition	X	

(f) Depreciation, amortization and impairment	X	
(g) Translation of foreign currencies		X
(h) Income and other taxes	X	
(i) Share-based compensation		X
(j) Employee future benefit plans	X	
Financial position focused		
(k) Cash and temporary investments, net		X
(l) Inventories		X
(m) Property, plant and equipment; intangible assets	X	
(n) Investments		X

Our consolidated financial statements are expressed in Canadian dollars. The generally accepted accounting principles that we use are International Financial Reporting Standards as issued by the International Accounting Standards Board (IFRS-IASB) and Canadian generally accepted accounting principles.

Generally accepted accounting principles require that we disclose the accounting policies we have selected in those instances in which we have been obligated to choose from among various accounting policies that comply with generally accepted accounting principles. In certain other instances, including those in which no selection among policies is allowed, we are also required to disclose how we have applied certain accounting policies. In the selection and application of accounting policies, we consider, among other factors, the fundamental qualitative characteristics of useful financial information, namely relevance and faithful representation. In our assessment, the accounting policy disclosures we are required to make are not all equally significant for us, as set out in the accompanying table; their relative significance for us will evolve over time, as we do.

These consolidated financial statements for each of the years ended December 31, 2020 and 2019, were authorized by our Board of Directors for issue on February 11, 2021.

(a) Consolidation

Our consolidated financial statements include our accounts and the accounts of all of our subsidiaries, the principal ones of which are: TELUS Communications Inc. in which, as at December 31, 2020, we have a 100% equity interest; and TELUS International (Cda) Inc. in which, as at December 31, 2020, we have a 62.6% equity interest, as discussed further in *Note 28(d)*. TELUS Communications Inc. includes substantially all of our wireless and wireline operations, excluding the customer experience and digital enablement transformation provided through the customer care and business services business of TELUS International (Cda) Inc.

Our financing arrangements and those of our wholly owned subsidiaries do not impose restrictions on inter-corporate dividends.

On a continuing basis, we review our corporate organization and effect changes as appropriate so as to enhance the value of TELUS Corporation. This process can, and does, affect which of our subsidiaries are considered principal subsidiaries at any particular point in time.

(b) Use of estimates and judgments

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates, assumptions and judgments that affect: the reported amounts of assets and liabilities at the date of the financial statements; the disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts and classification of income and expense during the reporting period. Actual results could differ from those estimates.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

Estimates

Examples of the significant estimates and assumptions that we make, and their relative significance and degree of difficulty, are set out in the graphic at right.

Judgments

Examples of our significant judgments, apart from those involving estimation, include the following:

- Assessments about whether line items are sufficiently material to warrant separate presentation in the primary financial statements and, if not, whether they are sufficiently material to warrant separate presentation in the notes to the financial statements. In the normal course, we make changes to our assessments regarding materiality for presentation so that they reflect current economic conditions. Due consideration is given to the view that it is reasonable to expect differing opinions of what is, and is not, material.
- In respect of revenue-generating transactions, we must make judgments that affect the timing of the recognition of revenue, as set out following:
  - We have millions of multi-year contracts with our customers and we must make judgments about when we have satisfied our performance obligations to our customers, either over a period of time or at a point in time. Service revenues are recognized based upon customers' access to, or usage of, our telecommunications infrastructure; we believe that this method faithfully depicts the transfer of the services, and thus the revenues are recognized as the services are made available and/or rendered. We consider our performance obligations arising from the sale of equipment to have been satisfied when the equipment has been delivered to, and accepted by, the end-user customers (see *(e)* following).
  - Principally in the context of revenue-generating transactions involving wireless handsets, we must make judgments about whether third-party re-sellers that deliver equipment to our customers are acting in the transactions as principals or as our agents. Upon due consideration of the relevant indicators, we believe that the decision to consider the re-sellers to be acting, solely for accounting purposes, as our agents is more representative of the economic substance of the transactions, as we are the primary obligor to the end-user customers. The effect of this judgment is that no equipment revenue is recognized upon the transfer of inventory to third-party re-sellers.
  - We compensate third-party re-sellers and our employees for generating revenues, and we must make judgments as to whether such sales-based compensation amounts are costs incurred to obtain contracts with customers that should be capitalized (see *Note 20*). We believe that compensation amounts tangentially attributable to obtaining a contract with a customer, because the amount of such compensation could be affected in ways other than by simply obtaining that contract, should be expensed as incurred; compensation amounts directly attributable to obtaining a contract with a customer should be capitalized and subsequently amortized on a systematic basis, consistent with the satisfaction of our associated performance obligations.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

Judgment must also be exercised in the capitalization of costs incurred to fulfill revenue-generating contracts with customers. Such fulfilment costs are those incurred to set up, activate or otherwise implement services involving access to, or usage of, our telecommunications infrastructure that would not otherwise be capitalized as property, plant, equipment and/or intangible assets (see *Note 20*).

- The decision to depreciate and amortize any property, plant, equipment (including right-of-use lease assets) and intangible assets that are subject to amortization on a straight-line basis, as we believe that this method reflects the consumption of resources related to the economic lifespan of those assets better than an accelerated method and is more representative of the economic substance of the underlying use of those assets.
- The preparation of financial statements in accordance with generally accepted accounting principles requires management to make judgments that affect the financial statement disclosure of information regularly reviewed by our chief operating decision-maker used to make resource allocation decisions and to assess performance (segment information, *Note 5*). A significant judgment we make is in respect of distinguishing between our wireless and wireline operations and cash flows (and this extends to allocations of both direct and indirect expenses and capital expenditures). The clarity of this distinction has been increasingly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure technology and operations. Less than one-half of the operating expenses included in the segment performance measure reported to our chief operating decision-maker during the years ended December 31, 2020 and 2019, were direct costs; judgment, largely based upon historical experience, is applied in apportioning indirect expenses that are not objectively distinguishable between our wireless and wireline operations.

  Until recently, our judgment was that our wireless and wireline telecommunications infrastructure technology and operations had not experienced sufficient convergence to objectively make their respective operations and cash flows practically indistinguishable. The continued build-out of our technology-agnostic fibre-optic infrastructure, in combination with converged edge network technology, has significantly affected this judgment, as have the commercialization of fixed-wireless telecommunications solutions for customers and the consolidation of our non-customer facing operations.

  As a result, it has become increasingly difficult and impractical to objectively and clearly distinguish between our wireless and wireline operations and cash flows, and the assets from which those cash flows arise. Our judgment as to whether these operations can continue to be judged to be individual components of the business and discrete operating segments has changed; effective January 1, 2020, we embarked upon modifying our internal and external reporting processes, systems and internal controls to accommodate the technology convergence-driven cessation of the historical distinction between our wireless and wireline operations at the level of regularly reported discrete performance measures that are provided to our chief operating decision-maker. We anticipate transitioning to a new segment reporting structure during the first quarter of 2021.

  The impracticality of objectively distinguishing between our wireless and wireline cash flows, and the assets from which those cash flows arise, is evidence of their increasing interdependence, and this is expected to result in the unification of the wireless cash-generating unit and the wireline cash-generating unit as a single telecommunications cash-generating unit for future impairment testing purposes. As our business continues to evolve, new cash-generating units may also develop.

- The view that our spectrum licences granted by Innovation, Science and Economic Development Canada (including spectrum licences that have been subordinated to us) will likely be renewed; that we intend to renew them; that we believe we have the financial and operational ability to renew them; and thus, that they have an indefinite life, as discussed further in *Note 18(d)*.
- In connection with the annual impairment testing of intangible assets with indefinite lives and goodwill, there are instances in which we must exercise judgment in allocating our net assets, including shared corporate and administrative assets, to our cash-generating units when determining their carrying amounts. These judgments are necessary because of the convergence that our wireless and wireline telecommunications infrastructure technology and operations have experienced to date, and because of our continuous development. There are instances in which similar judgments must also be made in respect of future capital expenditures in support of both wireless and wireline operations, which are a component of the determination of recoverable amounts used in the annual impairment testing, as discussed further in *Note 18(e)*.
- In respect of claims and lawsuits, as discussed further in *Note 29(a)*, the determination of whether an item is a contingent liability or whether an outflow of resources is probable and thus needs to be accounted for as a provision.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

(c) Financial instruments – recognition and measurement

In respect of the recognition and measurement of financial instruments, we have adopted the following policies:

- Regular-way purchases or sales of financial assets or financial liabilities (purchases or sales that require actual delivery of financial assets or financial liabilities) are recognized on the settlement date. We have selected this method as the benefits of using the trade date method were not expected to exceed the costs of selecting and implementing that method.
- Transaction costs, other than in respect of items held for trading, are added to the initial fair value of the acquired financial asset or financial liability. We have selected this method as we believe that it results in a better matching of the transaction costs with the periods in which we benefit from the transaction costs.

(d) Hedge accounting

General

We apply hedge accounting to the financial instruments used to: establish designated currency hedging relationships for certain U.S. dollar-denominated future purchase commitments and debt repayments, as set out in *Note 4(a)* and *(d)*; and fix the compensation cost arising from specific grants of restricted share units, as set out in *Note 4(f)* and discussed further in *Note 14(b)*.

Hedge accounting

The purpose of hedge accounting, in respect of our designated hedging relationships, is to ensure that counterbalancing gains and losses are recognized in the same periods. We have chosen to apply hedge accounting as we believe that it is more representative of the economic substance of the underlying transactions.

In order to apply hedge accounting, a high correlation (which indicates effectiveness) is required in the offsetting changes in the risk-associated values of the financial instruments (the hedging items) used to establish the designated hedging relationships and all, or a part, of the asset, liability or transaction having an identified risk exposure that we have taken steps to modify (the hedged items). We assess the anticipated effectiveness of designated hedging relationships at inception and their actual effectiveness for each reporting period thereafter. We consider a designated hedging relationship to be effective if the following critical terms match between the hedging item and the hedged item: the notional amount of the hedging item and the principal amount of the hedged item; maturity dates; payment dates; and interest rate index (if, and as, applicable). As set out in *Note 4(i)*, any ineffectiveness, such as would result from a difference between the notional amount of the hedging item and the principal amount of the hedged item, or from a previously effective designated hedging relationship becoming ineffective, is reflected in the Consolidated statements of income and other comprehensive income as Financing costs if in respect of long-term debt, as Goods and services purchased if in respect of U.S. dollar-denominated future purchase commitments, or as Employee benefits expense if in respect of share-based compensation.

Hedging assets and liabilities

In the application of hedge accounting, an amount (the hedge value) is recorded in the Consolidated statements of financial position in respect of the fair value of the hedging items. The net difference, if any, between the amounts recognized in the determination of net income and the amounts necessary to reflect the fair value of the designated cash flow hedging items recorded in the Consolidated statements of financial position is recognized as a component of Other comprehensive income, as set out in *Note 11*.

In the application of hedge accounting to the compensation cost arising from share-based compensation, the amount recognized in the determination of net income is the amount that counterbalances the difference between the quoted market price of our Common Shares at the statement of financial position date and the price of our Common Shares in the hedging items.

(e) Revenue recognition

General

We earn the majority of our revenues (wireless: network revenues (voice and data); wireline: data revenues (which include: internet protocol; television; hosting, managed information technology and cloud-based services; customer care and business services; certain healthcare solutions; and home and business smart technology (including security and agriculture)) and voice revenues) from access to, and usage of, our telecommunications infrastructure. The majority of the balance of our revenues (wireless equipment and other) arises from providing services and products facilitating access to, and usage of, our telecommunications infrastructure.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

We offer complete and integrated solutions to meet our customers' needs. These solutions may involve deliveries of multiple services and products (our performance obligations) that occur at different points in time and/or over different periods of time; as referred to in *(b)*, this is a significant judgment for us. As required, the performance obligations of these multiple element arrangements are identified, the transaction price for the entire multiple element arrangement is determined and allocated among the performance obligations based upon our relative stand-alone selling prices for each of them, and our relevant revenue recognition policies are then applied, so that revenue is recognized when, or as, we satisfy the performance obligations. To the extent that variable consideration is included in determining the minimum transaction price, it is constrained to the "minimum spend" amount required in a contract with a customer. Service revenues arising from contracts with customers typically have variable consideration, because customers have the ongoing ability to both add and remove features and services, and because customer usage of our telecommunications infrastructure may exceed the base amounts provided for in their contracts.

Our contracts with customers do not have a significant financing component. With the exception of both equipment-related upfront payments that may be required under the terms of contracts with customers and in-store "cash and carry" sales of equipment and accessories, payments are typically due 30 days from the billing date. Billings are typically rendered on a monthly basis.

Multiple contracts with a single customer are normally accounted for as separate arrangements. In instances where multiple contracts are entered into with a customer in a short period of time, the contracts are reviewed as a group to ensure that, as with multiple element arrangements, their relative transaction prices are appropriate.

Lease accounting is applied to an accounting unit if it conveys to a customer the right to use a specific asset but does not convey the risks and/or benefits of ownership.

Our revenues are recorded net of any value-added and/or sales taxes billed to the customer concurrent with a revenue-generating transaction.

We use the following revenue accounting practical expedients provided for in IFRS 15, *Revenue from Contracts with Customers*:

- No adjustment of the contracted amount of consideration for the effects of financing components when, at the inception of a contract, we expect that the effect of the financing component is not significant at the individual contract level.
- No deferral of contract acquisition costs when the amortization period for such costs would be one year or less.

- When estimating minimum transaction prices allocated to any remaining unfulfilled, or partially unfulfilled, performance obligations, exclusion of amounts arising from contracts originally expected to have a duration of one year or less, as well as amounts arising from contracts under which we may recognize and bill revenue in an amount that corresponds directly with our completed performance obligations.

Contract assets

Many of our multiple element arrangements arise from bundling the sale of equipment (*e.g.* a wireless handset) with a contracted service period. Although the customer receives the equipment at contract inception and the revenue from the associated completed performance obligation is recognized at that time, the customer's payment for the equipment will effectively be received rateably over the contracted service period to the extent it is not received as a lump-sum amount at contract inception. The difference between the equipment revenue recognized and the associated amount cumulatively billed to the customer is recognized on the Consolidated statements of financial position as a contract asset.

Contract assets may also arise in instances where we give consideration to a customer. When we receive no identifiable, separable benefit for consideration given to a customer, the amount of the consideration is recorded as a reduction of revenue rather than as an expense. Such amounts are included in the determination of transaction prices for allocation purposes in multiple element arrangements.

- Some forms of consideration given to a customer, effectively at contract inception, such as rebates (including prepaid non-bank cards) and/or equipment, are considered to be performance obligations in a multiple element arrangement. Although the performance obligation is satisfied at contract inception, the customer's payment associated with the performance obligation will effectively be received rateably over the associated contracted service period. The difference between the revenue arising from the satisfied performance obligation and the associated amount cumulatively reflected in billings to the customer is recognized on the Consolidated statements of financial position as a contract asset.
- Other forms of consideration given to a customer, either at contract inception or over a period of time, such as discounts (including prepaid bank cards), may result in us receiving no identifiable, separable benefit and thus are not

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

considered performance obligations. Such consideration is recognized as a reduction of revenue rateably over the term of the contract. The difference between the consideration provided and the associated amount recognized as a reduction of revenue is recognized on the Consolidated statements of financial position as a contract asset.

Contract liabilities

Advance billings are recorded when billing occurs prior to provision of the associated services; such advance billings are recognized as revenue in the period in which the services and/or equipment are provided (see *Note 24*). Similarly, and as appropriate, upfront customer activation and connection fees are deferred and recognized over the average expected term of the customer relationship.

Costs of contract acquisition and contract fulfilment

Costs of contract acquisition (typically commissions) and costs of contract fulfilment are capitalized and recognized as an expense, generally over the life of the contract on a systematic and rational basis consistent with the pattern of the transfer of goods or services to which the asset relates. The amortization of such costs is included in the Consolidated statements of income and other comprehensive income as a component of Goods and services purchased, with the exception of amounts paid to our employees, which are included as Employee benefits expense.

The total cost of wireless equipment sold to customers and advertising and promotion costs related to initial customer acquisition are expensed as incurred; the cost of equipment we own that is situated at customers' premises and associated installation costs are capitalized as incurred. Costs of advertising production, advertising airtime and advertising space are expensed as incurred.

Voice and data

We recognize revenues on an accrual basis and include an estimate of revenues earned but unbilled. Wireless and wireline service revenues are recognized based upon access to, and usage of, our telecommunications infrastructure and upon contract fees.

Advance billings are recorded when billing occurs prior to provision of the associated services; such advance billings are recognized as revenue in the period in which the services are provided. Similarly, and as appropriate, upfront customer activation and connection fees are deferred and recognized over the average expected term of the customer relationship.

We use the liability method of accounting for the amounts of our quality of service rate rebates that arise from the jurisdiction of the Canadian Radio-television and Telecommunications Commission (CRTC).

The CRTC has established a mechanism to subsidize local exchange carriers, such as ourselves, that provide residential basic telephone service to high cost serving areas. The CRTC has determined the per network access line/per band subsidy rate for all local exchange carriers. We recognize the subsidy on an accrual basis by applying the subsidy rate to the number of residential network access lines we provide in high cost serving areas, as discussed further in *Note 7*. Differences, if any, between interim and final subsidy rates set by the CRTC are accounted for as a change in estimate in the period in which the CRTC finalizes the subsidy rate.

Other and wireless equipment

We recognize product revenues, including amounts related to wireless handsets sold to re-sellers and customer premises equipment, when the products are both delivered to, and accepted by, the end-user customers, irrespective of which supply channel delivers the product. With respect to wireless handsets sold to re-sellers, we consider ourselves to be the principal and primary obligor to the end-user customers. Revenues from operating leases of equipment are recognized on a systematic and rational basis (normally a straight-line basis) over the term of the lease.

(f) Depreciation, amortization and impairment

Depreciation and amortization

Property, plant and equipment (including right-of-use lease assets) are depreciated on a straight-line basis over their estimated useful lives (lease terms for right-of-use lease assets) as determined by a continuing program of asset life studies. Depreciation includes amortization of leasehold improvements and, prior to fiscal 2019, amortization of assets under finance leases. Leasehold improvements are normally amortized over the lesser of their expected average service lives or the terms of the associated leases. Intangible assets with finite lives (intangible assets subject to amortization) are amortized on a straight-line basis over their estimated useful lives, which are reviewed at least annually and adjusted as appropriate. As referred to in *(b)*, the use of a straight-line basis of depreciation and amortization is a significant judgment for us.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

Estimated useful lives for the majority of our property, plant and equipment and right-of-use lease assets subject to depreciation are as follows:

	Estimated useful lives [1]
Network assets	
Outside plant	17 to 40 years
Inside plant	4 to 25 years
Wireless site equipment	5 to 7 years
Real estate right-of-use lease assets	5 to 20 years
Balance of depreciable property, plant and equipment and right-of-use lease assets	3 to 40 years

1 The composite property, plant and equipment depreciation rate for the year ended December 31, 2020, was 5.0% (2019 – 5.0%). The rate is calculated by dividing property, plant and equipment depreciation expense by an average of the gross book value of property, plant and equipment depreciable assets over the reporting period.

Estimated useful lives for the majority of our intangible assets subject to amortization are as follows:

	Estimated useful lives
Wireline subscriber base	25 years
Customer contracts and related customer relationships	4 to 15 years
Software	2 to 10 years
Access to rights-of-way, crowdsource assets and other	5 to 30 years

Impairment – general

Impairment testing compares the carrying values of the assets or cash-generating units being tested with their recoverable amounts (the recoverable amount being the greater of an asset's or a cash-generating unit's value in use or its fair value less costs of disposal); as referred to in *(b)*, this is a significant estimate for us. Impairment losses are immediately recognized to the extent that the carrying value of an asset or a cash-generating unit exceeds its recoverable amount. Should the recoverable amounts for impaired assets or cash-generating units subsequently increase, the impairment losses previously recognized (other than in respect of goodwill) may be reversed to the extent that the reversal is not a result of "unwinding of the discount" and that the resulting carrying values do not exceed the carrying values which would have been the result if no impairment losses had been recognized previously.

Impairment – property, plant and equipment; intangible assets subject to amortization

The continuing program of asset life studies considers such items as the timing of technological obsolescence, competitive pressures and future infrastructure utilization plans; these considerations could also indicate that the carrying value of an asset may not be recoverable. If the carrying value of an asset were not considered to be recoverable, an impairment loss would be recognized.

Impairment – intangible assets with indefinite lives; goodwill

The carrying values of intangible assets with indefinite lives and goodwill are periodically tested for impairment. The frequency of the impairment testing is generally the reciprocal of the stability of the relevant events and circumstances, but intangible assets with indefinite lives and goodwill must, at a minimum, be tested annually; we have selected December as the time of our annual test.

We assess our intangible assets with indefinite lives by comparing the recoverable amounts of our cash-generating units to their carrying values (including the intangible assets with indefinite lives allocated to a cash-generating unit, but excluding any goodwill allocated to a cash-generating unit). To the extent that the carrying value of a cash-generating unit (including the intangible assets with indefinite lives allocated to the cash-generating

unit, but excluding any goodwill allocated to the cash-generating unit) exceeds its recoverable amount, the excess amount would be recorded as a reduction in the carrying value of intangible assets with indefinite lives.

Subsequent to assessing intangible assets with indefinite lives, we assess goodwill by comparing the recoverable amounts of our cash-generating units to their carrying values (including the intangible assets with indefinite lives and any goodwill allocated to a cash-generating unit). To the extent that the carrying value of a cash-generating unit (including the intangible assets with indefinite lives and the goodwill allocated to the cash-generating unit) exceeds its recoverable amount, the excess amount would first be recorded as a reduction in the carrying value of goodwill and any remainder would be recorded as a reduction in the carrying values of the assets of the cash-generating unit on a pro-rated basis.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

notes to consolidated financial statements

(g) Translation of foreign currencies

Trade transactions completed in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing at the time of the transactions. Monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the rate of exchange in effect at the statement of financial position date, with any resulting gain or loss recorded in the Consolidated statements of income and other comprehensive income as a component of Financing costs, as set out in *Note 9*. Hedge accounting is applied in specific instances, as discussed further in *(d)* preceding.

We have foreign subsidiaries that do not have the Canadian dollar as their functional currency. Foreign exchange gains and losses arising from the translation of these foreign subsidiaries' accounts into Canadian dollars are reported as a component of other comprehensive income, as set out in *Note 11*.

(h) Income and other taxes

We follow the liability method of accounting for income taxes; as referred to in *(b)*, this is a significant estimate for us. Under this method, current income taxes are recognized for the estimated income taxes payable for the current year. Deferred income tax assets and liabilities are recognized for temporary differences between the tax and accounting bases of assets and liabilities, and also for any benefits of losses and Investment Tax Credits available to be carried forward to future years for tax purposes that are more likely than not to be realized. The amounts recognized in respect of deferred income tax assets and liabilities are based upon the expected timing of the reversal of temporary differences or the usage of tax losses and the application of the substantively enacted tax rates at the time of reversal or usage.

We account for any changes in substantively enacted income tax rates affecting deferred income tax assets and liabilities in full in the period in which the changes are substantively enacted. We account for changes in the estimates of tax balances for prior years as estimate revisions in the period in which changes in the estimates arise; we have selected this approach as its emphasis on the statement of financial position is more consistent with the liability method of accounting for income taxes.

Our operations are complex and the related domestic and foreign tax interpretations, regulations, legislation and jurisprudence are continually changing. As a result, there are usually some tax matters in question that result in uncertain tax positions. We recognize the income tax benefit of an uncertain tax position only when it is more likely than not that the ultimate determination of the tax treatment of the position will result in that benefit being realized; however, this does not mean that tax authorities cannot challenge these positions. We accrue an amount for interest charges on current tax liabilities that have not been funded, which would include interest and penalties arising from uncertain tax positions. We include such charges in the Consolidated statements of income and other comprehensive income as a component of Financing costs.

Our research and development activities may be eligible to earn Investment Tax Credits, for which the determination of eligibility is a complex matter. We recognize Investment Tax Credits only when there is reasonable assurance that the ultimate determination of the eligibility of our research and development activities will result in the Investment Tax Credits being received, at which time they are accounted for using the cost reduction method, whereby such credits are deducted from the expenditures or assets to which they relate, as set out in *Note 10(c)*.

(i) Share-based compensation

General

When share-based compensation vests in its entirety at one future point in time (cliff-vesting), we recognize the expense on a straight-line basis over the vesting period. When share-based compensation vests in tranches (graded-vesting), we recognize the expense using the accelerated expense attribution method. An estimate of forfeitures during the vesting period is made at the date of grant of such share-based compensation; this estimate is adjusted to reflect actual experience.

Restricted share units

In respect of restricted share units with neither an equity settlement feature nor market performance conditions, as set out in *Note 14(b)*, we accrue a liability equal to the product of the number of vesting restricted share units multiplied by the fair market value of the corresponding Common Shares at the end of the reporting period (unless hedge accounting is applied, as set out in *(d)* preceding). Similarly, we accrue a liability for the notional subset of our restricted share units without an equity settlement feature and with market performance conditions using a Monte Carlo simulation-determined fair value. Restricted share units that have an equity settlement feature are accounted for as equity instruments. The expense for restricted share units

that do not ultimately vest is reversed against the expense that was previously recorded in their respect.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

Share option awards

A fair value for share option awards is determined at the date of grant and that fair value is recognized in the financial statements. Proceeds arising from the exercise of share option awards are credited to share capital, as are the recognized grant-date fair values of the exercised share option awards.

Share option awards that have a net-equity settlement feature, as set out in *Note 14(d)*, are accounted for as equity instruments. We have selected the equity instrument fair value method of accounting for the net-equity settlement feature as it is consistent with the accounting treatment applied to the associated share option awards.

(j) Employee future benefit plans

Defined benefit plans

We accrue amounts for our obligations under employee defined benefit plans and the related costs, net of plan assets. The cost of pensions and other retirement benefits earned by employees is actuarially determined using the accrued benefit method pro-rated on service and management's best estimates of both salary escalation and the retirement ages of employees. In the determination of net income, net interest for each plan, which is the product of the plan's surplus (deficit) multiplied by the discount rate, is included as a component of Financing costs, as set out in *Note 9*.

An amount reflecting the effect of differences between the discount rate and the actual rate of return on plan assets is included as a component of employee defined benefit plan re-measurements within Other comprehensive income, as set out in *Note 11* and *Note 15*. We determine the maximum economic benefit available from the plans' assets on the basis of reductions in future contributions to the plans.

On an annual basis, at a minimum, the defined benefit plan key assumptions are assessed and revised as appropriate; as referred to in *(b)*, these are significant estimates for us.

Defined contribution plans

We use defined contribution accounting for the Telecommunication Workers Pension Plan and the British Columbia Public Service Pension Plan, which cover certain of our employees and provide defined benefits to their members. In the absence of any regulations governing the calculation of the share of the underlying financial position and plan performance attributable to each employer-participant, and in the absence of contractual agreements between the plans and the employer-participants related to the financing of any shortfall (or distribution of any surplus), we account for these plans as defined contribution plans in accordance with International Accounting Standard 19, *Employee Benefits*.

(k) Cash and temporary investments, net

Cash and temporary investments, which may include investments in money market instruments that are purchased three months or less from maturity, are presented net of outstanding items, including cheques written but not cleared by the related banks as at the statement of financial position date. Cash and temporary investments, net, are classified as a liability in the statement of financial position when the total amount of all cheques written but not cleared by the related banks exceeds the amount of cash and temporary investments. When cash and temporary investments, net, are classified as a liability, they may also include overdraft amounts drawn on our bilateral bank facilities, which revolve daily and are discussed further in *Note 22*.

(l) Inventories

Our inventories primarily consist of wireless handsets, parts and accessories totalling $328 million at year-end (2019 – $375 million) and communications equipment held for resale. Inventories are valued at the lower of cost and net realizable value, with cost being determined on an average cost basis. Costs of goods sold for the year ended December 31, 2020, totalled $2.0 billion (2019 – $2.1 billion).

(m) Property, plant and equipment; intangible assets

General

Property, plant and equipment and intangible assets are recorded at historical cost, which for self-constructed property, plant and equipment includes materials, direct labour and applicable overhead costs. For internally developed, internal-use software, the historical cost recorded includes materials, direct labour and direct labour-related costs. Where property, plant and equipment construction projects are of sufficient size and duration, an amount is capitalized for the cost of funds used to finance construction, as set out in *Note 9*. The rate for calculating the capitalized financing cost is based on the weighted average cost of borrowing that we experience during the reporting period.

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

When we sell property, plant and/or equipment, the net book value is netted against the sale proceeds and the difference, as set out in *Note 7*, is included in the Consolidated statements of income and other comprehensive income as a component of Other income.

Asset retirement obligations

Provisions for liabilities, as set out in *Note 25*, are recognized for statutory, contractual or legal obligations, normally when incurred, associated with the retirement of property, plant and equipment (primarily certain items of outside plant and wireless site equipment) when those obligations result from the acquisition, construction, development and/or normal operation of the assets; as referred to in *(b)*, this is a significant estimate for us. The obligations are measured initially at fair value, which is determined using present value methodology, and the resulting costs are capitalized as a part of the carrying value of the related asset. In subsequent periods, the provisions for these liabilities are adjusted for the accretion of discount, for any changes in the market-based discount rate and for any changes in the amount or timing of the underlying future cash flows. The capitalized asset retirement cost is depreciated on the same basis as the related asset and the discount accretion, as set out in *Note 9*, is included in the Consolidated statements of income and other comprehensive income as a component of Financing costs.

(n) Investments

We account for our investments in companies over which we have significant influence, as discussed further in *Note 21*, using the equity method of accounting, whereby the investments are initially recorded at cost and subsequently adjusted to recognize our share of earnings or losses of the investee companies and any earnings distributions received. The excess of the cost of an equity investment over its underlying book value at the date of acquisition, except for goodwill, is amortized over the estimated useful lives of the underlying assets to which the excess cost is attributed.

Similarly, we account for our interests in the real estate joint ventures, as discussed further in *Note 21*, using the equity method of accounting. Unrealized gains and losses from transactions with (including contributions to) the real estate joint ventures are deferred in proportion to our remaining interest in the real estate joint ventures.

We account for our other long-term investments at their fair values unless they are investment securities that do not have quoted market prices in an active market or do not have other clear and objective evidence of fair value. When we do not account for our other long-term investments at their fair values, we use the cost basis of accounting, whereby the investments are initially recorded at cost, and earnings from those investments are recognized only to the extent received or receivable. When there is a significant or prolonged decline in the value of an other long-term investment, the carrying value of that other long-term investment is adjusted to its estimated fair value.

2 accounting policy developments

(a) Initial application of standards, interpretations and amendments to standards and interpretations in the reporting period

In October 2018, the International Accounting Standards Board amended IFRS 3, *Business Combinations*, seeking to clarify whether an acquisition transaction results in the acquisition of an asset or the acquisition of a business. The amendments are effective for acquisition transactions on or after January 1, 2020, although earlier application was permitted. The amended standard has a narrower definition of a business, which could result in the recognition of fewer business combinations than under the previous standard; the implication of this is that amounts which may have been recognized as goodwill in a business combination under the previous standard may now be recognized as allocations to net identifiable assets acquired under the amended standard (with an associated effect in an entity's results of operations that would differ from the effect of goodwill having been recognized). We have applied the standard prospectively from January 1, 2020. The effects of the amended standard on our financial performance and disclosure will be dependent upon the facts and circumstances of any future acquisition transactions and have not been material in the current fiscal year.

(b) Standards, interpretations and amendments to standards and interpretations in the reporting period not yet effective and not yet applied

In August 2020, the International Accounting Standards Board issued *Interest Rate Benchmark Reform—Phase 2*, which amends IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance Contracts* and IFRS 16 *Leases*. The amendments are effective for periods beginning on or after January 1, 2021, although earlier application is permitted. Interest rate benchmarks such as interbank offer rates (IBORs) play an important role in global financial markets as they index a wide variety of financial products,

Denotes accounting policy requiring, for us, a more significant choice among accounting policies and/or a more significant application of judgment.

including derivative financial instruments. Market developments have impacted the reliability of some existing benchmarks and, in this context, the Financial Stability Board has published a report setting out recommendations to reform such benchmarks. The *Interest Rate Benchmark Reform—Phase 2* amendments focus on the effects of the interest rate benchmark reform on a company's financial statements that arise when an interest rate benchmark used to calculate interest is replaced with an alternative benchmark rate; most significantly, there will be no requirement to derecognize or adjust the amount of financial instruments for changes required by the reform, but will instead update the effective interest rate to reflect the change to the alternative benchmark rate. The effects of these amendments on our financial performance and disclosure will be dependent upon the facts and circumstances of future changes in the derivative financial instruments we use, if any, and any future changes in interest rate benchmarks, if any, referenced by such derivative financial instruments we use.

3 capital structure financial policies

General

Our objective when managing capital is to maintain a flexible capital structure that optimizes the cost and availability of capital at acceptable risk.

In the management of capital and in its definition, we include common equity (excluding accumulated other comprehensive income), long-term debt (including long-term credit facilities, commercial paper backstopped by long-term credit facilities and any hedging assets or liabilities associated with long-term debt items, net of amounts recognized in accumulated other comprehensive income), cash and temporary investments, and short-term borrowings arising from securitized trade receivables.

We manage our capital structure and make adjustments to it in light of changes in economic conditions and the risk characteristics of our business. In order to maintain or adjust our capital structure, we may adjust the amount of dividends paid to holders of Common Shares, purchase Common Shares for cancellation pursuant to normal course issuer bids, issue new shares, issue new debt, issue new debt to replace existing debt with different characteristics and/or increase or decrease the amount of trade receivables sold to an arm's-length securitization trust.

During 2020, our financial objectives, which are reviewed annually, were unchanged from 2019, except for a change in the methodology for calculating our TELUS Corporation Common Share dividend payout ratio. We believe that our financial objectives are supportive of our long-term strategy.

We monitor capital utilizing a number of measures, including: net debt to earnings before interest, income taxes, depreciation and amortization (EBITDA*) – excluding restructuring and other costs ratio; coverage ratios; and dividend payout ratios.

Debt and coverage ratios

Net debt to EBITDA – excluding restructuring and other costs is calculated as net debt at the end of the period, divided by 12-month trailing EBITDA – excluding restructuring and other costs. This measure, historically, is substantially similar to the leverage ratio covenant in our credit facilities. Net debt and EBITDA – excluding restructuring and other costs are measures that do not have any standardized meanings prescribed by IFRS-IASB and are therefore unlikely to be comparable to similar measures presented by other issuers. The calculation of these measures is set out in the following table. Net debt is one component of a ratio used to determine compliance with debt covenants.

As at, or for the 12-month periods ended, December 31 ($ in millions)	Objective	**2020**	2019
Components of debt and coverage ratios			
Net debt [1]		**$ 19,826**	$ 18,199
EBITDA – excluding restructuring and other costs [2]		**$ 5,753**	$ 5,688
Net interest cost [3] (*Note 9*)		**$ 792**	$ 755
Debt ratio			
Net debt to EBITDA – excluding restructuring and other costs	2.20 – 2.70 [4]	**3.45**	3.20
Coverage ratios			
Earnings coverage [5]		**3.2**	4.0
EBITDA – excluding restructuring and other costs interest coverage [6]		**7.3**	7.5

* EBITDA does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers; we define EBITDA as operating revenues and other income less goods and services purchased and employee benefits expense. We have issued guidance on, and report, EBITDA because it is a key measure that management uses to evaluate the performance of our business, and it is also utilized in measuring compliance with certain debt covenants.

notes to consolidated financial statements

1 Net debt and total capitalization are calculated as follows:

As at December 31	*Note*	**2020**	2019
Long-term debt	*26*	**$ 20,288**	$ 18,474
Debt issuance costs netted against long-term debt		**97**	87
Derivative (assets) liabilities, net		**120**	(37)

Accumulated other comprehensive income amounts arising from financial instruments used to manage interest rate and currency risks associated with U.S. dollar-denominated long-term debt – excluding tax effects		**69**	110
Cash and temporary investments, net		**(848)**	(535)
Short-term borrowings	*22*	**100**	100
Net debt		**19,826**	18,199
Common equity		**12,074**	10,548
Less: accumulated other comprehensive income included in common equity above		**(117)**	(119)
Total capitalization		**$ 31,783**	$ 28,628

2 EBITDA – excluding restructuring and other costs is calculated as follows:

Years ended December 31	*Note*	**2020**	2019
EBITDA	*5*	**$ 5,494**	$ 5,554
Restructuring and other costs	*16*	**259**	134
EBITDA – excluding restructuring and other costs		**$ 5,753**	$ 5,688

3 Net interest cost is defined as financing costs, excluding employee defined benefit plans net interest, recoveries on long-term debt prepayment premium and repayment of debt, calculated on a 12-month trailing basis (expenses recorded for long-term debt prepayment premium, if any, are included in net interest cost) (see *Note 9*).

4 Our long-term objective range for this ratio is 2.20 – 2.70 times. The ratio as at December 31, 2020, is outside the long-term objective range. We may permit, and have permitted, this ratio to go outside the objective range (for long-term investment opportunities), but we will endeavour to return this ratio to within the objective range in the medium term (following upcoming 2021, 2022 and 2023 spectrum auctions), as we believe that this range is supportive of our long-term strategy. We are in compliance with the leverage ratio covenant in our credit facilities, which states that we may not permit our net debt to operating cash flow ratio to exceed 4.00:1.00 (see *Note 26(d)*); the calculation of the debt ratio is substantially similar to the calculation of the leverage ratio covenant in our credit facilities.

5 Earnings coverage is defined by Canadian Securities Administrators National Instrument 41-101 as net income before borrowing costs and income tax expense, divided by borrowing costs (interest on long-term debt; interest on short-term borrowings and other; long-term debt prepayment premium), and adding back capitalized interest, all such amounts excluding amounts attributable to non-controlling interests.

6 EBITDA – excluding restructuring and other costs interest coverage is defined as EBITDA – excluding restructuring and other costs, divided by net interest cost. This measure is substantially similar to the coverage ratio covenant in our credit facilities.

Net debt to EBITDA – excluding restructuring and other costs was 3.45 times as at December 31, 2020, up from 3.20 times one year earlier. The effect of the increase in net debt, primarily due to business acquisitions and the acquisition of spectrum licences, exceeded the effect of growth in EBITDA – excluding restructuring and other costs. EBITDA growth was reduced by COVID-19 pandemic impacts.

As set out in *Note 28(d)*, in February 2021, TELUS International (Cda) Inc. made an initial public offering of subordinate voting shares; both TELUS Corporation and a TELUS International (Cda) Inc. non-controlling shareholder individually also offered subordinate voting shares in conjunction with the initial public offering. Through February 11, 2021, net proceeds of approximately $0.6 billion from the offering were used to reduce the amount of outstanding TELUS International (Cda) Inc. credit facility indebtedness and $0.2 billion (comprised of net proceeds on disposition of TELUS International (Cda) Inc. subordinate voting shares by TELUS Corporation) from the offering was included in cash and temporary investments, net; had such reduction, and inclusion, respectively, been made at December 31, 2020, the pro forma net debt to EBITDA – excluding restructuring and other costs ratio would have been 3.30 times.

The earnings coverage ratio for the twelve-month period ended December 31, 2020, was 3.2 times, down from 4.0 times one year earlier. Higher borrowing costs reduced the ratio by 0.1 and a decrease in income before borrowing costs and income taxes decreased the ratio by 0.7. The EBITDA – excluding restructuring and other costs interest coverage ratio for the twelve-month period ended December 31, 2020, was 7.3 times, down from 7.5 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.1, while an increase in net interest costs reduced the ratio by 0.3.

TELUS Corporation Common Share dividend payout ratio

Commencing in 2020, so as to be consistent with the way we manage our business, we updated our revised TELUS Corporation Common Share dividend payout ratio presented to be a historical measure calculated as the sum of the most recent four quarters' dividends declared for TELUS Corporation Common Shares, as recorded in the financial statements net of dividend reinvestment plan effects (see *Note 13*), divided by the sum of free cash flow* amounts for the

* Free cash flow does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers; we define free cash flow as EBITDA (operating revenues and other income less goods and services purchased and employee benefits expense) excluding certain working capital changes (such as trade receivables and trade payables), proceeds from divested assets and other sources and uses of cash, as found in the consolidated statements of cash flows. We have issued guidance on, and report, free cash flow because it is a key measure that management, and investors, use to evaluate the performance of our business.

most recent four quarters for interim reporting periods (divided by annual free cash flow if the reported amount is in respect of a fiscal year).

For the 12-month periods ended December 31	Objective	**2020**	2019
Determined using management measures			
TELUS Corporation Common Share dividend payout ratio – net of dividend reinvestment plan effects	60%–75% [1]	**67%**	115%
Determined using most comparable IFRS-IASB measures			
Ratio of TELUS Corporation Common Share dividends declared to cash provided by operating activities – less capital expenditures (excluding spectrum licences)		**84%**	133%

1 Our objective range for the TELUS Corporation Common Share dividend payout ratio is 60%-75% of free cash flow on a prospective basis.

For the 12-month periods ended December 31 (millions)	**2020**	2019
TELUS Corporation Common Share dividends declared	**$ 1,520**	$ 1,358
Amount of TELUS Corporation Common Share dividends declared reinvested in TELUS Corporation Common Shares	**(561)**	(290)
TELUS Corporation Common Share dividends declared – net of dividend reinvestment plan effects	**$ 959**	$ 1,068

Our calculation of free cash flow, and the reconciliation to cash provided by operating activities, is as follows:

For the 12-month periods ended December 31 (millions)	*Note*	**2020**	2019
EBITDA	***5***	**$ 5,494**	$ 5,554
Deduct non-cash gains from the sale of property, plant and equipment		**(4)**	(21)
Restructuring and other costs, net of disbursements		**35**	(36)
Effects of contract asset, acquisition and fulfilment and TELUS Easy Payment device financing		**43**	(118)
Effects of lease principal	*31(b)*	**(365)**	(333)
Leases accounted for as finance leases prior to adoption of IFRS 16		**86**	108
Items from the Consolidated statements of cash flows:			
Share-based compensation, net	*14*	**27**	(2)
Net employee defined benefit plans expense	*15*	**102**	78
Employer contributions to employee defined benefit plans		**(51)**	(41)
Interest paid		**(740)**	(714)
Interest received		**13**	7
Capital expenditures (excluding spectrum licences)	*5*	**(2,775)**	(2,906)
Free cash flow before income taxes		**1,865**	1,576
Income taxes paid, net of refunds		**(430)**	(644)
Free cash flow		**1,435**	932
Add (deduct):			
Capital expenditures (excluding spectrum licences)	*5*	**2,775**	2,906
Adjustments to reconcile to cash provided by operating activities		**364**	89
Cash provided by operating activities		**$ 4,574**	$ 3,927

4 financial instruments

(a) Risks – overview

Our financial instruments, their accounting classification and the nature of certain risks to which they may be subject are set out in the following table.

		Risks				
				Market risks		
Financial instrument	Accounting classification	Credit	Liquidity	Currency	Interest rate	Other price
Measured at amortized cost						
Accounts receivable	AC [1]	X		X		
Contract assets	AC [1]	X				
Construction credit facilities advances to real estate joint venture	AC [1]				X	
Short-term borrowings	AC [1]		X	X	X	

Accounts payable	AC [1]		X	X		
Provisions (including restructuring accounts payable)	AC [1]		X	X		X
Long-term debt	AC [1]		X	X	X	
Measured at fair value						
Cash and temporary investments	FVTPL [2]	X		X	X	
Long-term investments (not subject to significant influence) [3]	FVTPL/FVOCI [3]			X		X
Foreign exchange derivatives [4]	FVTPL [2]	X	X	X		
Share-based compensation derivatives [4]	FVTPL [2]	X	X			X

1 For accounting recognition and measurement purposes, classified as amortized cost (AC).

2 For accounting recognition and measurement purposes, classified as fair value through net income (FVTPL). *Unrealized* changes in the fair values of financial instruments are included in net income unless the instrument is part of a cash flow hedging relationship. The effective portions of *unrealized* changes in the fair values of financial instruments held for hedging are included in other comprehensive income.

3 Long-term investments over which we do not have significant influence are measured at fair value if those fair values can be reliably measured. For accounting recognition and measurement purposes, on an investment-by-investment basis, long-term investments are classified as either fair value through net income or fair value through other comprehensive income (FVOCI).

4 Use of derivative financial instruments is subject to a policy which requires that no derivative transaction is to be entered into for the purpose of establishing a speculative or leveraged position (the corollary being that all derivative transactions are to be entered into for risk management purposes only) and sets criteria for the creditworthiness of the transaction counterparties.

Derivatives that are part of an established and documented cash flow hedging relationship are accounted for as held for hedging. We believe that classification as held for hedging results in a better matching of the change in the fair value of the derivative financial instrument with the risk exposure being hedged.

In respect of hedges of anticipated transactions, hedge gains/losses are included with the related expenditure and are expensed when the transaction is recognized in our results of operations. We have selected this method as we believe that it results in a better matching of the hedge gains/losses with the risk exposure being hedged.

Derivatives that are not part of a documented cash flow hedging relationship are accounted for as held for trading and thus are measured at fair value through net income.

Derivative financial instruments

We apply hedge accounting to financial instruments used to establish hedge accounting relationships for U.S. dollar-denominated transactions and to fix the cost of some share-based compensation. We believe that our use of derivative financial instruments for hedging or arbitrage assists us in managing our financing costs and/or reducing the uncertainty associated with our financing or other business activities. Uncertainty associated with currency risk and other price risk is reduced through our use of foreign exchange derivatives and share-based compensation derivatives that effectively swap floating currency exchange rates and share prices for fixed rates and prices. When entering into derivative financial instrument contracts, we seek to align the cash flow timing of the hedging items with that of the hedged items. The effects of this risk management strategy and its application are set out in *(i)* following.

(b) Credit risk

Excluding credit risk, if any, arising from currency swaps settled on a gross basis, the best representation of our maximum exposure (excluding income tax effects) to credit risk, which is a worst-case scenario and does not reflect results we expect, is set out in the following table.

As at December 31 (millions)	**2020**	2019
Cash and temporary investments, net	**$ 848**	$ 535
Accounts receivable	**2,716**	2,187
Contract assets	**707**	1,065
Derivative assets	**42**	84
	$ 4,313	$ 3,871

Cash and temporary investments, net

Credit risk associated with cash and temporary investments is managed by ensuring that these financial assets are placed with: governments; major financial institutions that have been accorded strong investment grade ratings by a primary rating agency; and/or other creditworthy counterparties. An ongoing review evaluates changes in the status of counterparties.

Accounts receivable

Credit risk associated with accounts receivable is inherently managed by the size and diversity of our large customer base, which includes substantially all consumer and business sectors in Canada. We follow a program of credit evaluations of customers and limit the amount of credit extended when deemed necessary. Accounts are considered to be past due (in default) when customers have failed to make the contractually required payments when due, which is generally within 30 days of the billing date. Any late payment charges are levied at an industry-based market or negotiated rate on outstanding non-current customer account balances.

As at December 31 (millions)	Note	2020 Gross	2020 Allowance	2020 Net [1]	2019 Gross	2019 Allowance	2019 Net [1]
Customer accounts receivable, net of allowance for doubtful accounts							
Less than 30 days past billing date		**$ 815**	**$ (19)**	**$ 796**	$ 803	$ (10)	$ 793
30-60 days past billing date		**339**	**(17)**	**322**	331	(8)	323
61-90 days past billing date		**90**	**(19)**	**71**	74	(5)	69
More than 90 days past billing date		**98**	**(43)**	**55**	73	(14)	59
Unbilled customer finance receivables		**1,026**	**(42)**	**984**	523	(18)	505
		$ 2,368	**$ (140)**	**$ 2,228**	$ 1,804	$ (55)	$ 1,749
Current		**$ 1,986**	**$ (119)**	**$ 1,867**	$ 1,570	$ (46)	$ 1,524
Non-current	20	**382**	**(21)**	**361**	234	(9)	225
		$ 2,368	**$ (140)**	**$ 2,228**	$ 1,804	$ (55)	$ 1,749

1 Net amounts represent customer accounts receivable for which an allowance had not been made as at the dates of the Consolidated statements of financial position (see *Note 6(b)*).

We maintain allowances for lifetime expected credit losses related to doubtful accounts. Current economic conditions (including forward-looking macroeconomic data), historical information (including credit agency reports, if available), reasons for the accounts being past due and the line of business from which the customer accounts receivable arose are all considered when determining whether to make allowances for past-due accounts. The same factors are considered when determining whether to write off amounts charged to the allowance for doubtful accounts against the customer accounts receivable; amounts charged to the customer accounts receivable allowance for doubtful accounts that were written off but were still subject to enforcement activity as at December 31, 2020, totalled $597 million (2019 – $449 million). The doubtful accounts expense is calculated on a specific-identification basis for customer accounts receivable above a specific balance threshold and on a statistically derived allowance basis for the remainder. No customer accounts receivable are written off directly to the doubtful accounts expense.

The following table presents a summary of the activity related to our allowance for doubtful accounts.

Years ended December 31 (millions)	2020	2019
Balance, beginning of period	**$ 55**	$ 53
Additions (doubtful accounts expense)	**91**	64
Accounts written off less than recoveries	**(22)**	(66)
Other	**16**	4
Balance, end of period	**$ 140**	$ 55

Contract assets

Credit risk associated with contract assets is inherently managed by the size and diversity of our large customer base, which includes substantially all consumer and business sectors in Canada. We follow a program of credit evaluations of customers and limit the amount of credit extended when deemed necessary.

As at December 31 (millions)	2020 Gross	2020 Allowance	2020 Net *(Note 6(c))*	2019 Gross	2019 Allowance	2019 Net *(Note 6(c))*
Contract assets, net of impairment allowance						
To be billed and thus reclassified to accounts receivable during:						
The 12-month period ending one year hence	**$ 611**	**$ (29)**	**$ 582**	$ 952	$ (42)	$ 910
The 12-month period ending two years hence	**265**	**(12)**	**253**	322	(14)	308
Thereafter	**16**	**(1)**	**15**	21	(1)	20
	$ 892	**$ (42)**	**$ 850**	$ 1,295	$ (57)	$ 1,238

We maintain allowances for lifetime expected credit losses related to contract assets. Current economic conditions, historical information (including credit agency reports, if available), and the line of business from which the contract asset arose are all considered when determining impairment allowances. The same factors are considered when determining whether to write off amounts charged to the impairment allowance for contract assets

against contract assets.

Derivative assets (and derivative liabilities)

Counterparties to our share-based compensation cash-settled equity forward agreements and foreign exchange derivatives are major financial institutions that have been accorded investment grade ratings by a primary credit rating agency. The total dollar amount of credit exposure under contracts with any one financial institution is limited and counterparties' credit ratings are monitored. We do not give or receive collateral on swap agreements and hedging items due to our credit rating and those of our counterparties. While we are exposed to the risk of potential credit losses due to the possible non-performance of our counterparties, we consider this risk remote. Our derivative liabilities do not have credit risk-related contingent features.

(c) Liquidity risk

As a component of our capital structure financial policies, discussed further in *Note 3*, we manage liquidity risk by:

- maintaining a daily cash pooling process that enables us to manage our available liquidity and our liquidity requirements according to our actual needs;
- maintaining an agreement to sell trade receivables to an arm's-length securitization trust and bilateral bank facilities (*Note 22*), a commercial paper program (*Note 26(c)*) and syndicated credit facilities (*Note 26(d),(f)*);
- maintaining an in-effect shelf prospectus;
- continuously monitoring forecast and actual cash flows; and
- managing maturity profiles of financial assets and financial liabilities.

Our debt maturities in future years are as disclosed in *Note 26(i)*. As at December 31, 2020, we could offer $2.0 billion of debt or equity securities pursuant to a shelf prospectus that is in effect until June 2022 (2019 – $2.0 billion pursuant to a shelf prospectus that was in effect until August 2021). We believe that our investment grade credit ratings contribute to reasonable access to capital markets.

We closely match the contractual maturities of our derivative financial liabilities with those of the risk exposures they are being used to manage.

The expected maturities of our undiscounted financial liabilities do not differ significantly from the contractual maturities, other than as noted below. The contractual maturities of our undiscounted financial liabilities, including interest thereon (where applicable), are set out in the following tables.

	Non-derivative				**Derivative**					
			Composite long-term debt		Currency swap agreement amounts to be exchanged [2]			Currency swap agreement amounts to be exchanged		
As at December 31, 2020 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Long-term debt, excluding leases [1] (*Note 26*)	Leases (*Note 26*)	(Receive)	Pay	Other	(Receive)	Pay	Total
2021	**$ 2,669**	**$ 101**	**$ 1,658**	**$ 538**	**$ (882)**	**$ 892**	**$ —**	**$ (454)**	**$ 475**	**$ 4,997**
2022	**74**	**—**	**2,204**	**371**	**(149)**	**151**	**—**	**—**	**—**	**2,651**
2023	**8**	**—**	**1,149**	**230**	**(149)**	**151**	**6**	**—**	**—**	**1,395**
2024	**8**	**—**	**1,706**	**191**	**(150)**	**151**	**—**	**—**	**—**	**1,906**
2025	**9**	**—**	**2,868**	**145**	**(525)**	**575**	**—**	**—**	**—**	**3,072**
2026-2030	**12**	**—**	**7,953**	**417**	**(1,836)**	**1,898**	**—**	**—**	**—**	**8,444**
Thereafter	**—**	**—**	**9,877**	**379**	**(2,889)**	**2,949**	**—**	**—**	**—**	**10,316**
Total	**$ 2,780**	**$ 101**	**$ 27,415**	**$ 2,271**	**$ (6,580)**	**$ 6,767**	**$ 6**	**$ (454)**	**$ 475**	**$ 32,781**
			Total (*Note 26(i)*)			**$ 29,873**				

1 Cash outflows in respect of interest payments on our short-term borrowings, commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the interest rates in effect as at December 31, 2020.

2 The amounts included in undiscounted non-derivative long-term debt in respect of U.S. dollar-denominated long-term debt, and the corresponding amounts in the long-term debt currency swap receive column, have been determined based upon the currency exchange rates in effect as at December 31, 2020. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swap pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

	Non-derivative		**Derivative**	
	Composite long-term debt			
		Currency swap agreement amounts to be exchanged [2]		Currency swap agreement amounts to be exchanged

As at December 31, 2019 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Construction credit facilities commitment (*Note 21*)	Long-term debt, excluding leases [1]	Leases	Long-term debt currency swap (Receive)	Long-term debt currency swap Pay	Other	Other currency swap (Receive)	Other currency swap Pay	Total
2020	$ 2,639	$ 3	$ 10	$ 1,657	$ 373	$ (1,140)	$ 1,153	$ —	$ (917)	$ 921	$ 4,699
2021	43	103	—	1,698	338	(119)	118	—	—	—	2,181
2022	7	—	—	2,235	207	(119)	118	8	—	—	2,456
2023	5	—	—	1,021	189	(119)	118	—	—	—	1,214
2024	5	—	—	1,595	157	(119)	118	—	—	—	1,756
2025-2029	4	—	—	7,311	429	(1,919)	1,944	—	—	—	7,769
Thereafter	—	—	—	10,102	388	(3,019)	3,020	—	—	—	10,491
Total	$ 2,703	$ 106	$ 10	$ 25,619	$ 2,081	$ (6,554)	$ 6,589	$ 8	$ (917)	$ 921	$ 30,566
				Total			$ 27,735				

1 Cash outflows in respect of interest payments on our short-term borrowings, commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the interest rates in effect as at December 31, 2019.

2 The amounts included in undiscounted non-derivative long-term debt in respect of U.S. dollar-denominated long-term debt, and the corresponding amounts in the long-term debt currency swap receive column, have been determined based upon the currency exchange rates in effect as at December 31, 2019. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swap pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

(d) Currency risk

Our functional currency is the Canadian dollar, but certain routine revenues and operating costs are denominated in U.S. dollars and some inventory purchases and capital asset acquisitions are sourced internationally. The U.S. dollar is the only foreign currency to which we have a significant exposure as at the balance sheet date.

Our foreign exchange risk management includes the use of foreign currency forward contracts and currency options to fix the exchange rates on a varying percentage, typically in the range of 50% to 75%, of our domestic short-term U.S. dollar-denominated transactions and commitments and all U.S. dollar-denominated commercial paper. Other than in respect of U.S. dollar-denominated commercial paper, we designate only the spot element of these instruments as the hedging item, as the forward element is wholly immaterial; in respect of U.S. dollar-denominated commercial paper, we designate the forward rate.

As discussed further in *Note 26(b)* and *Note 26(f)*, we are also exposed to currency risk in that the fair value or future cash flows of our U.S. Dollar Notes and our TELUS International (Cda) Inc. credit facility U.S. dollar borrowings could fluctuate because of changes in foreign exchange rates. Currency hedging relationships have been established for the related semi-annual interest payments and the principal payment at maturity in respect of the U.S. Dollar Notes; we designate only the spot element of these instruments as the hedging item, as the forward element is wholly immaterial. As the functional currency of our TELUS International (Cda) Inc. subsidiary is the U.S. dollar, fluctuations in foreign exchange rates affecting its borrowings are reflected as a foreign currency translation adjustment within other comprehensive income.

(e) Interest rate risk

Changes in market interest rates will cause fluctuations in the fair values or future cash flows of temporary investments, construction credit facility advances made to the real estate joint venture, short-term obligations, long-term debt and interest rate swap derivatives.

When we have temporary investments, they have short maturities and fixed interest rates and, as a result, their fair values will fluctuate with changes in market interest rates; absent monetization prior to maturity, the related future cash flows will not change due to changes in market interest rates.

If the balance of short-term investments includes dividend-paying equity instruments, we could be exposed to interest rate risk.

Due to the short-term nature of the applicable rates of interest charged, the fair value of the construction credit facility advances made to the real estate joint venture is not materially affected by changes in market interest rates; the associated cash flows representing interest payments will be affected until such advances are repaid.

As short-term obligations arising from bilateral bank facilities, which typically have variable interest rates, are rarely outstanding for periods that exceed one calendar week, interest rate risk associated with this item is not material.

Short-term borrowings arising from the sales of trade receivables to an arm's-length securitization trust are fixed-rate debt. Due to the short maturities of these borrowings, interest rate risk associated with this item is not material.

All of our currently outstanding long-term debt, other than commercial paper and amounts drawn on our credit facilities (*Note 26(c), (f)*), is fixed-rate debt. The fair value of fixed-rate debt fluctuates with changes in market interest

rates; absent early redemption, the related future cash flows will not change. Due to the short maturities of commercial paper, its fair value is not materially affected by changes in market interest rates, but the associated cash flows representing interest payments may be affected if the

commercial paper is rolled over.

Amounts drawn on our short-term and long-term credit facilities will be affected by changes in market interest rates in a manner similar to commercial paper.

(f) Other price risk

Long-term investments

We are exposed to equity price risk arising from investments classified as fair value through other comprehensive income. Such investments are held for strategic rather than trading purposes.

Share-based compensation derivatives

We are exposed to other price risk arising from cash-settled share-based compensation (appreciating Common Share prices increase both the expense and the potential cash outflow). Certain cash-settled equity swap agreements were entered into which fixed the cost associated with our estimate of the TELUS Corporation restricted share units that were expected to vest.

(g) Market risks

Net income and other comprehensive income for the years ended December 31, 2020 and 2019, could have varied if the Canadian dollar: U.S. dollar exchange rate, the U.S. dollar: European euro exchange rate, market interest rates and our Common Share price varied by reasonably possible amounts from their actual statement of financial position date amounts.

The sensitivity analysis of our exposure to currency risk at the reporting date has been determined based upon a hypothetical change taking place at the relevant statement of financial position date. The U.S. dollar-denominated and European euro-denominated balances and derivative financial instrument notional amounts as at the statement of financial position dates have been used in the calculations.

The sensitivity analysis of our exposure to interest rate risk at the reporting date has been determined based upon a hypothetical change taking place at the beginning of the relevant fiscal year and being held constant through to the statement of financial position date. The principal and notional amounts as at the relevant statement of financial position date have been used in the calculations.

The sensitivity analysis of our exposure to other price risk arising from share-based compensation at the reporting date has been determined based upon a hypothetical change taking place at the relevant statement of financial position date. The relevant notional number of Common Shares at the relevant statement of financial position date, which included those in the cash-settled equity swap agreements, were used in the calculations.

Income tax expense, which is reflected net in the sensitivity analysis, reflects the applicable statutory income tax rates for the reporting periods.

Years ended December 31	Net income		Other comprehensive income		Comprehensive income	
(increase (decrease) in millions)	**2020**	2019	**2020**	2019	**2020**	2019
Reasonably possible changes in market risks [1]						
10% change in C$: US$ exchange rate						
Canadian dollar appreciates	**$ —**	$ —	**$ 14**	$ (80)	**$ 14**	$ (80)
Canadian dollar depreciates	**$ —**	$ —	**$ (14)**	$ 80	**$ (14)**	$ 80
10% change in US$: € exchange rate						
U.S. dollar appreciates	**$ —**	$ —	**$ (54)**	$ (4)	**$ (54)**	$ (4)
U.S. dollar depreciates	**$ —**	$ —	**$ 54**	$ 4	**$ 54**	$ 4
25 basis point change in interest rates						
Interest rates increase						
Canadian interest rate	**$ (1)**	$ (2)	**$ 107**	$ 93	**$ 106**	$ 91
U.S. interest rate	**$ —**	$ —	**$ (107)**	$ (95)	**$ (107)**	$ (95)
Combined	**$ (1)**	$ (2)	**$ —**	$ (2)	**$ (1)**	$ (4)
Interest rates decrease						
Canadian interest rate	**$ 1**	$ 2	**$ (112)**	$ (98)	**$ (111)**	$ (96)
U.S. interest rate	**$ —**	$ —	**$ 113**	$ 101	**$ 113**	$ 101
Combined	**$ 1**	$ 2	**$ 1**	$ 3	**$ 2**	$ 5
25% [2] change in Common Share price [3]						
Price increases	**N/A**	$ (5)	**N/A**	$ 5	**N/A**	$ —
Price decreases	**N/A**	$ 13	**N/A**	$ (5)	**N/A**	$ 8

1 These sensitivities are hypothetical and should be used with caution. Changes in net income and/or other comprehensive income generally cannot be extrapolated because the relationship of the change in assumption to the change in net income and/or other comprehensive income may not be linear. In this table, the effect of a variation in a particular assumption on the amount of net income and/or other comprehensive income is calculated without changing any other factors; in reality, changes in one factor may result in changes in another, which might magnify or counteract the sensitivities.

The sensitivity analysis assumes that we would realize the changes in exchange rates and market interest rates; in reality, the competitive marketplace in which we operate would have an effect on this assumption.

No consideration has been made for a difference in the notional number of Common Shares associated with share-based compensation awards made during the reporting period that may have arisen due to a difference in the Common Share price.

2 To facilitate ongoing comparison of sensitivities, a constant variance of approximate magnitude has been used. Reflecting a twelve-month data period and calculated on a monthly basis, the volatility of our Common Share price as at December 31, 2019, was 9.9%.

3 The hypothetical effects of changes in the price of our Common Shares are restricted to those which would arise from our share-based compensation awards that are accounted for as liability instruments and the associated cash-settled equity swap agreements; as at December 31, 2020, we had no Common Share compensation awards accounted for as liability instruments.

(h) Fair values

Derivative

The derivative financial instruments that we measure at fair value on a recurring basis subsequent to initial recognition are set out in the following table.

		2020				2019			
As at December 31 (millions)	Designation	Maximum maturity date	Notional amount	Fair value [1] and carrying value	Price or rate	Maximum maturity date	Notional amount	Fair value [1] and carrying value	Price or rate
Current Assets [2]									
Derivatives used to manage									
Currency risk arising from U.S. dollar revenues	HFT [4]	2021	**$ 87**	**$ 2**	US$1.00: C$1.27	2020	$ 36	$ 1	US$1.00: C$1.30
Changes in share-based compensation costs (*Note 14(b)*)	HFH [3]	—	**$ —**	**—**	—	2020	$ 72	4	$24.40*
Currency risk arising from U.S. dollar-denominated long-term debt (*Note 26(b)-(c)*)	HFH [3]	2021	**$ 95**	**—**	US$1.00: C$1.27	—	$ —	—	—
Currency risk associated with European euro-denominated business acquisition	HFH [5]	—	**$ —**	**—**	—	2020	$ 472	3	€1.00: US$1.12
				$ 2				$ 8	
Other Long-Term Assets [2]									
Derivatives used to manage									
Currency risk arising from U.S. dollar-denominated long-term debt [6] (*Note 26(b)-(c)*)	HFH [3]	2049	**$ 2,176**	**$ 40**	US$1.00: C$1.27	2048	$ 3,068	$ 76	US$1.00: C$1.28
Current Liabilities [2]									
Derivatives used to manage									
Currency risk arising from U.S. dollar-denominated purchases	HFH [3]	2021	**$ 388**	**$ 21**	US$1.00: C$1.34	2020	$ 412	$ 6	US$1.00: C$1.32
Currency risk arising from U.S. dollar-denominated long-term debt (*Note 26(b)-(c)*)	HFH [3]	2021	**$ 647**	**11**	US$1.00: C$1.29	2020	$ 1,037	17	US$1.00: C$1.32
Currency risk arising from European euro functional currency operations purchased with U.S. dollar-denominated long-term debt [7] (*Notes 18(b), 26(f)*)	HFH [5]	2024	**$ 34**	**—**	€1.00: US$1.09	—	$ —	—	—
Interest rate risk associated with non-fixed rate credit facility amounts drawn (*Note 26(f)*)	HFH [3]	2022	**$ 8**	**—**	2.64%	2022	$ 8	—	2.64%
				$ 32				$ 23	

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

		2020				2019			
As at December 31 (millions)	Designation	Maximum maturity date	Notional amount	Fair value [1] and carrying value	Price or rate	Maximum maturity date	Notional amount	Fair value [1] and carrying value	Price or rate
Other Long-Term Liabilities [2]									
Derivatives used to manage									
Currency risk arising from U.S. dollar-denominated long-term debt [6] (*Note 26(b)-(c)*)	HFH [3]	2049	**$ 3,260**	**$ 82**	US$1.00: C$1.33	2049	$ 2,485	$ 22	US$1.00: C$1.34
Currency risk arising from European euro functional currency operations purchased with U.S. dollar-denominated long-term debt [7] (*Notes 18(b), 26(f)*)	HFH [5]	2025	**$ 557**	**67**	€1.00: US$1.09	—	$ —	—	—
Interest rate risk associated with non-fixed rate credit facility amounts drawn (*Note 26(f)*)	HFH [3]	2022	**$ 120**	**6**	2.64%	2022	$ 130	4	2.64%
				$ 155				$ 26	

1 Fair value measured at reporting date using significant other observable inputs (Level 2).
2 Derivative financial assets and liabilities are not set off.
3 Designated as held for hedging (HFH) upon initial recognition (cash flow hedging item); hedge accounting is applied. Unless otherwise noted, hedge ratio is 1:1 and is established by assessing the degree of matching between the notional amounts of hedging items and the notional amounts of the associated hedged items.
4 Designated as held for trading (HFT) and classified as fair value through net income upon initial recognition; hedge accounting is not applied.
5 Designated as a hedge of a net investment in a foreign operation and hedge accounting is applied. Hedge ratio is 1:1 and is established by assessing the degree of matching between the notional amounts of hedging items and the notional amounts of the associated hedged items.
6 We designate only the spot element as the hedging item. As at December 31, 2020, the foreign currency basis spread included in the fair value of the derivative instruments, which is used for purposes of assessing hedge ineffectiveness, was $101 (2019 – $38).
7 We designate only the spot element as the hedging item. As at December 31, 2020, the foreign currency basis spread included in the fair value of the derivative instruments, which is used for purposes of assessing hedge ineffectiveness, was $4.

Non-derivative

Our long-term debt, which is measured at amortized cost, and the fair value thereof, are set out in the following table.

	2020		2019	
As at December 31 (millions)	Carrying value	Fair value	Carrying value	Fair value
Long-term debt, excluding leases (*Note 26*)	**$ 18,451**	**$ 20,313**	$ 16,813	$ 17,930

(i) Recognition of derivative gains and losses

The following table sets out the gains and losses, excluding income tax effects, arising from derivative instruments that are classified as cash flow hedging items and their location within the Consolidated statements of income and other comprehensive income.

Credit risk associated with such derivative instruments, as discussed further in *(b)*, would be the primary source of hedge ineffectiveness. There was no ineffective portion of the derivative instruments classified as cash flow hedging items for the periods presented.

		Amount of gain (loss) recognized in other comprehensive income (effective portion) (*Note 11*)		Gain (loss) reclassified from other comprehensive income to income (effective portion) (*Note 11*)		
					Amount	
Years ended December 31 (millions)	*Note*	**2020**	2019	Location	**2020**	2019
Derivatives used to manage currency risk						
Arising from U.S. dollar-denominated purchases		**$ (6)**	$ (16)	Goods and services purchased	**$ (9)**	$ 11
Arising from U.S. dollar-denominated long-term debt [1]	*26(b)-(c)*	**(44)**	(21)	Financing costs	**12**	(162)
Arising from net investment in a foreign operation [2]		**(67)**	3	Financing costs	**—**	—
		(117)	(34)		**3**	(151)
Derivatives used to manage other market risk						
Arising from changes in share-based compensation costs and other	*14(b)*	**(6)**	10	Employee benefits expense	**1**	12
		$ (123)	$ (24)		**$ 4**	$ (139)

1 Amounts recognized in other comprehensive income are net of the change in the foreign currency basis spread (which is used for purposes of assessing hedge ineffectiveness) included in the fair value of the derivative instruments; such amount for the year ended December 31, 2020, was $63 (2019 – $9).
2 Amounts recognized in other comprehensive income are net of the change in the foreign currency basis spread (which is used for purposes of assessing hedge ineffectiveness) included in the fair value of the derivative instruments; such amount for the year ended December 31, 2020, was $4.

The following table sets out the gains and losses arising from derivative instruments that are classified as held for trading and that are not designated as being in a hedging relationship, as well as their location within the Consolidated statements of income and other comprehensive income.

		Gain (loss) recognized in income on derivatives	
Years ended December 31 (millions)	Location	**2020**	2019
Derivatives used to manage currency risk	Financing costs	**$ 11**	$ (7)

5 segment information

General

Operating segments are components of an entity that engage in business activities from which they earn revenues and incur expenses (including revenues and expenses related to transactions with the other component(s)), the operations of which can be clearly distinguished and for which the operating results are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. Effective January 1, 2020, we embarked upon modifying our internal and external reporting processes, systems and internal controls to accommodate the technology convergence-driven cessation of the historical distinction between our wireless and wireline operations at the level of regularly reported discrete performance measures that are provided to our chief operating decision-maker. Prior to the World Health Organization characterizing COVID-19 as a pandemic, we had anticipated transitioning to a new segment reporting structure during 2020, and did not, and do not, anticipate a substantive change to our products and services revenue reporting from such transition; such transition is now anticipated in the first quarter of 2021.

The wireless segment includes network revenues and equipment sales arising from mobile technologies. The wireline segment includes data revenues (which include internet protocol; television; hosting, managed information technology and cloud-based services; customer care and business

services; certain healthcare solutions; and home and business security and agriculture), voice and other telecommunications services revenues (excluding wireless arising from mobile technologies), and equipment sales. Segmentation has been based on similarities in technology (mobile versus fixed), the technical expertise required to deliver the services and products, customer characteristics, the distribution channels used and regulatory treatment. Intersegment sales are recorded at the exchange value, which is the amount agreed to by the parties.

The segment information regularly reported to our Chief Executive Officer (our chief operating decision-maker), and the reconciliations thereof to our products and services view of revenues, other revenues and income before income taxes, are set out in the following table.

Years ended December 31	Wireless		Wireline		Eliminations		Consolidated	
(millions)	**2020**	2019	**2020**	2019	**2020**	2019	**2020**	2019
Operating revenues								
External revenues								
Service	**$ 6,096**	$ 6,165	**$ 7,181**	$ 6,235	**$ —**	$ —	**$ 13,277**	$ 12,400
Equipment	**1,809**	1,964	**255**	225	**—**	—	**2,064**	2,189
Operating revenues (arising from contracts with customers)	**7,905**	8,129	**7,436**	6,460	**—**	—	**15,341**	14,589
Other income	**9**	20	**113**	49	**—**	—	**122**	69
	7,914	8,149	**7,549**	6,509	**—**	—	**15,463**	14,658
Intersegment revenues	**60**	53	**262**	251	**(322)**	(304)	**—**	—
	$ 7,974	$ 8,202	**$ 7,811**	$ 6,760	**$ (322)**	$ (304)	**$ 15,463**	$ 14,658
EBITDA [1]	**$ 3,642**	$ 3,693	**$ 1,852**	$ 1,861	**$ —**	$ —	**$ 5,494**	$ 5,554
CAPEX, excluding spectrum licences [2]	**$ 810**	$ 889	**$ 1,965**	$ 2,017	**$ —**	$ —	**$ 2,775**	$ 2,906

Operating revenues – external and other income (above)	**$ 15,463**	$ 14,658
Goods and services purchased	**6,268**	6,070
Employee benefits expense	**3,701**	3,034
EBITDA (above)	**5,494**	5,554
Depreciation	**2,107**	1,929
Amortization	**905**	648
Operating income	**2,482**	2,977
Financing costs	**771**	733
Income before income taxes	**$ 1,711**	$ 2,244

1 Earnings before interest, income taxes, depreciation and amortization (EBITDA) does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers; we define EBITDA as operating revenues and other income less goods and services purchased and employee benefits expense. We have issued guidance on, and report, EBITDA because it is a key measure that management uses to evaluate the performance of our business, and it is also utilized in measuring compliance with certain debt covenants.

2 Total capital expenditures (CAPEX); see *Note 31(a)* for a reconciliation of capital expenditures, excluding spectrum licences, to cash payments for capital assets, excluding spectrum licences, reported in the Consolidated statements of cash flows.

Geographical information

We attribute revenues from external customers to individual countries on the basis of the location where the goods and/or services are provided; for the year ended December 31, 2020, we attributed approximately $1.9 billion (2019 – $1.1 billion) of our revenues to countries other than Canada (our country of domicile). We do not have significant amounts of property, plant and equipment located outside of Canada. As at December 31, 2020, on a historical cost basis, we had approximately $2.2 billion (2019 – $0.2 billion) and approximately $2.2 billion (2019 – $0.6 billion) of intangible assets and goodwill, respectively, located outside of Canada.

6 revenue from contracts with customers

(a) Revenues

In the determination of the minimum transaction prices in contracts with customers, amounts are allocated to fulfilling, or completion of fulfilling, future contracted performance obligations. These unfulfilled, or partially unfulfilled, future contracted performance obligations are largely in respect of services to be provided over the duration of the contract. The following table sets out our aggregate estimated minimum transaction prices allocated to remaining unfulfilled, or partially unfulfilled, future contracted performance obligations and the timing of when we might expect to recognize the associated revenues; actual amounts could differ from these estimates due to a variety of factors, including the unpredictable nature of: customer behaviour; industry regulation; the economic environments in which we operate; and competitor behaviour.

As at December 31 (millions)	2020	2019
Estimated minimum transaction price allocated to remaining unfulfilled, or partially unfulfilled, performance obligations to be recognized as revenue in a future period [1, 2]		
During the 12-month period ending one year hence	**$ 2,279**	$ 2,405
During the 12-month period ending two years hence	**883**	930
Thereafter	**35**	40
	$ 3,197	$ 3,375

1 Excludes constrained variable consideration amounts, amounts arising from contracts originally expected to have a duration of one year or less and, as a permitted practical expedient, amounts arising from contracts that are not affected by revenue recognition timing differences arising from transaction price allocation **or** from contracts under which we may recognize and bill revenue in an amount that corresponds directly with our completed performance obligations.

2 IFRS-IASB requires the explanation of when we expect to recognize as revenue the amounts disclosed as the estimated minimum transaction price allocated to remaining unfulfilled, or partially unfulfilled, performance obligations. The estimated amounts disclosed are based upon contractual terms and maturities. Actual minimum transaction price revenues recognized, and the timing thereof, will differ from these estimates primarily due to the frequency with which the actual durations of contracts with customers do not match their contractual maturities.

(b) Accounts receivable

As at December 31 (millions)	*Note*	2020	2019
Customer accounts receivable		**$ 1,986**	$ 1,570
Accrued receivables – customer		**241**	180
Allowance for doubtful accounts	*4(b)*	**(119)**	(46)
		2,108	1,704
Accrued receivables – other		**247**	258
Accounts receivable – current		**$ 2,355**	$ 1,962

(c) Contract assets

Years ended December 31 (millions)	*Note*	2020	2019
Balance, beginning of period		**$ 1,238**	$ 1,475
Net additions arising from operations		**959**	1,161
Amounts billed in the period and thus reclassified to accounts receivable [1]		**(1,363)**	(1,416)
Change in impairment allowance, net	*4(b)*	**15**	17
Other		**1**	1
Balance, end of period		**$ 850**	$ 1,238
To be billed and thus reclassified to accounts receivable during:			
The 12-month period ending one year hence		**$ 582**	$ 910
The 12-month period ending two years hence		**253**	308
Thereafter		**15**	20
Balance, end of period		**$ 850**	$ 1,238
Reconciliation of contract assets presented in the Consolidated statements of financial position – current			
Gross contract assets		**$ 582**	$ 910
Reclassification to contract liabilities of contracts with contract assets less than contract liabilities	*24*	**(10)**	(7)
Reclassification from contract liabilities of contracts with contract liabilities less than contract assets	*24*	**(133)**	(166)
		$ 439	$ 737

1 For the year ended December 31, 2020, amounts billed for our wireless products and services and reclassified to accounts receivable totalled $1,015 (2019 – $1,288).

7 other income

Years ended December 31 (millions)	*Note*	2020	2019
Government assistance		**$ 13**	$ 22
Other sublet revenue	*19*	**4**	2
Investment income (loss), gain (loss) on disposal of assets and other		**(12)**	24
Interest income	*21(b)*	**4**	4
Changes in business combination-related provisions	*25*	**113**	17

$	**122**	$ 69

We receive government assistance, as defined by IFRS-IASB, from a number of sources and generally include such amounts received in Other income. We recognize such amounts on an accrual basis as the subsidized services are provided or as the subsidized costs are incurred.

CRTC subsidy

Local exchange carriers' costs of providing the level of residential basic telephone services that the CRTC requires to be provided in high cost serving areas are greater than the amounts the CRTC allows the local exchange carriers to charge for the level of service. To ameliorate the situation, the CRTC directs the collection of contribution payments, in a central fund, from all registered Canadian telecommunications service providers (including voice, data and wireless service providers) that are then disbursed to incumbent local exchange carriers as subsidy payments to partially offset the costs of providing residential basic telephone services in non-forborne high cost serving areas. The subsidy payment

disbursements are based upon a total subsidy requirement calculated on a per network access line/per band subsidy rate. For the year ended December 31, 2020, our subsidy receipts were $10 million (2019 – $15 million).

Government of Quebec

Salaries for qualifying employment positions in the province of Quebec, mainly in the information technology sector, are eligible for tax credits. In respect of such tax credits, for the year ended December 31, 2020, we recorded $3 million (2019 – $7 million).

8 employee benefits expense

Years ended December 31 (millions)	*Note*	**2020**	2019
Employee benefits expense – gross			
Wages and salaries [1]		**$ 3,668**	$ 3,017
Share-based compensation	*14*	**173**	147
Pensions – defined benefit	*15(b)*	**102**	78
Pensions – defined contribution	*15(f)*	**94**	92
Restructuring costs	*16(a)*	**49**	63
Employee health and other benefits		**190**	184
		4,276	3,581
Capitalized internal labour costs, net			
Contract acquisition costs	*20*		
Capitalized		**(74)**	(54)
Amortized		**55**	48
Contract fulfilment costs	*20*		
Capitalized		**(2)**	(3)
Amortized		**4**	4
Property, plant and equipment		**(350)**	(351)
Intangible assets subject to amortization		**(208)**	(191)
		(575)	(547)
		$ 3,701	$ 3,034

1 For the year ended December 31, 2020, wages and salaries are net of Canada Emergency Wage Subsidy program amounts.

9 financing costs

Years ended December 31 (millions)	*Note*	**2020**	2019
Interest expense			
Interest on long-term debt, excluding lease liabilities – gross		**$ 676**	$ 634
Interest on long-term debt, excluding lease liabilities – capitalized [1]	*18(a)*	**(37)**	(23)
Interest on long-term debt, excluding lease liabilities		**639**	611
Interest on lease liabilities	*19*	**70**	67
Interest on short-term borrowings and other		**5**	8
Interest accretion on provisions	*25*	**16**	22
Long-term debt prepayment premium	*26(b)*	**18**	28
		748	736
Employee defined benefit plans net interest	*15*	**16**	1
Foreign exchange		**14**	3
		778	740

Interest income		**(7)**	(7)
		$ 771	$ 733
Net interest cost	*3*	**$ 792**	$ 755
Interest on long-term debt, excluding lease liabilities – capitalized [1]		**(37)**	(23)
Employee defined benefit plans net interest		**16**	1
		$ 771	$ 733

1 Interest on long-term debt, excluding lease liabilities at a composite rate of 4.33% was capitalized to intangible assets with indefinite lives in the periods.



notes to consolidated financial statements

10 income taxes

(a) Expense composition and rate reconciliation

Years ended December 31 (millions)	**2020**	2019
Current income tax expense		
For the current reporting period	**$ 474**	$ 416
Adjustments recognized in the current period for income taxes of prior periods	**(99)**	(63)
	375	353
Deferred income tax expense		
Arising from the origination and reversal of temporary differences	**3**	193
Revaluation of deferred income tax liability to reflect future income tax rates	**(6)**	(124)
Adjustments recognized in the current period for income taxes of prior periods	**79**	46
	76	115
	$ 451	$ 468

Our income tax expense and effective income tax rate differ from those computed by applying the applicable statutory rates for the following reasons:

Years ended December 31 ($ in millions)	**2020**		2019	
Income taxes computed at applicable statutory rates	**$ 446**	**26.1%**	$ 604	26.9%
Revaluation of deferred income tax liability to reflect future income tax rates	**(6)**	**(0.4)**	(124)	(5.5)
Adjustments recognized in the current period for income taxes of prior periods	**(20)**	**(1.3)**	(17)	(0.8)
Other	**31**	**1.9**	5	0.2
Income tax expense per Consolidated statements of income and other comprehensive income	**$ 451**	**26.3%**	$ 468	20.8%

(b) Temporary differences

We must make significant estimates in respect of the composition of our deferred income tax liability. Our operations are complex and the related income tax interpretations, regulations, legislation and jurisprudence are continually changing. As a result, there are usually some income tax matters in question.

Temporary differences comprising the net deferred income tax liability and the amounts of deferred income taxes recognized in the Consolidated statements of income and other comprehensive income and the Consolidated statements of changes in owners' equity are estimated as follows:

(millions)	Property, plant and equipment (owned) and intangible assets subject to amortization	Intangible assets with indefinite lives	Property, plant and equipment (leased), net of lease liabilities	Contract assets and liabilities	Net pension and share-based compensation amounts	Provisions not currently deductible	Losses available to be carried forward [1]	Other	Net deferred income tax liability
As at January 1, 2019 [2]	$ 1,204	$ 1,718	$ (83)	$ 496	$ (21)	$ (189)	$ (6)	$ (29)	$ 3,090
Deferred income tax expense recognized in Net income	332	(110)	6	(78)	(9)	(23)	(5)	2	115
Other comprehensive income	—	—	—	—	(110)	—	—	32	(78)
Deferred income taxes charged directly to owners' equity and other (*Note 18(c)*)	80	—	—	—	—	—	—	1	81
As at December 31, 2019 [3]	1,616	1,608	(77)	418	(140)	(212)	(11)	6	3,208
Deferred income tax expense recognized in Net income	**85**	**82**	**37**	**(111)**	**(31)**	**8**	**(33)**	**39**	**76**
Other comprehensive income	**—**	**—**	**—**	**—**	**(109)**	**—**	**—**	**(13)**	**(122)**
Deferred income taxes charged directly to owners' equity and other (*Note 18(b)*)	**621**	**2**	**—**	**—**	**—**	**—**	**(4)**	**(16)**	**603**
As at December 31, 2020 [4]	**$ 2,322**	**$ 1,692**	**$ (40)**	**$ 307**	**$ (280)**	**$ (204)**	**$ (48)**	**$ 16**	**$ 3,765**

1 We expect to be able to utilize our non-capital losses prior to expiry.

2 Deferred tax liability of $3,095, net of deferred tax asset of $5 (included in Other long-term assets).
3 Deferred tax liability of $3,214, net of deferred tax asset of $6 (included in Other long-term assets).
4 Deferred tax liability of $3,776, net of deferred tax asset of $11 (included in Other long-term assets).

Temporary differences arise from the carrying value of investments in subsidiaries and partnerships exceeding their tax base, for which no deferred income tax liabilities have been recognized because the parent is able to control the timing of



the reversal of the difference and it is probable that it will not reverse in the foreseeable future. In our specific instance, this is relevant to our investments in Canadian subsidiaries and Canadian partnerships. We are not required to recognize such deferred income tax liabilities, as we are in a position to control the timing and manner of the reversal of the temporary differences, which would not be expected to be exigible to income tax, and it is probable that such differences will not reverse in the foreseeable future. We are in a position to control the timing and manner of the reversal of temporary differences in respect of our non-Canadian subsidiaries, and it is probable that such differences will not reverse in the foreseeable future.

(c) Other

We conduct research and development activities, which may be eligible to earn Investment Tax Credits. During the year ended December 31, 2020, we recorded Investment Tax Credits of $12 million (2019 – $8 million). Of this amount, $6 million (2019 – $4 million) was recorded as a reduction of property, plant and equipment and/or intangible assets and the balance was recorded as a reduction of Goods and services purchased.



11 other comprehensive income

	Items that may subsequently be reclassified to income								Item never reclassified to income		Item never reclassified to income	
	Change in unrealized fair value of derivatives designated as cash flow hedges in current period (*Note 4(i)*)											
	Derivatives used to manage currency risk			Derivatives used to manage other market risks								
Years ended December 31 (millions)	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Total	Cumulative foreign currency translation adjustment	Change in measurement of investment financial assets	Accumulated other comp. income	Employee defined benefit plan re-measurements	Other comp. income
Accumulated balance as at January 1, 2019			$ (19)			$ —	$ (19)	$ 22	$ —	$ 3		
Other comprehensive income (loss) Amount arising	$ (34)	$ 151	117	$ 10	$ (12)	(2)	115	20	13	148	$ (448)	$ (300)
Income taxes	$ 10	$ 22	32	$ 2	$ (3)	(1)	31	—	1	32	(110)	(78)
Net			85			(1)	84	20	12	116	$ (338)	$ (222)
Accumulated balance as at December 31, 2019			66			(1)	65	42	12	119		
Other comprehensive income (loss) Amount arising	**$ (117)**	**$ (3)**	**(120)**	**$ (6)**	**$ (1)**	**(7)**	**(127)**	**113**	**17**	**3**	**$ (421)**	**$ (418)**
Income taxes	**$ (5)**	**$ (9)**	**(14)**	**$ (2)**	**$ —**	**(2)**	**(16)**	**—**	**3**	**(13)**	**(109)**	**(122)**
Net			**(106)**			**(5)**	**(111)**	**113**	**14**	**16**	**$ (312)**	**$ (296)**
Accumulated balance as at December 31, 2020			**$ (40)**			**$ (6)**	**$ (46)**	**$ 155**	**$ 26**	**$ 135**		
Attributable to:												
Common Shares										**$ 117**		
Non-controlling interests										**18**		
										$ 135		



12 per share amounts

Basic net income per Common Share is calculated by dividing net income attributable to Common Shares by the total weighted average number of Common Shares outstanding during the period. Diluted net income per Common Share is calculated to give effect to share option awards and restricted share unit awards.

The following table presents reconciliations of the denominators of the basic and diluted per share computations. Net income was equal to diluted net income for all periods presented.

Years ended December 31 (millions)	**2020**	2019*
Basic total weighted average number of Common Shares outstanding	**1,275**	1,204
Effect of dilutive securities – Restricted share units	**3**	—
Diluted total weighted average number of Common Shares outstanding	**1,278**	1,204

For the years ended December 31, 2020 and 2019, no outstanding equity-settled restricted share unit awards were excluded in the computation of diluted income per Common Share. For the year ended December 31, 2020, one million* outstanding TELUS Corporation share option awards were excluded in the calculation of diluted net income per Common Share; as at December 31, 2019, no TELUS Corporation share option awards were outstanding.

13 dividends per share

(a) Dividends declared

Years ended December 31 (millions except per share amounts)	**2020**				2019			
	Declared		Paid to		Declared		Paid to	
Common Share dividends	Effective	Per share*	shareholders	Total	Effective	Per share*	shareholders	Total
Quarter 1 dividend	**Mar. 11, 2020**	**$ 0.29125**	**Apr. 1, 2020**	**$ 371**	Mar. 11, 2019	$ 0.27250	Apr. 1, 2019	$ 329
Quarter 2 dividend	**Jun. 10, 2020**	**0.29125**	**Jul. 2, 2020**	**372**	Jun. 10, 2019	0.28125	Jul. 2, 2019	339
Quarter 3 dividend	**Sep. 10, 2020**	**0.29125**	**Oct. 1, 2020**	**374**	Sep. 10, 2019	0.28125	Oct. 1, 2019	338
Quarter 4 dividend	**Dec. 11, 2020**	**0.31120**	**Jan. 4, 2021**	**403**	Dec. 11, 2019	0.29125	Jan. 2, 2020	352
		$ 1.18495		**$ 1,520**		$ 1.12625		$ 1,358

On February 10, 2021, the Board of Directors declared a quarterly dividend of $0.3112 per share on our issued and outstanding TELUS Corporation Common Shares payable on April 1, 2021, to holders of record at the close of business on March 11, 2021. The final amount of the dividend payment depends upon the number of TELUS Corporation Common Shares issued and outstanding at the close of business on March 11, 2021.

(b) Dividend Reinvestment and Share Purchase Plan

We have a Dividend Reinvestment and Share Purchase Plan under which eligible holders of TELUS Corporation Common Shares may acquire additional TELUS Corporation Common Shares by reinvesting dividends and by making additional optional cash payments to the trustee. Under this plan, we have the option of offering TELUS Corporation Common Shares from Treasury or having the trustee acquire TELUS Corporation Common Shares in the stock market. We may, at our discretion, offer TELUS Corporation Common Shares at a discount of up to 5% from the market price under the plan. Effective with our dividends paid October 1, 2019, we offered TELUS Corporation Common Shares from Treasury at a discount of 2%. In respect of TELUS Corporation Common Shares held by eligible shareholders who have elected to participate in the plan, dividends declared during the year ended December 31, 2020, of $524 million (2019 – $256 million) were to be reinvested in TELUS Corporation Common Shares.

* Amounts reflect retrospective application of March 17, 2020, share split (*see Note 28(b)*).

14 share-based compensation

(a) Details of share-based compensation expense

Reflected in the Consolidated statements of income and other comprehensive income as Employee benefits expense and in the Consolidated statements of cash flows are the following share-based compensation amounts:

Years ended December 31 (millions)	*Note*	**2020** Employee benefits expense	**2020** Associated operating cash outflows	**2020** Statement of cash flows adjustment	2019 Employee benefits expense	2019 Associated operating cash outflows	2019 Statement of cash flows adjustment
Restricted share units	*(b)*	**$ 131**	**$ (109)**	**$ 22**	$ 107	$ (112)	$ (5)
Employee share purchase plan	*(c)*	**33**	**(33)**	**—**	37	(37)	—
Share option awards	*(d)*	**9**	**(4)**	**5**	3	—	3
		$ 173	**$ (146)**	**$ 27**	$ 147	$ (149)	$ (2)

For the year ended December 31, 2020, the associated operating cash outflows in respect of restricted share units were net of cash inflows arising from cash-settled equity forward agreements of $4 million (2019 – $13 million). For the year ended December 31, 2020, the income tax benefit arising from share-based compensation was $43 million (2019 – $39 million).

(b) Restricted share units

General

We use restricted share units as a form of retention and incentive compensation. Each restricted share unit is nominally equal in value to one equity share and is nominally entitled to the dividends that would arise thereon if it were an issued and outstanding equity share. The notional dividends are recorded as additional issuances of restricted share units during the life of the restricted share unit. Due to the notional dividend mechanism, the grant-date fair value of restricted share units equals the fair market value of the corresponding equity shares at the grant date, other than for the notional subset of our restricted share units affected by the relative total shareholder return performance condition (which have their grant-date fair value determined using a Monte Carlo simulation). The restricted share units generally become payable when vesting is complete and typically vest over a period of 33 months (the requisite service period). The vesting method of restricted share units, which is determined on or before the date of grant, may be either cliff or graded; the majority of restricted share units outstanding are cliff-vesting. Accounting for restricted share units, as either equity instruments or liability instruments, is based upon the expected manner of their settlement when they are granted. Grants of restricted share units prior to fiscal 2019 are accounted for as liability instruments, as the associated obligation is normally cash-settled.

TELUS Corporation restricted share units

We also award restricted share units that largely have the same features as our general restricted share units, but have a variable payout (0% – 200%) that depends upon the achievement of our total customer connections performance condition (with a weighting of 25%) and the total shareholder return on TELUS Corporation Common Shares relative to an international peer group of telecommunications companies (with a weighting of 75%). The grant-date fair value of the notional subset of our restricted share units affected by the total customer connections performance condition equals the fair market value of the corresponding TELUS Corporation Common Shares at the grant date, and thus the notional subset has been included in the presentation of our restricted share units with only service conditions. The estimate, which reflects a variable payout, of the fair value of the notional subset of our restricted share units affected by the relative total shareholder return performance condition is determined using a Monte Carlo simulation. Grants of restricted share units in 2020 and 2019 are accounted for as equity-settled, as that was their expected manner of settlement when granted.

The following table presents a summary of outstanding TELUS Corporation non-vested restricted share units.

Number of non-vested restricted share units as at December 31	**2020***	2019*
Restricted share units without market performance conditions		
Restricted share units with only service conditions	**5,718,328**	6,186,854
Notional subset affected by total customer connections performance condition	**298,957**	282,100
	6,017,285	6,468,954
Restricted share units with market performance conditions		
Notional subset affected by relative total shareholder return performance condition	**896,870**	846,298
	6,914,155	7,315,252

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

The following table presents a summary of the activity related to TELUS Corporation restricted share units without market performance conditions.

	2020			2019		
	Number of restricted share units [1]		Weighted average grant-date fair value	Number of restricted share units [1]		Weighted average grant-date fair value
Years ended December 31	Non-vested	Vested		Non-vested	Vested	
Outstanding, beginning of period *						
Non-vested	**6,468,954**	**—**	**$ 23.37**	6,387,040	—	$ 22.42
Vested	**—**	**30,800**	**$ 22.02**	—	126,766	$ 22.45
Granted						
Initial award	**3,199,809**	**—**	**$ 25.36**	4,092,094	—	$ 23.82
In lieu of dividends	**428,750**	**624**	**$ 23.08**	333,600	578	$ 23.62
Vested	**(3,696,539)**	**3,696,539**	**$ 23.14**	(4,004,162)	4,004,162	$ 22.28
Settled in cash	**—**	**(3,053,349)**	**$ 22.82**	—	(4,100,706)	$ 22.28
Settled in equity	**—**	**(644,744)**	**$ 24.17**	—	—	$ —
Forfeited	**(383,689)**	**—**	**$ 23.82**	(339,618)	—	$ 22.65
Outstanding, end of period						
Non-vested	**6,017,285**	**—**	**$ 24.55**	6,468,954	—	$ 23.37
Vested	**—**	**29,870**	**$ 24.58**	—	30,800	$ 22.02

1 Excluding the notional subset of restricted share units affected by the relative total shareholder return performance condition.

TELUS International (Cda) Inc. restricted share units

We also award restricted share units that largely have the same features as the TELUS Corporation restricted share units, but have a variable payout (0% – 150%) that depends upon the achievement of TELUS International (Cda) Inc. financial performance and non-market quality-of-service performance conditions.

The following table presents a summary of the activity related to TELUS International (Cda) Inc. restricted share units.

	2020				2019					
	US$ denominated				US$ denominated				Canadian $ denominated	
	Number of restricted share units		Weighted average grant-date fair value		Number of restricted share units		Weighted average grant-date fair value		Number of vested restricted share units	Weighted average grant-date fair value
Years ended December 31	Non-vested	Vested			Non-vested	Vested				
Outstanding, beginning of period [1]										
Non-vested	**2,093,603**	**—**	**US$**	**6.11**	2,527,704	—	US$	5.71	—	$ —
Vested	**—**	**—**	**US$**	**—**	—	—	US$	—	145,346	$ 4.75
Granted	**357,966**	**—**	**US$**	**11.11**	836,145	—	US$	7.32	—	$ —
Vested	**(982,395)**	**982,395**	**US$**	**5.95**	(1,186,524)	1,186,524	US$	5.10	—	$ —
Settled in cash	**—**	**(982,395)**	**US$**	**5.95**	—	(1,186,524)	US$	5.10	(145,346)	$ 4.75
Forfeited	**(85,532)**	**—**	**US$**	**7.00**	(83,722)	—	US$	5.94	—	$ —
Outstanding, end of period – non-vested	**1,383,642**	**—**	**US$**	**7.94**	2,093,603	—	US$	6.11	—	$ —

1 Amounts reflect retrospective application of February 4, 2021, 4.5-for-one share subdivision which occurred in connection with TELUS International (Cda) Inc.'s initial public offering of shares (see *Note 28(d)*).

(c) Employee share purchase plan

We have an employee share purchase plan under which eligible employees up to a certain job classification can purchase TELUS Corporation Common Shares through regular payroll deductions. In respect of TELUS Corporation Common Shares held within the employee share purchase plan, TELUS Corporation Common Share dividends declared during the year ended December 31, 2020, of $37 million (2019 – $34 million) were to be reinvested in TELUS Corporation Common Shares acquired by the trustee from Treasury, with no discount applicable prior to October 1, 2019; subsequent to that date, a discount was applicable, as set out in *Note 13(b)*.

(d) Share option awards

General

We use share option awards as a form of retention and incentive compensation. We apply the fair value method of accounting for share-based compensation awards granted to officers and other employees. Share option awards typically have a three-year vesting period (the requisite service period). The vesting method of share option awards, which is determined on or before the date of grant, may be either cliff or graded; all share option awards granted subsequent to 2004 have been cliff-vesting.

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

The weighted average fair value of share option awards granted is calculated by using the Black-Scholes model (a closed-form option pricing model). The risk-free interest rate used in determining the fair value of the share option awards is based on a Government of Canada yield curve that is current at the time of grant. The expected lives of the share option awards are based on our historical share option award exercise data. Similarly, expected volatility considers the historical volatility in the price of our Common Shares in respect of TELUS Corporation share options and the average historical volatility in the prices of a peer group's shares in respect of TELUS International (Cda) Inc. share options. The dividend yield is the annualized dividend current at the time of grant divided by the share option award exercise price. Dividends are not paid on unexercised share option awards and are not subject to vesting.

TELUS Corporation share options

Employees may be granted options to purchase TELUS Corporation Common Shares at an exercise price equal to the fair market value at the time of grant. Share option awards granted under the plan may be exercised over specific periods not to exceed seven years from the time of grant. Share option awards granted in fiscal 2020 were for front-line employees; no share option awards were granted in fiscal 2019.

These share option awards have a net-equity settlement feature. The optionee does not have the choice of exercising the net-equity settlement feature; it is at our option whether the exercise of a share option award is settled as a share option or settled using the net-equity settlement feature.

The following table presents a summary of the activity related to the TELUS Corporation share option plan.

Year ended December 31, 2020	Number of share options	Weighted average share option price [1]
Outstanding, beginning of period *	—	$ —
Granted	3,171,600	$ 21.57
Forfeited	(156,900)	$ 21.29
Outstanding, end of period	3,014,700	$ 21.59

1 The weighted average remaining contractual life is 6.3 years. No options were exercisable as at the balance sheet date.

The weighted average fair value of share option awards granted, and the weighted average assumptions used in the fair value estimation at the time of grant, calculated by using the Black-Scholes model (a closed-form option pricing model), are as follows:

Year ended December 31, 2020	
Share option award fair value (per share option)	$ 0.65
Risk-free interest rate	0.95%
Expected lives [1] (years)	4.25
Expected volatility	12.3%
Dividend yield	5.4%

1 The maximum contractual term of the share option awards granted in 2020 was seven years.

TELUS International (Cda) Inc. share options

Employees may be granted equity share options (equity-settled) to purchase TELUS International (Cda) Inc. subordinate voting shares at a price equal to, or a multiple of, the fair market value at the time of grant and/or phantom share options (cash-settled) that provide them with exposure to TELUS International (Cda) Inc. subordinate voting share price appreciation. Share option awards granted under the plan may be exercised over specific periods not to exceed ten years from the time of grant. All equity share option awards and most phantom share option awards have a variable payout (0% – 100%) that depends upon the achievement of TELUS International (Cda) Inc. financial performance and non-market quality-of-service performance conditions.

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

The following table presents a summary of the activity related to the TELUS International (Cda) Inc. share option plan.

Years ended December 31	**2020**				2019			
	US$ denominated		Canadian $ denominated		US$ denominated		Canadian $ denominated	
	Number of share options	Weighted average share option price [2]	Number of share options	Share option price [3]	Number of share options	Weighted average share option price [2]	Number of share options	Share option price [3]
Outstanding, beginning of period [1]	**4,484,790**	**US$ 6.91**	**242,244**	**$ 4.75**	3,864,308	US$ 6.63	242,244	$ 4.75
Granted	**—**	**US$ —**	**—**	**$ —**	620,482	US$ 8.46	—	$ —
Exercised	**(562,734)**	**US$ 6.21**	**—**	**$ —**	—	US$ —	—	$ —
Outstanding, end of period	**3,922,056**	**US$ 6.94**	**242,244**	**$ 4.75**	4,484,790	US$ 6.91	242,244	$ 4.75
Exercisable, end of period	**3,267,423**	**US$ 6.58**	**242,244**	**$ 4.75**	—	US$ —	—	$ —

1 Amounts reflect retrospective application of February 4, 2021, 4.5-for-one share subdivision which occurred in connection with TELUS International (Cda) Inc.'s initial public offering of shares (see *Note 28(d)*).
2 The range of share option prices is US$4.87 – US$8.95 per TELUS International (Cda) Inc. equity share and the weighted average remaining contractual life is 6.4 years.
3 The weighted average remaining contractual life is 5.6 years.

15 employee future benefits

We have a number of defined benefit and defined contribution plans that provide pension and other retirement and post-employment benefits to most of our employees. As at December 31, 2020 and 2019, all registered defined benefit pension plans were closed to substantially all new participants and substantially all benefits had vested. The benefit plans in which our employees are participants reflect developments in our corporate history.

TELUS Corporation Pension Plan

Management and professional employees in Alberta who joined us prior to January 1, 2001, and certain unionized employees who joined us prior to June 9, 2011, are covered by this contributory defined benefit pension plan, which comprises slightly more than one-half of our total defined benefit obligation accrued. The plan contains a supplemental benefit account that may provide indexation of up to 70% of the annual increase in a specified cost-of-living index. Pensionable remuneration is determined by the average of the best five years of remuneration in the last ten years preceding retirement.

Pension Plan for Management and Professional Employees of TELUS Corporation

This defined benefit pension plan, which with certain limited exceptions ceased accepting new participants on January 1, 2006, and which comprises approximately one-quarter of our total defined benefit obligation accrued, provides a non-contributory base level of pension benefits. Additionally, on a contributory basis, employees annually can choose increased and/or enhanced levels of pension benefits above the base level. At an enhanced level of pension benefits, the plan has indexation of 100% of the annual increase in a specified cost-of-living index, to an annual maximum of 2%. Pensionable remuneration is determined by the annualized average of the best 60 consecutive months of remuneration.

TELUS Québec Defined Benefit Pension Plan

This contributory defined benefit pension plan, which ceased accepting new participants on April 14, 2009, covers any employee not governed by a collective agreement in Quebec who joined us prior to April 1, 2006, any non-supervisory employee governed by a collective agreement who joined us prior to September 6, 2006, and certain other unionized employees. The plan comprises approximately one-tenth of our total defined benefit obligation accrued. The plan has no indexation and pensionable remuneration is determined by the average of the best four years of remuneration.

TELUS Edmonton Pension Plan

This contributory defined benefit pension plan ceased accepting new participants on January 1, 1998. Indexation is 60% of the annual increase in a specified cost-of-living index and pensionable remuneration is determined by the annualized average of the best 60 consecutive months of remuneration. The plan comprises less than one-tenth of our total defined benefit obligation accrued.

Other defined benefit pension plans

In addition to the foregoing plans, we have non-registered, non-contributory supplementary defined benefit pension plans, which have the effect of maintaining the earned pension benefit once the allowable maximums in the registered plans are attained. As is common with non-registered plans of this nature, these plans are typically funded only as benefits are paid. These plans comprise less than 5% of our total defined benefit obligation accrued.

Telecommunication Workers Pension Plan

Certain employees in British Columbia are covered by a negotiated-cost, target-benefit union pension plan. Our contributions are determined in accordance with provisions of negotiated labour contracts (the current contract will expire on December 31, 2021), and are generally based on employee gross earnings. We are not required to guarantee the benefits or assure the solvency of the plan, and we are not liable to the plan for other participating employers' obligations. For the years ended December 31, 2020 and 2019, our contributions comprised a significant proportion of the employer contributions to the union pension plan; similarly, a significant proportion of the plan participants were our active and retired employees.

British Columbia Public Service Pension Plan

Certain employees in British Columbia are covered by a public service pension plan. Contributions are determined in accordance with provisions of labour contracts negotiated by the Province of British Columbia and are generally based on employee gross earnings.

Defined contribution pension plans

We primarily offer three defined contribution pension plans, which are contributory, and these are the primary pension plans that we sponsor that are available to our non-unionized and certain of our unionized employees. For the years ended December 31, 2020 and 2019, employees could generally choose to contribute to the plans at a rate of between 3% and 6% of their pensionable earnings; generally, we match 100% of contributions of employees up to 5% of their pensionable earnings and 80% of contributions of employees greater than that. Membership in a defined contribution pension plan is generally voluntary until an employee's third-year service anniversary. In the event that annual contributions exceed allowable maximums, excess amounts are in certain cases contributed to a non-registered supplementary defined contribution pension plan.

Other defined benefit plans

Other defined benefit plans, which are all non-contributory and, as at December 31, 2020 and 2019, non-funded, included a healthcare plan for retired employees and a life insurance plan, both of which ceased accepting new participants on January 1, 1997.

(a) Defined benefit pension plans – funded status overview

Information concerning our defined benefit pension plans, in aggregate, is as follows:

As at December 31 (millions)	2020	2019
PRESENT VALUE OF THE DEFINED BENEFIT OBLIGATIONS		
Balance, beginning of year	**$ 9,684**	$ 8,723
Current service cost	**111**	91
Past service cost	**3**	—
Interest expense	**297**	335
Actuarial loss (gain) arising from:		
Demographic assumptions	**67**	20
Financial assumptions	**836**	984
Benefits paid	**(477)**	(469)
Balance, end of year	**10,521**	9,684
PLAN ASSETS		
Fair value, beginning of year	**9,380**	9,043
Return on plan assets		
Notional interest income on plan assets at discount rate	**285**	344
Actual return on plan assets (less than) greater than discount rate	**480**	408
Contributions		
Employer contributions (*d)*	**51**	41
Employees' contributions	**19**	19
Benefits paid	**(477)**	(469)
Administrative fees	**(7)**	(6)
Fair value, end of year	**9,731**	9,380
Effect of asset ceiling limit		
Beginning of year	**(121)**	(263)
Change	**(2)**	142
End of year	**(123)**	(121)
Fair value of plan assets at end of year, net of asset ceiling limit	**9,608**	9,259
FUNDED STATUS – PLAN SURPLUS (DEFICIT)	**$ (913)**	$ (425)

The measurement date used to determine the plan assets and defined benefit obligations accrued was December 31.

(b) Defined benefit pension plans – details

Expense

Our defined benefit pension plan expense was as follows:

Years ended December 31 (millions)	2020				2019			
Recognized in	Employee benefits expense (*Note 8*)	Financing costs (*Note 9*)	Other comp. income (*Note 11*)	Total	Employee benefits expense (*Note 8*)	Financing costs (*Note 9*)	Other comp. income (*Note 11*)	Total
Current service cost	**$ 92**	**$ —**	**$ —**	**$ 92**	$ 72	$ —	$ —	$ 72
Past service cost	**3**	**—**	**—**	**3**	—	—	—	—
Net interest; return on plan assets								
Interest expense arising from defined benefit obligations accrued	**—**	**297**	**—**	**297**	—	335	—	335
Return, including interest income, on plan assets [1]	**—**	**(285)**	**(480)**	**(765)**	—	(344)	(408)	(752)
Interest effect on asset ceiling limit	**—**	**4**	**—**	**4**	—	10	—	10
	—	**16**	**(480)**	**(464)**	—	1	(408)	(407)
Administrative fees	**7**	**—**	**—**	**7**	6	—	—	6
Re-measurements arising from:								
Demographic assumptions	**—**	**—**	**67**	**67**	—	—	20	20
Financial assumptions	**—**	**—**	**836**	**836**	—	—	984	984
	—	**—**	**903**	**903**	—	—	1,004	1,004
Changes in the effect of limiting net defined benefit assets to the asset ceiling	**—**	**—**	**(2)**	**(2)**	—	—	(152)	(152)
	$ 102	**$ 16**	**$ 421**	**$ 539**	$ 78	$ 1	$ 444	$ 523

1 The interest income on the plan assets portion of the employee defined benefit plans net interest amount included in Financing costs reflects a rate of return on plan assets equal to the discount rate used in determining the defined benefit obligations accrued.

Disaggregation of defined benefit pension plan funding status

Defined benefit obligations accrued are the actuarial present values of benefits attributed to employee services rendered to a particular date. Our disaggregation of defined benefit pension plan surpluses and deficits at year-end is as follows:

	2020	2019

As at December 31 (millions)	Defined benefit obligations accrued	Plan assets	Difference *(Notes 20, 27)*	PBSR solvency position [1]	Defined benefit obligations accrued	Plan assets	Difference *(Notes 20, 27)*	PBSR solvency position [1]
Pension plans that have plan assets in excess of defined benefit obligations accrued	**$ 708**	**$ 721**	**$ 13**	**$ 524**	$ 8,277	$ 8,432	$ 155	$ 473
Pension plans that have defined benefit obligations accrued in excess of plan assets								
Funded	**9,550**	**8,887**	**(663)**	**(149)**	1,167	827	(340)	(101)
Unfunded	**263**	**—**	**(263)**	**N/A[2]**	240	—	(240)	N/A[2]
	9,813	**8,887**	**(926)**	**(149)**	1,407	827	(580)	(101)
	$ 10,521	**$ 9,608**	**$ (913)**	**$ 375**	$ 9,684	$ 9,259	$ (425)	$ 372
Defined benefit obligations accrued owed to:								
Active members	**$ 2,461**				$ 2,184			
Deferred members	**561**				513			
Pensioners	**7,499**				6,987			
	$ 10,521				$ 9,684			

1 The Office of the Superintendent of Financial Institutions, by way of the *Pension Benefits Standards Regulations, 1985* (PBSR) (see *(d)*), requires that a solvency valuation be performed on a periodic basis. The actual PBSR solvency positions are determined in conjunction with mid-year annual funding reports prepared by actuaries (see *(d)*); as a result, the PBSR solvency positions in this table as at December 31, 2020 and 2019, are interim estimates and updated estimates, respectively. The interim estimate as at December 31, 2019, was a net surplus of $568.

Interim estimated solvency ratios as at December 31, 2020, ranged from 95% to 109% (2019 – updated estimate is 96% to 109%; interim estimate was 98% to 112%) and the estimated three-year average solvency ratios, adjusted as required by the PBSR, ranged from 97% to 109% (2019 – updated estimate is 97% to 108%; interim estimate was 98% to 109%).

The solvency valuation effectively uses the fair value (excluding any asset ceiling limit effects) of the funded defined benefit pension plan assets (adjusted for theoretical wind-up expenses) to measure the solvency assets. Although the defined benefit obligations accrued and the solvency liabilities are calculated

similarly, the assumptions used for each differ, primarily in respect of retirement ages and discount rates, and the solvency liabilities, due to the required assumption that each plan is terminated on the valuation date, do not reflect assumptions about future compensation levels. Relative to the experience-based estimates of retirement ages used for purposes of determining the defined benefit obligations accrued, the minimum no-consent retirement age used for solvency valuation purposes may result in either a greater or lesser pension liability, depending upon the provisions of each plan. The solvency positions in this table reflect composite weighted average discount rates of 2.60% (2019 – 2.90%). A hypothetical decrease of 25 basis points in the composite weighted average discount rate would result in a $330 decrease in the PBSR solvency position as at December 31, 2020 (2019 – $295); these sensitivities are hypothetical, should be used with caution, are calculated without changing any other assumption and generally cannot be extrapolated because changes in amounts may not be linear.

2 PBSR solvency position calculations are not required for the non-registered, unfunded pension plans.

Fair value measurements

Information about the fair value measurements of our defined benefit pension plan assets, in aggregate, is as follows:

			Fair value measurements at reporting date using			
	Total		Quoted prices in active markets for identical items		Other	
As at December 31 (millions)	**2020**	2019	**2020**	2019	**2020**	2019
Asset class						
Equity securities						
Canadian	**$ 1,044**	$ 979	**$ 849**	$ 787	**$ 195**	$ 192
Foreign	**2,699**	2,405	**685**	663	**2,014**	1,742
Debt securities						
Issued by national, provincial or local governments	**1,453**	1,698	**1,225**	1,519	**228**	179
Corporate debt securities	**2,087**	1,628	**—**	—	**2,087**	1,628
Asset-backed securities	**32**	30	**—**	—	**32**	30
Commercial mortgages	**803**	1,012	**—**	—	**803**	1,012
Cash, cash equivalents and other	**528**	621	**20**	21	**508**	600
Real estate	**1,085**	1,007	**—**	—	**1,085**	1,007
	9,731	9,380	**$ 2,779**	$ 2,990	**$ 6,952**	$ 6,390
Effect of asset ceiling limit	**(123)**	(121)				
	$ 9,608	$ 9,259				

As at December 31, 2020, pension benefit trusts that we administered held no TELUS Corporation Common Shares and held debt of TELUS Corporation with a fair value of approximately $2 million (2019 – $2 million) (see *(c) – Allowable and prohibited investment types*). As at December 31, 2020 and 2019, pension benefit trusts that we administered did not lease real estate to us.

Future benefit payments

Estimated future benefit payments from our defined benefit pension plans, calculated as at December 31, 2020, are as follows:

Years ending December 31 (millions)

2021	$	**473**
2022		**480**
2023		**484**
2024		**489**
2025		**493**
2026-2030		**2,513**

(c) Plan investment strategies and policies

Our primary goal for the defined benefit pension plans is to ensure the security of the retirement income and other benefits of the plan members and their beneficiaries. A secondary goal is to maximize the long-term rate of return on the defined benefit plans' assets within a level of risk acceptable to us.

Risk management

We consider absolute risk (the risk of contribution increases, inadequate plan surplus and unfunded obligations) to be more important than relative return risk. Accordingly, the defined benefit plans' designs, the nature and maturity of defined benefit obligations and the characteristics of the plans' memberships significantly influence investment strategies and policies. We manage risk by specifying allowable and prohibited investment types, setting diversification strategies and determining target asset allocations.

Allowable and prohibited investment types

Allowable and prohibited investment types, along with associated guidelines and limits, are set out in each plan's required Statement of Investment Policies and Procedures (SIPP), which is reviewed and approved annually by the designated governing body. The SIPP guidelines and limits are further governed by the permitted investments and

lending limits set out in the *Pension Benefits Standards Regulations, 1985*. As well as conventional investments, each fund's SIPP may provide for the use of derivative products to facilitate investment operations and to manage risk, provided that no short position is taken and no guidelines and limits established in the SIPP are violated. Internally and externally managed funds are not permitted to directly invest in our securities and are prohibited from increasing grandfathered investments in our securities; any such grandfathered investments were made prior to the merger of BC TELECOM Inc. and TELUS Corporation, our predecessors.

Diversification

Our strategy for investments in equity securities is to be broadly diversified across individual securities, industry sectors and geographical regions. A meaningful portion (20% – 30% of total plan assets) of the plans' investment in equity securities is allocated to foreign equity securities with the intent of further diversifying plan assets. Debt securities may include a meaningful allocation to mortgages, with the objective of enhancing cash flow and providing greater scope for the management of the bond component of the plan assets. Debt securities may also include real return bonds to provide inflation protection, consistent with the indexed nature of some defined benefit obligations. Real estate investments are used to provide diversification of plan assets, hedging of potential long-term inflation and comparatively stable investment income.

Relationship between plan assets and benefit obligations

With the objective of lowering the long-term costs of our defined benefit pension plans, we purposely mismatch plan assets and benefit obligations. This mismatching is effected by including equity investments in the long-term asset mix, as well as fixed income securities and mortgages with durations that differ from those of the benefit obligations.

As at December 31, 2020, the present value-weighted average timing of estimated cash flows for the obligations (duration) of the defined benefit pension plans was 14.1 years (2019 – 13.7 years) and of the other defined benefit plans was 5.8 years (2019 – 6.2 years). Compensation for liquidity issues that may otherwise have arisen from the mismatching of plan assets and benefit obligations is provided by broadly diversified investment holdings (including cash and short-term investments) and cash flows from dividends, interest and rents from those diversified investment holdings.

Asset allocations

Our defined benefit pension plans' target asset allocations and actual asset allocations are as follows:

	Target allocation	Percentage of plan assets at end of year	
Years ended December 31	2021	**2020**	2019
Equity securities	25-55%	**38%**	36%
Debt securities	40-75%	**51%**	53%
Real estate	10-30%	**11%**	11%
Other	0-15%	**—**	—
		100%	100%

(d) Employer contributions

The determination of the minimum funding amounts necessary for substantially all of our registered defined benefit pension plans is governed by the *Pension Benefits Standards Act, 1985*, which requires that current service costs be funded, and that both going-concern and solvency valuations be performed on a specified periodic basis.

- Any excess of plan assets over plan liabilities determined in the going-concern valuation reduces our minimum funding requirement for current service costs, but may not reduce the requirement to an amount less than the employees' contributions. The going-concern valuation generally determines the excess (if any) of a plan's assets over its liabilities on a projected benefit basis.
- As of the date of these consolidated financial statements, the solvency valuation generally requires that a plan's average solvency liabilities, determined on the basis that the plan is terminated on the valuation date, in excess of its assets (if any) be funded, at a minimum, in equal annual amounts over a period not exceeding five years. So as to manage the risk of overfunding the plans, which results from the solvency valuation for funding purposes utilizing average solvency ratios, our funding may include the provision of letters of credit. As at December 31, 2020, undrawn letters of credit in the amount of $108 million (2019 – $173 million) secured certain obligations of the defined benefit pension plans, including non-registered unfunded plans.

Our best estimate of fiscal 2021 employer contributions to our defined benefit plans is approximately $51 million for defined benefit pension plans. This estimate is based upon the mid-year 2020 annual funding valuations that were prepared by

actuaries using December 31, 2019, actuarial valuations. The funding reports are based on the pension plans' fiscal years, which are calendar years. The next annual funding valuations are expected to be prepared mid-year 2021.

(e) Assumptions

As referred to in *Note 1(b)*, management is required to make significant estimates related to certain actuarial and economic assumptions that are used in determining defined benefit pension costs, defined benefit obligations accrued and pension plan assets. These significant estimates are of a long-term nature, consistent with the nature of employee future benefits.

Demographic assumptions

In determining the defined benefit pension expense recognized in net income for the years ended December 31, 2020 and 2019, we utilized the Canadian Institute of Actuaries CPM 2014 mortality tables.

Financial assumptions

The discount rate, which is used to determine a plan's defined benefit obligations accrued, is based upon the yield on long-term, high-quality, fixed-term investments, and is set annually. The rate of future increases in compensation is based upon current benefits policies and economic forecasts.

The significant weighted average actuarial assumptions arising from these estimates and used in measuring our defined benefit obligations accrued are as follows:

	2020	2019
Discount rate [1] used to determine:		
Net benefit costs for the year ended December 31	**3.10%**	3.90%
Defined benefit obligations accrued as at December 31	**2.50%**	3.10%
Current service cost in subsequent fiscal year	**2.70%**	3.20%
Rate of future increases in compensation used to determine:		
Net benefit costs for the year ended December 31	**2.90%**	2.80%
Defined benefit obligations accrued as at December 31	**2.90%**	2.90%

1 The discount rate disclosed in this table reflects the computation of an average discount rate that replicates the timing of the obligation cash flows.

Sensitivity of key assumptions

The sensitivity of our key assumptions for our defined benefit pension plans was as follows:

Years ended, or as at, December 31	**2020**		2019	
Increase (decrease) (millions)	Change in obligations	Change in expenses	Change in obligations	Change in expenses
Sensitivity of key demographic assumptions to an increase of one year [1] in life expectancy	**$ 349**	**$ 11**	$ 297	$ 9
Sensitivity of key financial assumptions to a hypothetical decrease of 25 basis points [1] in:				

Discount rate	**$ 386**	**$ 15**	$ 342	$ 13
Rate of future increases in compensation	**$ (36)**	**$ (3)**	$ (32)	$ (4)

1 These sensitivities are hypothetical and should be used with caution. Favourable hypothetical changes in the assumptions result in decreased amounts, and unfavourable hypothetical changes in the assumptions result in increased amounts, of the obligations and expenses. Changes in amounts based on a variation in assumptions of one year or 25 basis points generally cannot be extrapolated because the relationship of the change in an assumption to the change in amounts may not be linear. Also, in this table, the effect of a variation in a particular assumption on the change in obligations or change in expenses is calculated without changing any other assumption; in reality, changes in one factor may result in changes in another (for example, increases in the discount rate may result in changes in expectations about the rate of future increases in compensation), which might magnify or counteract the sensitivities.

(f) Defined contribution plans – expense

Our total defined contribution pension plan costs recognized were as follows:

Years ended December 31 (millions)	**2020**	2019
Union pension plan and public service pension plan contributions	**$ 21**	$ 22
Other defined contribution pension plans	**73**	70
	$ 94	$ 92

We expect that our 2021 union pension plan and public service pension plan contributions will be approximately $22 million.

(g) Other defined benefit plans

For the year ended December 31, 2020, other defined benefit plan current service cost was $3 million (2019 – $2 million), financing cost was $NIL (2019 – $NIL) and other re-measurements recorded in other comprehensive income were $NIL (2019 – $4 million). Estimated future benefit payments from our other defined benefit plans, calculated as at December 31, 2020, are $1 million annually for the five-year period from 2021 to 2025 and $5 million for the five-year period from 2026 to 2030.

notes to consolidated financial statements

16 restructuring and other costs

(a) Details of restructuring and other costs

With the objective of reducing ongoing costs, we incur associated incremental non-recurring restructuring costs, as discussed further in *(b)* following. We may also incur atypical charges when undertaking major or transformational changes to our business or operating models or post-acquisition business integration. In other costs, we include incremental atypical external costs incurred in connection with business acquisition or disposition activity; significant litigation costs in respect of losses or settlements; adverse retrospective regulatory decisions; and certain incremental atypical costs incurred in connection with the COVID-19 pandemic.

Restructuring and other costs are presented in the Consolidated statements of income and other comprehensive income, as set out in the following table:

	Restructuring *(b)*		Other *(c)*		Total	
Years ended December 31 (millions)	**2020**	2019	**2020**	2019	**2020**	2019
Goods and services purchased	**$ 160**	$ 56	**$ 49**	$ 9	**$ 209**	$ 65
Employee benefits expense	**49**	63	**1**	6	**50**	69
	$ 209	$ 119	**$ 50**	$ 15	**$ 259**	$ 134

(b) Restructuring provisions

Employee-related provisions and other provisions, as presented in *Note 25,* include amounts in respect of restructuring activities. In 2020, restructuring activities included ongoing and incremental efficiency initiatives, some of which involved personnel-related costs and rationalization of real estate. These initiatives were intended to improve our long-term operating productivity and competitiveness.

(c) Other

During the year ended December 31, 2020, incremental external costs were incurred in connection with business acquisition activity. In connection with business acquisitions, non-recurring atypical business integration expenditures that would be considered neither restructuring costs nor part of the fair value of the net assets acquired have been included in other costs.

Also during the year ended December 31, 2020, other costs were incurred in connection with the COVID-19 pandemic. Incremental costs were incurred due to proactive steps we elected to take to keep our customers and employees safe, including adjustments to the frequency of real estate cleaning and maintenance, among other items. As well, costs that have been incurred in the normal course but which are unable to contribute normally to the earning of revenues have been deemed atypical.

notes to consolidated financial statements

17 property, plant and equipment

		Owned assets						Right-of-use lease assets (*Note 19*)				
(millions)	*Note*	Network assets	Buildings and leasehold improvements	Computer hardware and other	Land	Assets under construction	Total	Network assets	Real estate	Other	Total	Total
AT COST												
As at January 1, 2019		$ 29,855	$ 3,273	$ 1,173	$ 48	$ 779	$ 35,128	$ 101	$ 1,011	$ 31	$ 1,143	$ 36,271
Additions [1]		1,073	42	84	—	1,217	2,416	219	274	16	509	2,925
Additions arising from business acquisitions		127	3	12	—	—	142	—	12	11	23	165
Dispositions, retirements and other		(644)	(125)	(48)	—	—	(817)	(101)	(18)	2	(117)	(934)
Assets under construction put into service		1,302	121	152	—	(1,575)	—	—	—	—	—	—
Net foreign exchange differences		—	—	—	—	—	—	—	(12)	—	(12)	(12)
As at December 31, 2019		31,713	3,314	1,373	48	421	36,869	219	1,267	60	1,546	38,415
Additions [1]		**998**	**43**	**62**	**5**	**1,191**	**2,299**	**282**	**224**	**24**	**530**	**2,829**
Additions arising from business acquisitions	*18(b)*	**4**	**22**	**12**	**—**	**—**	**38**	**—**	**74**	**6**	**80**	**118**
Dispositions, retirements and other		**(497)**	**(70)**	**(142)**	**—**	**—**	**(709)**	**(2)**	**(64)**	**(8)**	**(74)**	**(783)**
Assets under construction put into service		**752**	**119**	**100**	**1**	**(972)**	**—**	**—**	**—**	**—**	**—**	**—**
Net foreign exchange differences		**2**	**—**	**(2)**	**—**	**—**	**—**	**—**	**5**	**—**	**5**	**5**
As at December 31, 2020		**$ 32,972**	**$ 3,428**	**$ 1,403**	**$ 54**	**$ 640**	**$ 38,497**	**$ 499**	**$ 1,506**	**$ 82**	**$ 2,087**	**$ 40,584**
ACCUMULATED DEPRECIATION												
As at January 1, 2019		$ 20,299	$ 2,050	$ 789	$ —	$ —	$ 23,138	$ 1	$ —	$ —	$ 1	$ 23,139
Depreciation [2]		1,473	120	135	—	—	1,728	13	177	11	201	1,929
Dispositions, retirements and other		(712)	(118)	(49)	—	—	(879)	(8)	(3)	5	(6)	(885)
As at December 31, 2019		21,060	2,052	875	—	—	23,987	6	174	16	196	24,183
Depreciation [2]		**1,547**	**127**	**158**	**—**	**—**	**1,832**	**37**	**221**	**17**	**275**	**2,107**
Dispositions, retirements and other		**(489)**	**(70)**	**(142)**	**—**	**—**	**(701)**	**—**	**(16)**	**(6)**	**(22)**	**(723)**
Net foreign exchange differences		**2**	**—**	**(2)**	**—**	**—**	**—**	**—**	**3**	**—**	**3**	**3**
As at December 31, 2020		**$ 22,120**	**$ 2,109**	**$ 889**	**$ —**	**$ —**	**$ 25,118**	**$ 43**	**$ 382**	**$ 27**	**$ 452**	**$ 25,570**
NET BOOK VALUE												
As at December 31, 2019		$ 10,653	$ 1,262	$ 498	$ 48	$ 421	$ 12,882	$ 213	$ 1,093	$ 44	$ 1,350	$ 14,232
As at December 31, 2020		**$ 10,852**	**$ 1,319**	**$ 514**	**$ 54**	**$ 640**	**$ 13,379**	**$ 456**	**$ 1,124**	**$ 55**	**$ 1,635**	**$ 15,014**

1 For the year ended December 31, 2020, additions include $157 (2019 – $153) in respect of asset retirement obligations (see *Note 25*).

2 For the year ended December 31, 2020, depreciation includes $23 (2019 – $5) in respect of impairment of real estate right-of-use lease assets.

As at December 31, 2020, our contractual commitments for the acquisition of property, plant and equipment totalled $235 million over a period ending December 31, 2022 (2019 – $136 million over a period ending December 31, 2022).

notes to consolidated financial statements

18 intangible assets and goodwill

(a) Intangible assets and goodwill, net

(millions)	Note	Intangible assets subject to amortization: Customer contracts, related customer relationships and subscriber base	Software [1]	Access to rights-of-way, crowdsource assets and other [1]	Assets under construction	Total	Intangible assets with indefinite lives: Spectrum licences	Total intangible assets	Goodwill [1, 2]	Total intangible assets and goodwill
AT COST										
As at January 1, 2019		$ 616	$ 5,092	$ 103	$ 341	$ 6,152	$ 8,694	$ 14,846	$ 5,111	$ 19,957
Additions		—	60	8	592	660	1,217	1,877	—	1,877
Additions arising from business acquisitions		453	205	2	—	660	—	660	593	1,253
Dispositions, retirements and other (including capitalized interest)	*g*	(29)	(166)	24	—	(171)	26	(145)	—	(145)
Assets under construction put into service		—	679	—	(679)	—	—	—	—	—
Net foreign exchange differences		(8)	—	—	—	(8)	—	(8)	(33)	(41)
As at December 31, 2019		1,032	5,870	137	254	7,293	9,937	17,230	5,671	22,901
Additions		**—**	**88**	**4**	**548**	**640**	**—**	**640**	**—**	**640**
Additions arising from business acquisitions	*(b)*	**1,736**	**357**	**271**	**—**	**2,364**	**9**	**2,373**	**1,887**	**4,260**
Dispositions, retirements and other (including capitalized interest)	*g*	**100**	**(421)**	**(41)**	**—**	**(362)**	**(36)**	**(398)**	**—**	**(398)**
Assets under construction put into service		**—**	**586**	**—**	**(586)**	**—**	**—**	**—**	**—**	**—**
Net foreign exchange differences		**47**	**(1)**	**—**	**—**	**46**	**—**	**46**	**41**	**87**
As at December 31, 2020		**$ 2,915**	**$ 6,479**	**$ 371**	**$ 216**	**$ 9,981**	**$ 9,910**	**$ 19,891**	**$ 7,599**	**$ 27,490**
ACCUMULATED AMORTIZATION										
As at January 1, 2019		$ 226	$ 3,621	$ 65	$ —	$ 3,912	$ —	$ 3,912	$ 364	$ 4,276
Amortization		70	573	5	—	648	—	648	—	648
Dispositions, retirements and other		(11)	(166)	1	—	(176)	—	(176)	—	(176)
As at December 31, 2019		285	4,028	71	—	4,384	—	4,384	364	4,748
Amortization		**215**	**671**	**19**	**—**	**905**	**—**	**905**	**—**	**905**
Dispositions, retirements and other		**(10)**	**(424)**	**6**	**—**	**(428)**	**—**	**(428)**	**—**	**(428)**
Net foreign exchange differences		**5**	**(1)**	**—**	**—**	**4**	**—**	**4**	**—**	**4**
As at December 31, 2020		**$ 495**	**$ 4,274**	**$ 96**	**$ —**	**$ 4,865**	**$ —**	**$ 4,865**	**$ 364**	**$ 5,229**
NET BOOK VALUE										
As at December 31, 2019		$ 747	$ 1,842	$ 66	$ 254	$ 2,909	$ 9,937	$ 12,846	$ 5,307	$ 18,153
As at December 31, 2020		**$ 2,420**	**$ 2,205**	**$ 275**	**$ 216**	**$ 5,116**	**$ 9,910**	**$ 15,026**	**$ 7,235**	**$ 22,261**

1 Amounts for software, access to rights-of-way, crowdsource assets and other and goodwill arising from business acquisitions for the year ended December 31, 2019, have been adjusted as set out in *(c)*.

2 Accumulated amortization of goodwill is amortization recorded prior to 2002; there are no accumulated impairment losses in the accumulated amortization of goodwill.

As at December 31, 2020, our contractual commitments for the acquisition of intangible assets totalled $56 million over a period ending December 31, 2024 (2019 – $45 million over a period ending December 31, 2024).

notes to consolidated financial statements

(b) Business acquisitions

Competence Call Center

On January 31, 2020, we acquired 100% of Competence Call Center, a provider of higher-value-added business services with a focus on customer relationship management and content moderation. The acquisition is complementary to, and was made with a view to growing, our existing lines of business and has been consolidated with our TELUS International (Cda) Inc. subsidiary.

The primary factor that contributed to the recognition of goodwill was the earnings capacity of the acquired business in excess of the net tangible and intangible assets acquired (such excess arising from the acquired workforce and the benefits of acquiring an established business). The amount assigned to goodwill is not expected to be deductible for income tax purposes.

Mobile Service Centre Canada Ltd. (d.b.a. Mobile Klinik)

On July 1, 2020, we acquired 100% of Mobile Klinik, a storefront wireless device repair and sales business complementary to our existing wireless

lines of business. Consideration includes contingent consideration of $34 million, payment of which is dependent upon achieving revenue, profitability, store expansion and wireless subscriber addition targets through 2023. The investment was made with a view to growing our wireless business.

The primary factor that contributed to the recognition of goodwill was the earnings capacity of the acquired business in excess of the net tangible and intangible assets acquired (such excess arising from the acquired workforce and the benefits of acquiring an established business). The amount assigned to goodwill is not expected to be deductible for income tax purposes.

AFS Technologies Inc.

On August 19, 2020, we acquired 100% of AFS Technologies Inc., a business complementary to our existing technology-related lines of business that provides trade promotion and supply chain software solutions to consumer packaged goods companies, food distributors and food manufacturers. The investment was made with a view to growing our existing smart data solutions business.

The primary factor that contributed to the recognition of goodwill was the earnings capacity of the acquired business in excess of the net tangible and intangible assets acquired (such excess arising from the acquired workforce and the benefits of acquiring an established business). The amount assigned to goodwill is not expected to be deductible for income tax purposes.

Equinoxe Virtual Clinic Corp. (d.b.a. EQ Care)

On December 16, 2020, we acquired 100% of EQ Care, a business complementary to our existing lines of healthcare business. As partial consideration for the acquired business, one of our subsidiaries issued shares to the selling shareholders and we concurrently provided a written put option on those subsidiary shares to those selling shareholders. The fair value of the puttable shares at the EQ Care acquisition date has been accounted for as a provision (see *Note 25*).

The primary factor that contributed to the recognition of goodwill was the earnings capacity of the acquired business in excess of the net tangible and intangible assets acquired (such excess arising from the acquired workforce and the benefits of acquiring an established business). A portion of the amount assigned to goodwill may be deductible for income tax purposes.

Lionbridge AI

On December 31, 2020, we acquired 100% of an artificial intelligence-enablement business, Lionbridge AI, the data annotation business of Lionbridge Technologies, Inc. The acquisition is complementary to, and was made with a view to growing, our existing lines of business and the acquired business has been consolidated with our TELUS International (Cda) Inc. subsidiary.

The primary factor that contributed to the recognition of goodwill was the earnings capacity of the acquired business in excess of the net tangible and intangible assets acquired (such excess arising from the acquired workforce and the benefits of acquiring an established business). The amount assigned to goodwill is not expected to be deductible for income tax purposes.

Individually immaterial transactions

During the year ended December 31, 2020, we acquired 100% ownership of businesses complementary to our existing lines of business. The primary factor that gave rise to the recognition of goodwill was the earnings capacity of the acquired businesses in excess of the net tangible and intangible assets acquired (such excess arising from the low

level of tangible assets relative to the earnings capacities of the businesses). A portion of the amounts assigned to goodwill may be deductible for income tax purposes.

Acquisition-date fair values

Acquisition-date fair values assigned to the assets acquired and liabilities assumed are set out in the following table:

(millions)	Competence Call Center	Mobile Klinik	AFS Technologies	EQ Care	Lionbridge AI	Individually immaterial transactions	Total [1]
Assets							
Current assets							
Cash	$ 90	$ 2	$ 35	$ 3	$ 3	$ 18	$ 151
Accounts receivable [2]	64	4	19	2	52	20	161
Other	2	4	2	—	—	9	17
	156	10	56	5	55	47	329
Non-current assets							
Property, plant and equipment							
Owned assets	21	11	1	—	—	5	38
Right-of-use lease assets	43	17	7	—	3	10	80
Intangible assets subject to amortization [3]	754	61	369	164	819	197	2,364

Intangible assets with indefinite lives	—	—	—	—	—	9	9
Other	2	—	—	—	—	4	6
	820	89	377	164	822	225	2,497
Total identifiable assets acquired	976	99	433	169	877	272	2,826
Liabilities							
Current liabilities							
Accounts payable and accrued liabilities	42	4	22	9	28	23	128
Income and other taxes payable	63	—	1	35	7	2	108
Advance billings and customer deposits	—	—	20	—	1	22	43
Current maturities of long-term debt	11	8	7	—	1	9	36
	116	12	50	44	37	56	315
Non-current liabilities							
Long-term debt	216	13	120	—	2	8	359
Other long-term liabilities	—	—	3	—	1	2	6
Deferred income taxes	215	11	101	4	237	39	607
	431	24	224	4	240	49	972
Total liabilities assumed	547	36	274	48	277	105	1,287
Net identifiable assets acquired	429	63	159	121	600	167	1,539
Goodwill	726	106	156	134	596	169	1,887
Net assets acquired	$ 1,155	$ 169	$ 315	$ 255	$ 1,196	$ 336	$ 3,426
Acquisition effected by way of:							
Cash consideration	$ 1,155	$ 129	$ 315	$ 140	$ 1,196	$ 304	$ 3,239
Provisions	—	37	—	115	—	24	176
Pre-existing relationship effectively settled	—	3	—	—	—	—	3
Issue of TELUS Corporation Common Shares	—	—	—	—	—	8	8
	$ 1,155	$ 169	$ 315	$ 255	$ 1,196	$ 336	$ 3,426

1 The purchase price allocation, primarily in respect of customer contracts, related customer relationships and leasehold interests and deferred income taxes, had not been finalized as of the date of issuance of these consolidated financial statements. As is customary in a business acquisition transaction, until the time of acquisition of control, we did not have full access to the books and records of the acquired businesses. Upon having sufficient time to review the books and records of the acquired businesses, we expect to finalize our purchase price allocations.

2 The fair value of accounts receivable is equal to the gross contractual amounts receivable and reflects the best estimates at the acquisition dates of the contractual cash flows expected to be collected.

3 Customer contracts and customer relationships (including those related to customer contracts) are generally expected to be amortized over periods of 8-15 years; software is expected to be amortized over periods of 3-10 years; and other intangible assets are expected to be amortized over periods of 2-8 years.

Pro forma disclosures

The following pro forma supplemental information represents certain results of operations as if the business acquisitions noted above had been completed at the beginning of the fiscal 2020 year.

Year ended December 31, 2020 (millions except per share amounts)	As reported [1]	Pro forma [2]
Operating revenues and other income	$ 15,463	$ 16,054
Net income	$ 1,260	$ 1,166
Net income per Common Share *		
Basic	$ 0.95	$ 0.89
Diluted	$ 0.94	$ 0.88

1 Operating revenues and other income, and net income, for the year ended December 31, 2020, include: $531 and $(2), respectively, in respect of Competence Call Center; $13 and $(11), respectively, in respect of Mobile Klinik; $40 and $(9), respectively, in respect of AFS Technologies; and $1 and $(1), respectively, in respect of EQ Care.

2 Pro forma amounts for the year ended December 31, 2020, reflect the acquired businesses. The results of the acquired businesses have been included in our Consolidated statements of income and other comprehensive income effective the dates of acquisition.

The pro forma supplemental information is based on estimates and assumptions that are believed to be reasonable. The pro forma supplemental information is not necessarily indicative of our consolidated financial results in future periods or the actual results that would have been realized had the business acquisitions been completed at the beginning of the period presented. The pro forma supplemental information includes incremental property, plant and equipment depreciation, intangible asset amortization, financing and other charges as a result of the acquisitions, net of the related tax effects.

(c) Business acquisitions – prior period

In 2019, we acquired businesses that were complementary to our existing lines of business. As at December 31, 2019, purchase price allocations had not been finalized. During the year ended December 31, 2020, the preliminary acquisition-date values for software, other intangible assets, goodwill and deferred income taxes were increased (decreased) by $32 million, $2 million, $(24 million) and $10 million, respectively; as required by IFRS-IASB, comparative amounts have been adjusted so as to reflect those increases (decreases) effective the dates of acquisition.

(d) Intangible assets with indefinite lives – spectrum licences

Our intangible assets with indefinite lives include spectrum licences granted by Innovation, Science and Economic Development Canada, which are used for the provision of both mobile and fixed wireless services. The spectrum licence policy terms indicate that the spectrum licences will likely be renewed. We expect our spectrum licences to be renewed every 20 years following a review of our compliance with licence terms. In addition to current usage, our licensed spectrum can be used for planned and new technologies. As a result of our assessment of the combination of these significant factors, we currently consider our spectrum licences to have indefinite lives and, as referred to in *Note 1(b)*, this represents a significant judgment for us.

(e) Impairment testing of intangible assets with indefinite lives and goodwill

General

As referred to in *Note 1(f)*, the carrying values of intangible assets with indefinite lives and goodwill are periodically tested for impairment and, as referred to in *Note 1(b)*, this test represents a significant estimate for us, while also requiring significant judgments to be made. Also as referred to in *Note 1(b)*, effective January 1, 2020, we embarked upon modifying our internal and external reporting processes, systems and internal controls to accommodate the technology convergence-driven cessation of the historical distinction between our wireless and wireline operations and this is expected to reflect a concurrent redetermination of cash-generating units; although the future annual testing is expected to commensurately change to reflect this redetermination, the December 2020 and December 2019 annual tests reflect the historical distinction.

The carrying values allocated to intangible assets with indefinite lives and goodwill are set out in the following table.

	Intangible assets with indefinite lives		Goodwill		Total	
As at December 31 (millions)	**2020**	2019	**2020**	2019 [1]	**2020**	2019
Wireless	**$ 9,910**	$ 9,937	**$ 2,890**	$ 2,890	**$ 12,800**	$ 12,827
Wireline	**—**	—	**4,345**	2,417	**4,345**	2,417
	$ 9,910	$ 9,937	**$ 7,235**	$ 5,307	**$ 17,145**	$ 15,244

1 The goodwill balance for wireline as at December 31, 2019, has been adjusted, as set out in *(c)*.

* Amounts reflect retrospective application of March 17, 2020, share split (see Note 28(b)).

The recoverable amounts of the cash-generating units' assets have been determined based on a fair value less costs of disposal calculation. There is a material degree of uncertainty with respect to the estimates of the recoverable amounts of the cash-generating units' assets, given the necessity of making key economic assumptions about the future. Recoverable amounts based on fair value less costs of disposal calculations are categorized as Level 3 fair value measures.

We validate our recoverable amount calculation results through a market-comparable approach and an analytical review of industry facts and facts that are specific to us. The market-comparable approach uses current (at time of test) market consensus estimates and equity trading prices for U.S. and Canadian firms in the same industry. In addition, we ensure that the combination of the valuations of the cash-generating units is reasonable based on our current (at time of test) market value.

Key assumptions

The fair value less costs of disposal calculation uses discounted cash flow projections that employ the following key assumptions: future cash flows and growth projections (including judgments about the allocation of future capital expenditures to support both wireless and wireline operations); associated economic risk assumptions and estimates of the likelihood of achieving key operating metrics and drivers; estimates of future generational infrastructure capital expenditures; and the future weighted average cost of capital. We consider a range of reasonably possible amounts to use for key assumptions and decide upon amounts that represent management's best estimates of market amounts. In the normal course, we make changes to key assumptions so that they reflect current (at time of test) economic conditions, updates of historical information used to develop the key assumptions and changes (if any) in our debt ratings.

The key assumptions for cash flow projections are based upon our approved financial forecasts, which span a period of three years and are discounted, for December 2020 annual impairment test purposes, at a consolidated post-tax notional rate of 7.0% (2019 – 7.0%). For impairment testing valuations, cash flows subsequent to the three-year projection period are extrapolated, for December 2020 annual impairment test purposes, generally using perpetual growth rates of 2.00% (2019 – 2.00%) for each of the wireless cash-generating unit and the wireline cash-generating unit;

these growth rates do not exceed the long-term average growth rates observed in the markets in which we operate.

We believe that any *reasonably possible* change in the key assumptions on which the calculation of the recoverable amounts of our cash-generating units is based would not cause the cash-generating units' carrying values (including the intangible assets with indefinite lives and the goodwill allocated to each cash-generating unit) to exceed their recoverable amounts. If the future were to *adversely* differ from management's best estimates for the key assumptions and associated cash flows were to be materially adversely affected, we could potentially experience future material impairment charges in respect of our intangible assets with indefinite lives and goodwill.

Sensitivity testing

Sensitivity testing was conducted as a part of the December 2020 annual impairment test, a component of which was hypothetical changes in the future weighted average cost of capital. Stress testing included a scenario of moderate declines in annual cash flows with all other assumptions being held constant; under this scenario, we would be able to recover the carrying values of our intangible assets with indefinite lives and goodwill for the foreseeable future.

19 leases

We have the right of use of land, buildings and equipment under leases. Most of our leases for real estate that we use for office, retail or network (including wireless site) purposes typically have options to extend the lease terms, which we use to protect our investment in leasehold improvements (including wireless site equipment), to mitigate relocation risk and/or which reflect the importance of the underlying real estate right-of-use lease assets to our operations. Judgments about lease terms are determinative of the measurement of right-of-use lease assets and their associated lease liabilities. Our judgment in respect of lease terms for leased real estate utilized in connection with our telecommunications infrastructure, more so than for any other right-of-use lease assets, routinely includes periods covered by options to extend the lease terms, as we are reasonably certain that we will extend such leases.

In the normal course of operations, there are future non-executory cash outflows in respect of leases to which we are potentially exposed and which are not included in our lease liabilities as at the reporting date. A significant, and increasing, portion of our wireless site lease payments have consumer price index-based price adjustments and such adjustments result in future periodic re-measurements of the lease liabilities with commensurate adjustments to the associated real estate right-of-use lease assets (and associated future depreciation amounts); these adjustments would represent our current variable lease payments. As well, we routinely and necessarily commit to leases that have not yet commenced.

As mandated by Innovation, Science and Economic Development Canada, telecommunications companies are obligated to allow, on their real estate assets owned, on their real estate right-of-use lease assets and/or on their owned-equipment situated on real estate right-of-use lease assets, competitors to co-locate telecommunications infrastructure equipment. Of our real estate right-of-use lease assets used for purposes of situating telecommunications infrastructure equipment, approximately one-fifth have subleases that we, as lessor, account for as operating leases.

Maturity analyses of lease liabilities are set out in *Note 4(c)* and *Note 26(i)*; the period interest expense in respect thereof is set out in *Note 9*. The additions to, the depreciation charges for, and the carrying amounts of, right-of-use lease assets are set out in *Note 17*. We have not currently elected to exclude low-value and short-term leases from lease accounting.

Years ended December 31 (millions)	*Note*	**2020**	2019
Income from subleasing right-of-use lease assets			
Co-location sublet revenue included in operating service revenues		**$ 17**	$ 18
Other sublet revenue included in other income	*7*	**$ 4**	$ 2
Lease payments		**$ 434**	$ 400

20 other long-term assets

As at December 31 (millions)	*Note*	**2020**	2019
Pension assets	*15(b)*	**$ 13**	$ 155
Unbilled customer finance receivables	*4(b)*	**361**	225
Derivative assets	*4(h)*	**40**	76
Costs incurred to obtain or fulfill a contract with a customer		**103**	109
Real estate joint venture advances	*21(b)*	**114**	104
Investment in real estate joint venture	*21(b)*	**1**	3
Investment in associate	*21*	**69**	—
Portfolio investments [1]		**236**	110
Prepaid maintenance		**50**	55
Other		**119**	82
		$ 1,106	$ 919

1 Fair value measured at reporting date using significant other observable inputs (Level 2).

The costs incurred to obtain and fulfill contracts with customers are set out in the following table:

	2020			2019		
	Costs incurred to			Costs incurred to		
Years ended December 31 (millions)	Obtain contracts with customers	Fulfill contracts with customers	Total	Obtain contracts with customers	Fulfill contracts with customers	Total
Balance, beginning of period	**$ 344**	**$ 14**	**$ 358**	$ 356	$ 15	$ 371
Additions	**261**	**4**	**265**	288	4	292
Amortization	**(282)**	**(7)**	**(289)**	(300)	(5)	(305)
Balance, end of period	**$ 323**	**$ 11**	**$ 334**	$ 344	$ 14	$ 358
Current [1]	**$ 225**	**$ 6**	**$ 231**	$ 243	$ 6	$ 249
Non-current	**98**	**5**	**103**	101	8	109
	$ 323	**$ 11**	**$ 334**	$ 344	$ 14	$ 358

1 Presented in the Consolidated statements of financial position in prepaid expenses.

21 real estate joint ventures and investment in associate

(a) General

Real estate joint ventures

In 2013, we partnered, as equals, with two arm's-length parties in a residential, retail and commercial real estate redevelopment project, TELUS Sky, in Calgary, Alberta. The new-build tower, completed in 2020, was to be built to the LEED Platinum standard.

Associate

On January 13, 2020, for cash consideration of approximately $73 million, we acquired a 28% basic equity interest in Miovision Technologies Incorporated, an associate that is complementary to, and is viewed to grow, our existing Internet

of Things business; our judgment is that we obtained significant influence over the associate concurrent with obtaining the newly acquired equity interest.

(b) Real estate joint ventures

Summarized financial information

As at December 31 (millions)	2020	2019	As at December 31 (millions)	2020	2019
ASSETS			**LIABILITIES AND OWNERS' EQUITY**		
Current assets			**Current liabilities**		
Cash and temporary investments, net	**$ 11**	$ 15	Accounts payable and accrued liabilities	**$ 21**	$ 25
Other	**18**	18	Construction holdback liabilities	**—**	15
			Construction credit facilities	**342**	—
	29	33		**363**	40
Non-current assets			**Non-current liabilities**		
Investment property	**332**	—	Construction credit facilities	**—**	312
Investment property under development	**—**	318	Other	**—**	3
Other	**13**	2			
	345	320		**—**	315
				363	355
			Owners' equity		
			TELUS [1]	**5**	1
			Other partners	**6**	(3)
				11	(2)
	$ 374	$ 353		**$ 374**	$ 353

1 The equity amounts recorded by the real estate joint venture differ from those recorded by us by the amount of the deferred gains on our real estate contributed and the valuation provision we have recorded in excess of that recorded by the real estate joint venture.

Years ended December 31 (millions)	2020	2019
Revenue	**$ 2**	$ —

Depreciation and amortization	**$**	**3**	$	—
Interest expense [1]	**$**	**1**	$	—
Net income (loss) and comprehensive income (loss) [2]	**$**	**(42)**	$	(1)

1 During the year ended December 31, 2020, the real estate joint venture capitalized $4 (2019 – $12) of financing costs.
2 As the real estate joint ventures are partnerships, no provision for income taxes of the partners is made in determining the real estate joint ventures' net income and comprehensive income.

Our real estate joint ventures activity

Our real estate joint ventures investment activity is set out in the following table.

	2020			2019		
Years ended December 31 (millions)	Loans and receivables [1]	Equity [2]	Total	Loans and receivables [1]	Equity [2]	Total
Related to real estate joint ventures' statements of income and other comprehensive income						
Comprehensive income (loss) attributable to us [3]	**$ —**	**$ (14)**	**$ (14)**	$ —	$ (4)	$ (4)
Related to real estate joint ventures' statements of financial position						
Items not affecting currently reported cash flows						
Construction credit facilities financing costs charged by us *(Note 7)*	**4**	**—**	**4**	4	—	4
Cash flows in the current reporting period						
Construction credit facilities						
Amounts advanced	**10**	**—**	**10**	35	—	35
Financing costs paid to us	**(4)**	**—**	**(4)**	(4)	—	(4)
Funds we advanced or contributed, excluding construction credit facilities	**—**	**17**	**17**	—	—	—
Funds repaid to us and earnings distributed	**—**	**(1)**	**(1)**	—	(3)	(3)
Net increase (decrease)	**10**	**2**	**12**	35	(7)	28
Real estate joint ventures carrying amounts						
Balance, beginning of period	**104**	**(2)**	**102**	69	5	74
Valuation provision	**—**	**(11)**	**(11)**	—	—	—
Balance, end of period	**$ 114**	**$ (11)**	**$ 103**	$ 104	$ (2)	$ 102

1 Loans and receivables are included in our Consolidated statements of financial position as Real estate joint venture advances and are comprised of advances under construction credit facilities.

2 We account for our interests in the real estate joint ventures using the equity method of accounting. As at December 31, 2020 and 2019, we had recorded equity losses in excess of our recorded equity investment in respect of one of the real estate joint ventures; such resulting balance has been included in long-term liabilities (*Note 27*).
3 As the real estate joint ventures are partnerships, no provision for income taxes of the partners is made in determining the real estate joint ventures' net income and comprehensive income.

We have entered into a lease agreement with the TELUS Sky real estate joint venture; for lease accounting purposes, the lease commenced during the three-month period ended March 31, 2019.

Real estate joint ventures commitments and contingent liabilities

Construction commitments

As at December 31, 2020, the TELUS Sky real estate joint venture's construction-related contractual commitments were approximately $17 million through to 2021 (2019 – $37 million through to 2020).

Construction credit facilities

The TELUS Sky real estate joint venture has a credit agreement, maturing August 31, 2021, with Canadian financial institutions (as 66-2/3% lender) and TELUS Corporation (as 33-1/3% lender) to provide $342 million of construction financing for the project. The construction credit facilities contain customary real estate construction financing representations, warranties and covenants and are secured by demand debentures

constituting first fixed and floating charge mortgages over the underlying real estate assets. The construction credit facilities are available by way of bankers' acceptance or prime loan and bear interest at rates in line with similar construction financing facilities.

As at December 31 (millions)	*Note*	**2020**	2019
Construction credit facilities commitment – TELUS Corporation			
Undrawn	*4(c)*	**$ —**	$ 10
Advances		**114**	104
		114	114
Construction credit facilities commitment – other		**228**	228
		$ 342	$ 342

22 short-term borrowings

On July 26, 2002, one of our subsidiaries, TELUS Communications Inc., entered into an agreement with an arm's-length securitization trust associated with a major Schedule I bank under which it is able to sell an interest in certain trade receivables up to a maximum of $500 million (2019 – $500 million). The term of this revolving-period securitization agreement ends December 31, 2021, and it requires minimum cash proceeds of $100 million from monthly sales of interests in certain trade receivables. TELUS Communications Inc. is required to maintain a credit rating of at least BB (2019 – BB) from DBRS Limited or the securitization trust may require the sale program to be wound down prior to the end of the term.

Sales of trade receivables in securitization transactions are recognized as collateralized short-term borrowings and thus do not result in our de-recognition of the trade receivables sold. When we sell our trade receivables, we retain reserve accounts, which are retained interests in the securitized trade receivables, and servicing rights. As at December 31, 2020, we had sold to the trust (but continued to recognize) trade receivables of $123 million (2019 – $124 million). Short-term borrowings of $100 million (2019 – $100 million) are comprised of amounts advanced to us by the arm's-length securitization trust pursuant to the sale of trade receivables.

The balance of short-term borrowings (if any) is comprised of amounts drawn on our bilateral bank facilities.

23 accounts payable and accrued liabilities

As at December 31 (millions)	**2020**	2019
Accrued liabilities	**$ 1,251**	$ 1,091
Payroll and other employee-related liabilities	**545**	422
Restricted share units liability	**18**	77
	1,814	1,590
Trade accounts payable	**855**	892
Interest payable	**173**	160
Indirect taxes payable and other	**120**	107
	$ 2,962	$ 2,749

24 advance billings and customer deposits

As at December 31 (millions)	**2020**	2019
Advance billings	**$ 551**	$ 522
Deferred customer activation and connection fees	**7**	9
Customer deposits	**34**	14
Contract liabilities	**592**	545
Other	**180**	130
	$ 772	$ 675

Contract liabilities represent our future performance obligations to customers in respect of services and/or equipment for which we have received consideration from the customer or for which an amount is due from the customer. Our contract liability balances, and the changes in those balances, are set out in the following table:

Years ended December 31 (millions)	*Note*	**2020**	2019
Balance, beginning of period		**$ 801**	$ 811
Revenue deferred in previous period and recognized in current period		**(577)**	(648)
Net additions arising from operations		**539**	605
Additions arising from business acquisitions	*18(b)*	**43**	33
Balance, end of period		**$ 806**	$ 801
Current		**$ 735**	$ 718
Non-current	*27*		
Deferred revenues		**61**	70
Deferred customer activation and connection fees		**10**	13
		$ 806	$ 801

Reconciliation of contract liabilities presented in the Consolidated statements of financial position – current		
Gross contract liabilities	**$ 735**	$ 718
Reclassification to contract assets for contracts with contract liabilities less than contract assets	**(133)**	(166)
Reclassification from contract assets for contracts with contract assets less than contract liabilities	**(10)**	(7)
	$ 592	$ 545

25 provisions

(millions)	Asset retirement obligation	Employee-related	Written put options and contingent consideration	Other	Total
As at January 1, 2019	$ 336	$ 88	$ 282	$ 94	$ 800
Additions	15	64	32	73	184
Reversals	—	—	(17)	(6)	(23)
Uses	(5)	(88)	(62)	(69)	(224)
Interest effects [1]	149	—	11	—	160
Effects of foreign exchange, net	—	—	(19)	—	(19)
As at December 31, 2019	495	64	227	92	878
Additions	**—**	**48**	**149**	**200**	**397**
Reversals	**(5)**	**(1)**	**(114)**	**(20)**	**(140)**
Uses	**(3)**	**(69)**	**(112)**	**(143)**	**(327)**
Interest effects [1]	**174**	**—**	**2**	**—**	**176**
Effects of foreign exchange, net	**—**	**—**	**13**	**—**	**13**
As at December 31, 2020	**$ 661**	**$ 42**	**$ 165**	**$ 129**	**$ 997**
Current	**$ 8**	**$ 36**	**$ —**	**$ 29**	**$ 73**
Non-current	**653**	**6**	**165**	**100**	**924**
As at December 31, 2020	**$ 661**	**$ 42**	**$ 165**	**$ 129**	**$ 997**

1 The difference of $160 (2019 – $138) between the asset retirement obligation interest effect in this table and the amount included in the amount disclosed in *Note 9* is in respect of the change in the discount rates applicable to the provision, such difference being included in the cost of the associated asset(s) by way of being included with (netted against) the additions detailed in *Note 17*.

Asset retirement obligation

We establish provisions for liabilities associated with the retirement of property, plant and equipment when those obligations result from the acquisition, construction, development and/or normal operation of the assets. We expect that

the cash outflows in respect of the balance accrued as at the financial statement date will occur proximate to the dates these assets are retired.

Employee-related

The employee-related provisions are largely in respect of restructuring activities (as discussed further in *Note 16(b)*). The timing of the cash outflows in respect of the balance accrued as at the financial statement date is substantially short-term in nature.

Written put options and contingent consideration

In connection with certain business acquisitions, we have established provisions for written put options in respect of non-controlling interests. Provisions for written put options are determined based on the net present value of estimated future earnings results and require us to make key economic assumptions about the future. Similarly, we have established provisions for contingent consideration. No cash outflows for the written put options are expected prior to their initial exercisability and no cash outflows for contingent consideration are expected prior to completion of the periods in which the contingent consideration can be earned.

Other

The provisions for other include: legal claims; non-employee-related restructuring activities; contract termination costs and onerous contracts related to business acquisitions; and costs incurred in connection with the COVID-19 pandemic. Other than as set out following, we expect that the cash outflows in respect of the balance accrued as at the financial statement date will occur over an indeterminate multi-year period.

As discussed further in *Note 29*, we are involved in a number of legal claims and we are aware of certain other possible legal claims. In respect of legal claims, we establish provisions, when warranted, after taking into account legal assessments, information presently available, and the expected availability of recourse. The timing of cash outflows associated with legal claims cannot be reasonably determined.

In connection with business acquisitions, we have established provisions for contract termination costs and onerous contracts acquired.

26 long-term debt

(a) Details of long-term debt

As at December 31 (millions)	*Note*	**2020**	2019
Senior unsecured			
TELUS Corporation senior notes	*(b)*	**$ 15,021**	$ 14,479
TELUS Corporation commercial paper	*(c)*	**731**	1,015
TELUS Communications Inc. debentures	*(e)*	**622**	621
Secured			
TELUS International (Cda) Inc. credit facility	*(f)*	**1,804**	431
Other	*(g)*	**273**	267
		18,451	16,813
Lease liabilities	*(h)*	**1,837**	1,661
Long-term debt		**$ 20,288**	$ 18,474
Current		**$ 1,432**	$ 1,332
Non-current		**18,856**	17,142
Long-term debt		**$ 20,288**	$ 18,474

(b) TELUS Corporation senior notes

The notes are senior unsecured and unsubordinated obligations and rank equally in right of payment with all of our existing and future unsecured unsubordinated obligations, are senior in right of payment to all of our existing and future subordinated indebtedness, and are effectively subordinated to all existing and future obligations of, or guaranteed by, our subsidiaries. The indentures governing the notes contain certain covenants that, among other things, place limitations on our ability, and the ability of certain of our subsidiaries, to: grant security in respect of indebtedness; enter into sale-leaseback transactions; and incur new indebtedness.

Interest is payable semi-annually. The notes require us to make an offer to repurchase them at a price equal to 101% of their principal amount plus accrued and unpaid interest to the date of repurchase upon the occurrence of a change in control triggering event, as defined in the supplemental trust indenture.

At any time prior to the respective maturity dates set out in the table below, the notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 days' and not more than 60 days' prior notice. On

or after the respective redemption present value spread cessation dates set out in the table below, the notes are redeemable at our option, in whole but not in part, on not fewer than 30 days' and not more than 60 days' prior notice, at redemption prices equal to 100% of the principal amounts thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption.

					Principal face amount		Redemption present value spread	
Series	Issued	Maturity	Issue price	Effective interest rate [1]	Originally issued	Outstanding at financial statement date	Basis points	Cessation date
3.60% Notes, Series CM	November 2013	January 2021 [2]	$ 997.15	3.65%	$400 million	$NIL	35 [3]	N/A
3.20% Notes, Series CO	April 2014	April 2021 [2]	$ 997.39	3.24%	$500 million	$NIL	30 [3]	Mar. 5, 2021
2.35% Notes, Series CT	March 2015	March 2022	$ 997.31	2.39%	$1.0 billion	$1.0 billion	35.5 [3]	Feb. 28, 2022
3.35% Notes, Series CJ	December 2012	March 2023	$ 998.83	3.36%	$500 million	$500 million	40 [3]	Dec. 15, 2022
3.35% Notes, Series CK	April 2013	April 2024	$ 994.35	3.41%	$1.1 billion	$1.1 billion	36 [3]	Jan. 2, 2024
3.75% Notes, Series CQ	September 2014	January 2025	$ 997.75	3.78%	$800 million	$800 million	38.5 [3]	Oct. 17, 2024
3.75% Notes, Series CV	December 2015	March 2026	$ 992.14	3.84%	$600 million	$600 million	53.5 [3]	Dec. 10, 2025
2.75% Notes, Series CZ	July 2019	July 2026	$ 998.73	2.77%	$800 million	$800 million	33 [3]	May 8, 2026
2.80% U.S. Dollar Notes [4]	September 2016	February 2027	US$ 991.89	2.89%	US$600 million	US$600 million	20 [5]	Nov. 16, 2026

3.70% U.S. Dollar Notes [4]	March 2017	September 2027	US$	998.95	3.71%	US$500 million	US$500 million	20 [5]	June 15, 2027
2.35% Notes, Series CAC	May 2020	January 2028	$	997.25	2.39%	$600 million	$600 million	48 [3]	Nov. 27, 2027
3.625% Notes, Series CX	March 2018	March 2028	$	989.49	3.75%	$600 million	$600 million	37 [3]	Dec. 1, 2027
3.30% Notes, Series CY	April 2019	May 2029	$	991.75	3.40%	$1.0 billion	$1.0 billion	43.5 [3]	Feb. 2, 2029
3.15% Notes, Series CAA	December 2019	February 2030	$	996.49	3.19%	$600 million	$600 million	39.5 [3]	Nov. 19, 2029
2.05% Notes, Series CAD	October 2020	October 2030	$	997.93	2.07%	$500 million	$500 million	38 [3]	July 7, 2030
4.40% Notes, Series CL	April 2013	April 2043	$	997.68	4.41%	$600 million	$600 million	47 [3]	Oct. 1, 2042
5.15% Notes, Series CN	November 2013	November 2043	$	995.00	5.18%	$400 million	$400 million	50 [3]	May 26, 2043
4.85% Notes, Series CP	Multiple [6]	April 2044		$987.91[6]	4.93% [6]	$500 million[6]	$900 million[6]	46 [3]	Oct. 5, 2043
4.75% Notes, Series CR	September 2014	January 2045	$	992.91	4.80%	$400 million	$400 million	51.5 [3]	July 17, 2044
4.40% Notes, Series CU	March 2015	January 2046	$	999.72	4.40%	$500 million	$500 million	60.5 [3]	July 29, 2045
4.70% Notes, Series CW	Multiple [7]	March 2048	$	998.067	4.71% [7]	$325 million[7]	$475 million [7]	58.5 [3]	Sept. 6, 2047
4.60% U.S. Dollar Notes [4]	June 2018	November 2048	US$	987.60	4.68%	US$750 million	US$750 million	25 [5]	May 16, 2048
4.30% U.S. Dollar Notes [4]	May 2019	June 2049	US$	990.48	4.36%	US$500 million	US$500 million	25 [5]	Dec. 15, 2048
3.95% Notes, Series CAB	Multiple [8]	February 2050	$	997.54[8]	3.97% [8]	$400 million[8]	$800 million[8]	57.5 [3]	Aug. 16, 2049

1 The effective interest rate is that which the notes would yield to an initial debt holder if held to maturity.

2 On May 22, 2020, we exercised our right to early redeem, on June 23, 2020, all of our 3.60% Notes, Series CM and all of our 3.20% Notes, Series CO. The long-term debt prepayment premium recorded in the three-month period ended June 30, 2020, was $18 million before income taxes (see *Note 9*).

3 The redemption price is equal to the greater of (i) the present value of the notes discounted at the Government of Canada yield plus the redemption present value spread calculated over the period to maturity, other than in the case of the Series CT, Series CU, Series CV, Series CW, Series CX, Series CY, Series CZ, Series CAA, Series CAB, Series CAC and Series CAD notes, for which it is calculated over the period to the redemption present value spread cessation date, or (ii) 100% of the principal amount thereof.

4 We have entered into foreign exchange derivatives (cross currency interest rate exchange agreements) that effectively converted the principal payments and interest obligations to Canadian dollar obligations as follows:

Series	Interest rate fixed at	Canadian dollar equivalent principal	Exchange rate
2.80% U.S. Dollar Notes	2.95%	$792 million	$ 1.3205
3.70% U.S. Dollar Notes	3.41%	$667 million	$ 1.3348
4.60% U.S. Dollar Notes	4.41%	$974 million	$ 1.2985
4.30% U.S. Dollar Notes	4.27%	$672 million	$ 1.3435

5 The redemption price is equal to the greater of (i) the present value of the notes discounted at the U.S. Adjusted Treasury Rate plus the redemption present value spread calculated over the period to the redemption present value spread cessation date, or (ii) 100% of the principal amount thereof.

6 $500 million of 4.85% Notes, Series CP were issued in April 2014 at an issue price of $998.74 and an effective interest rate of 4.86%. This series of notes was reopened in December 2015 and a further $400 million of notes were issued at an issue price of $974.38 and an effective interest rate of 5.02%.

7 $325 million of 4.70% Notes, Series CW were issued in March 2017 at an issue price of $990.65 and an effective interest rate of 4.76%. This series of notes was reopened in February 2018 and a further $150 million of notes were issued at an issue price of $1,014.11 and an effective interest rate of 4.61% in March 2018.

8 $400 million of 3.95% Notes, Series CAB were issued in December 2019 at an issue price of $991.54 and an effective interest rate of 4.00%. This series of notes was reopened in May 2020 and a further $400 million of notes were issued at an issue price of $1,003.53 and an effective interest rate of 3.93%.

(c) TELUS Corporation commercial paper

TELUS Corporation has an unsecured commercial paper program, which is backstopped by our $2.25 billion syndicated credit facility (see *(d)*) and is to be used for general corporate purposes, including capital expenditures and investments. This program enables us to issue commercial paper, subject to conditions related to debt ratings, up to a maximum aggregate amount at any one time of $1.4 billion (2019 – $1.4 billion). Foreign currency forward contracts are used to manage currency risk arising from issuing commercial paper denominated in U.S. dollars. Commercial paper debt is due

within one year and is classified as a current portion of long-term debt, as the amounts are fully supported, and we expect that they will continue to be supported, by the revolving credit facility, which has no repayment requirements within the next year. As at December 31, 2020, we had $731 million (2019 – $1,015 million) of commercial paper outstanding, all of which was denominated in U.S. dollars (US$574 million; 2019 – US$781 million), with an effective average interest rate of 0.33%, maturing through June 2021.

(d) TELUS Corporation credit facility

As at December 31, 2020, TELUS Corporation had an unsecured revolving $2.25 billion bank credit facility, expiring on May 31, 2023, with a syndicate of financial institutions, which is to be used for general corporate purposes, including the backstopping of commercial paper.

The TELUS Corporation credit facility bears interest at prime rate, U.S. Dollar Base Rate, a bankers' acceptance rate or London interbank offered rate (LIBOR) (as such terms are used or defined in the credit facility), plus applicable margins. The credit facility contains customary representations, warranties and covenants, including two financial quarter-end ratio tests. These tests are that our leverage ratio must not exceed 4.25:1.00 and our operating cash flow to interest expense ratio must not be less than 2.00:1.00, all as defined in the credit facility.

Continued access to the TELUS Corporation credit facility is not contingent upon TELUS Corporation maintaining a specific credit rating.

As at December 31 (millions)	**2020**	2019
Net available	**$ 1,519**	$ 1,235
Backstop of commercial paper	**731**	1,015
Gross available	**$ 2,250**	$ 2,250

We had $190 million of letters of credit outstanding as at December 31, 2020 (2019 – $184 million), issued under various uncommitted facilities; such letter of credit facilities are in addition to the ability to provide letters of credit pursuant to our committed bank credit facility.

(e) TELUS Communications Inc. debentures

The Series 3 and 5 Debentures were issued by a predecessor corporation of TELUS Communications Inc., BC TEL, under a Trust Indenture dated May 31, 1990. The Series B Debentures were issued by a predecessor corporation of TELUS Communications Inc., AGT Limited, under a Trust Indenture dated August 24, 1994, and a supplemental trust indenture dated September 22, 1995.

				Principal face amount		Redemption present value spread
Series [1]	Issued	Maturity	Issue price	Originally issued	Outstanding at financial statement date	Basis points
10.65% Debentures, Series 3	June 1991	June 2021	$ 998.00	$175 million	$175 million	N/A (non-redeemable)
9.65% Debentures, Series 5 [2]	April 1992	April 2022	$ 972.00	$150 million	$249 million	N/A (non-redeemable)
8.80% Debentures, Series B	September 1995	September 2025	$ 995.10	$200 million	$200 million	15 [3]

1 Interest is payable semi-annually.
2 Series 4 Debentures were exchangeable, at the holder's option, effective on April 8 of any year during the four-year period from 1996 to 1999, for Series 5 Debentures; $99 million of Series 4 Debentures were exchanged for Series 5 Debentures.
3 At any time prior to the maturity date set out in the table, the debentures are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 days' prior notice. The redemption price is equal to the greater of (i) the present value of the debentures discounted at the Government of Canada yield plus the redemption present value spread, or (ii) 100% of the principal amount thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption.

The debentures became obligations of TELUS Communications Inc. pursuant to an amalgamation on January 1, 2001, are not secured by any mortgage, pledge or other charge and are governed by certain covenants, including a negative pledge and a limitation on issues of additional debt, subject to a debt to capitalization ratio and an interest coverage test. Effective June 12, 2009, TELUS Corporation guaranteed the payment of the debentures' principal and interest.

(f) TELUS International (Cda) Inc. credit facility

As at December 31, 2020, TELUS International (Cda) Inc. had a credit facility, secured by its assets, expiring on January 28, 2025 (2019 – December 20, 2022), with a syndicate of financial institutions and, joined in 2020, by TELUS Corporation. The credit facility is comprised of US$620 million (2019 – US$350 million) (TELUS Corporation as an approximately 7.5% lender) and US$230 million (2019 – N/A) (TELUS Corporation as a 12.5% lender) revolving components and amortizing US$600 million (2019 – US$120 million) (TELUS Corporation as a 12.5% lender) and

US$250 million (2019 – N/A) term loan components. The credit facility is non-recourse to TELUS Corporation. The outstanding revolving components and term loan components had a weighted average interest rate of 2.90% as at December 31, 2020.

As at December 31 (millions)	2020 Revolving components	2020 Term loan components [1]	2020 Total	2019 Revolving component	2019 Term loan component	2019 Total
Available	**US$ 132**	**US$ N/A**	**US$ 132**	US$ 121	US$ N/A	US$ 121
Outstanding						
Due to other	**653**	**775**	**1,428**	229	107	336
Due to TELUS Corporation	**65**	**75**	**140**	N/A	N/A	N/A
	US$ 850	**US$ 850**	**US$ 1,700**	US$ 350	US$ 107	US$ 457

1 We have entered into a receive-floating interest rate, pay-fixed interest rate exchange agreement that effectively converts our interest obligations on US$101 of the debt to a fixed rate of 2.64%.

Relative to amounts owed to the syndicate of financial institutions, excluding TELUS Corporation, we have entered into foreign exchange derivatives (cross currency interest rate exchange agreements) that effectively convert an amortizing amount of US$415 of the principal payments and associated interest obligations to European euro obligations with an effective fixed interest rate of 0.65% and an effective fixed economic exchange rate of US$1.0932:€1.00. These have been accounted for as a net investment hedge in a foreign operation (see *Note 4*).

The TELUS International (Cda) Inc. credit facility bears interest at prime rate, U.S. Dollar Base Rate, a bankers' acceptance rate or London interbank offered rate (LIBOR) (all such terms as used or defined in the credit facility), plus applicable margins. The credit facility contains customary representations, warranties and covenants, including two financial quarter-end ratio tests. The TELUS International (Cda) Inc. quarter-end net debt to operating cash flow ratio must not exceed: 5.25:1.00 through fiscal 2021; 4.50:1.00 during fiscal 2022; and 3.75:1.00 subsequently. The quarter-end operating cash flow to debt service (interest and scheduled principal repayment) ratio must not be less than 1.50:1.00, all as defined in the credit facility.

The term loan components are subject to an amortization schedule which requires that 5% of the principal advanced be repaid each year of the term of the agreement, with the balance due at maturity and December 22, 2022, for the US$250 million component, respectively.

As set out in *Note 28(d)*, in February 2021, TELUS International (Cda) Inc. made an initial public offering of subordinate voting shares; both TELUS Corporation and a TELUS International (Cda) Inc. non-controlling shareholder individually also offered subordinate voting shares in conjunction with the initial public offering. Through February 11, 2021, net proceeds of approximately $0.6 billion (US$0.5 billion) from the offering were used to reduce the amount of outstanding credit facility indebtedness.

(g) Other

Other liabilities bear interest at 3.35%, are secured by the associated AWS-4 spectrum licences and a real estate holding, and are subject to amortization schedules, which results in the principal being repaid over the period to maturity, March 31, 2035.

(h) Lease liabilities

Lease liabilities are subject to amortization schedules, which results in the principal being repaid over various periods, including reasonably expected renewals. The weighted average interest rate on lease liabilities was approximately 4.45% as at December 31, 2020.

(i) Long-term debt maturities

Anticipated requirements to meet long-term debt repayments, calculated for long-term debts owing as at December 31, 2020, are as follows:

Composite long-term debt denominated in	Canadian dollars			U.S. dollars					Other currencies	
Years ending December 31 (millions)	Long-term debt, excluding leases	Leases (Note 19)	Total	Long-term debt, excluding leases	Leases (Note 19)	Currency swap agreement amounts to be exchanged (Receive) [1]	Currency swap agreement amounts to be exchanged Pay	Total	Leases (Note 19)	Total
2021	**$ 188**	**$ 396**	**$ 584**	**$ 803**	**$ 25**	**$ (759)**	**$ 771**	**$ 840**	**$ 46**	**$ 1,470**
2022	**1,263**	**259**	**1,522**	**314**	**23**	**(28)**	**28**	**337**	**35**	**1,894**
2023	**530**	**134**	**664**	**33**	**19**	**(28)**	**28**	**52**	**30**	**746**
2024	**1,115**	**119**	**1,234**	**33**	**9**	**(28)**	**28**	**42**	**23**	**1,299**
2025	**1,016**	**93**	**1,109**	**1,366**	**6**	**(408)**	**457**	**1,421**	**13**	**2,543**
2026-2030	**4,789**	**267**	**5,056**	**1,401**	**9**	**(1,401)**	**1,459**	**1,468**	**32**	**6,556**
Thereafter	**4,168**	**275**	**4,443**	**1,592**	**—**	**(1,592)**	**1,646**	**1,646**	**13**	**6,102**
Future cash outflows in respect of composite long-term debt principal repayments	**13,069**	**1,543**	**14,612**	**5,542**	**91**	**(4,244)**	**4,417**	**5,806**	**192**	**20,610**
Future cash outflows in respect of associated interest and like carrying costs [2]	**6,300**	**386**	**6,686**	**2,504**	**17**	**(2,336)**	**2,350**	**2,535**	**42**	**9,263**

Undiscounted contractual maturities (*Note 4(c)*)	**$ 19,369**	**$ 1,929**	**$ 21,298**	**$ 8,046**	**$ 108**	**$ (6,580)**	**$ 6,767**	**$ 8,341**	**$ 234**	**$ 29,873**

1 Where applicable, cash flows reflect foreign exchange rates as at December 31, 2020.
2 Future cash outflows in respect of associated interest and like carrying costs for commercial paper and amounts drawn under our credit facilities (if any) have been calculated based upon the rates in effect as at December 31, 2020.

27 other long-term liabilities

As at December 31 (millions)	*Note*	**2020**	2019
Contract liabilities	*24*	**$ 61**	$ 70
Other		**5**	7
Deferred revenues		**66**	77
Pension benefit liabilities	*15(b)*	**926**	580
Other post-employment benefit liabilities		**64**	53
Restricted share unit and deferred share unit liabilities		**17**	42
Derivative liabilities	*4(h)*	**155**	26
Investment in real estate joint ventures	*21(b)*	**12**	5
Other		**15**	10
		1,255	793
Deferred customer activation and connection fees	*24*	**10**	13
		$ 1,265	$ 806

28 owners' equity

(a) TELUS Corporation Common Share capital – general

Our authorized share capital is as follows:

As at December 31	**2020**	2019
First Preferred Shares	**1 billion**	1 billion
Second Preferred Shares	**1 billion**	1 billion
Common Shares	**4 billion**	4 billion*

Only holders of Common Shares may vote at our general meetings, with each holder of Common Shares entitled to one vote per Common Share held at all such meetings so long as not less than 66-2/3% of the issued and outstanding Common Shares are owned by Canadians. With respect to priority in the payment of dividends and in the distribution of assets in the event of our liquidation, dissolution or winding-up, whether voluntary or involuntary, or any other distribution

* Amounts reflect retrospective application of March 17, 2020, share split (see Note 28(b)).

of our assets among our shareholders for the purpose of winding up our affairs, preferences are as follows: First Preferred Shares; Second Preferred Shares; and finally Common Shares.

During the three-month period ended March 31, 2020, we issued approximately 58 million * Common Shares for gross proceeds of $1.5 billion.

As at December 31, 2020, approximately 20 million* Common Shares were reserved for issuance from Treasury under a dividend reinvestment and share purchase plan (see *Note 13(b)*); approximately 24 million* Common Shares were reserved for issuance from Treasury under a restricted share unit plan (see *Note 14(b)*); and approximately 90 million* Common Shares were reserved for issuance from Treasury under a share option plan (see *Note 14(d)*).

(b) TELUS Corporation Common Share split

On February 13, 2020, we announced a subdivision of our Common Shares on a two-for-one basis to be effected March 17, 2020. All references, unless otherwise indicated, to the number of shares authorized, the number of shares outstanding, the number of shares reserved, per share amounts and share-based compensation information in the consolidated financial statements have been retrospectively restated to reflect the impact of the subdivision.

(c) Purchase of TELUS Corporation Common Shares for cancellation pursuant to normal course issuer bid

As referred to in *Note 3*, we may purchase a portion of our Common Shares for cancellation pursuant to normal course issuer bids in order to maintain

or adjust our capital structure. In December 2019, we received approval for a normal course issuer bid to purchase and cancel up to 16 million * of our Common Shares (up to a maximum amount of $250 million) from January 2, 2020, to January 1, 2021.

(d) Subsidiary with significant non-controlling interest

Our TELUS International (Cda) Inc. subsidiary is incorporated under the *Business Corporations Act* (British Columbia) and has geographically dispersed operations with principal places of business in Asia, Central America, Europe and North America. During the three-month period ended March 31, 2020, non-controlling shareholders purchased TELUS International (Cda) Inc. common shares from Treasury for $209 million, which resulted in the non-controlling interests' ownership interest increasing to 37.7% as at March 31, 2020, up from 35.9% as at December 31, 2019. Associated with the transactions, adjustments reflecting the approximately 1.8% increase in the non-controlling interest in the net book value of the subsidiary were credited to non-controlling interests in our Consolidated statement of changes in owners' equity, and the net balance of proceeds were credited to contributed surplus.

On a continuing basis, we review our corporate organization and effect changes as appropriate so as to enhance the value of TELUS Corporation. This process can affect our subsidiaries, including TELUS International (Cda) Inc.; during the three-month period ended June 30, 2020, this process resulted in the non-controlling interests' ownership interest decreasing to 36.2% as at June 30, 2020, with an adjustment reflecting the approximately 1.5% decrease in the non-controlling interest in the net book value of the subsidiary credited to non-controlling interests in our Consolidated statement of changes in owners' equity, offset by an equal amount charged to contributed surplus.

During the three-month period ended December 31, 2020, a non-controlling shareholder purchased TELUS International (Cda) Inc. common shares from Treasury for $191 million, which resulted in the non-controlling interests' ownership interest increasing to 37.4% as at December 31, 2020, up from 36.2% as at September 30, 2020. Associated with the transactions, adjustments reflecting the approximately 1.2% increase in the non-controlling ownership interest in the net book value of the subsidiary were credited to non-controlling interests in our Consolidated statement of changes in owners' equity, and the net balance of proceeds were credited to contributed surplus.

In February 2021, TELUS International (Cda) Inc. made an initial public offering of subordinate voting shares; both TELUS Corporation and a TELUS International (Cda) Inc. non-controlling shareholder individually also offered subordinate voting shares in conjunction with the initial public offering. Net proceeds, excluding tax, to TELUS Corporation for the sale of its offered shareholdings were approximately $0.2 billion (US$154 million), and net proceeds from shares offered by TELUS International (Cda) Inc. were approximately $0.6 billion (US$0.5 billion). Due to the voting rights associated with the remaining multiple voting shares held by TELUS Corporation, it retained a 67.0% voting and controlling interest and a 55.2% economic interest in TELUS International (Cda) Inc. subsequent to the public purchase of subordinate voting shares. Associated with the public purchase of subordinate voting shares, an adjustment, in fiscal 2021, equal to approximately one-half of our net proceeds reflecting the approximately 7.4% increase in the non-controlling ownership interest in the net book value of the subsidiary, was credited to non-controlling interests in our Consolidated statement of changes in owners' equity, and the net balance of our proceeds was credited to contributed surplus.

Summarized financial information

As at, or for the years ended, December 31 (millions) [1]	**2020**	2019
Statement of financial position		
Current assets	**$ 746**	$ 476
Non-current assets	**$ 4,072**	$ 1,057
Current liabilities	**$ 689**	$ 570
Non-current liabilities	**$ 2,713**	$ 647
Statement of income and other comprehensive income		
Revenue and other income [2]	**$ 2,222**	$ 1,372
Goods and services purchased	**$ 404**	$ 253
Employee benefits expense	**$ 1,312**	$ 829
Depreciation	**$ 134**	$ 97
Amortization of intangible assets	**$ 110**	$ 19
Net income	**$ 141**	$ 85
Comprehensive income	**$ 189**	$ 106

1 As required by IFRS-IASB, this summarized financial information excludes inter-company eliminations.
2 For the year ended December 31, 2020, includes revenues from the wireless segment and the wireline segment of $176 (2019 – $165) and $240 (2019 – $190), respectively.

29 contingent liabilities

(a) Claims and lawsuits

General

A number of claims and lawsuits (including class actions and intellectual property infringement claims) seeking damages and other relief are pending against us and, in some cases, other wireless carriers and telecommunications service providers. As well, we have received notice of, or are aware of, certain possible claims (including intellectual property infringement claims) against us and, in some cases, other wireless carriers and

telecommunications service providers.

It is not currently possible for us to predict the outcome of such claims, possible claims and lawsuits due to various factors, including: the preliminary nature of some claims; uncertain damage theories and demands; an incomplete factual record; uncertainty concerning legal theories and procedures and their resolution by the courts, at both the trial and the appeal levels; and the unpredictable nature of opposing parties and their demands.

However, subject to the foregoing limitations, management is of the opinion, based upon legal assessments and information presently available, that it is unlikely that any liability, to the extent not provided for through insurance or otherwise, would have a material effect on our financial position and the results of our operations, including cash flows, with the exception of the items enumerated following.

Certified class actions

Certified class actions against us include the following:

Per minute billing class action

In 2008 a class action was brought in Ontario against us alleging breach of contract, breach of the Ontario *Consumer Protection Act*, breach of the *Competition Act* and unjust enrichment, in connection with our practice of "rounding up" wireless airtime to the nearest minute and charging for the full minute. The action sought certification of a national class. In November 2014, an Ontario class only was certified by the Ontario Superior Court of Justice in relation to the breach of contract, breach of *Consumer Protection Act*, and unjust enrichment claims; all appeals of the certification decision have now been exhausted. At the same time, the Ontario Superior Court of Justice declined to stay the claims of our business customers, notwithstanding an arbitration clause in our customer service agreements with those customers. This latter decision was appealed and on May 31, 2017, the Ontario Court of Appeal dismissed our appeal. The Supreme Court of Canada granted us leave to appeal this decision and on April 4, 2019, granted our appeal and stayed the claims of business customers.

Call set-up time class actions

In 2005 a class action was brought against us in British Columbia alleging that we have engaged in deceptive trade practices in charging for incoming calls from the moment the caller connects to the network, and not from the moment the incoming call is connected to the recipient. In 2011, the Supreme Court of Canada upheld a stay of all of the causes of action advanced by the plaintiff in this class action, with one exception, based on the arbitration clause that was included in our customer service agreements. The sole exception was the cause of action based on

deceptive or unconscionable practices under the British Columbia *Business Practices and Consumer Protection Act*, which the Supreme Court of Canada declined to stay. In January 2016, the British Columbia Supreme Court certified this class action in relation to the claim under the *Business Practices and Consumer Protection Act*. The class is limited to residents of British Columbia who contracted wireless services with us in the period from January 21, 1999, to April 2010. We have appealed the certification decision. A companion class action was brought against us in Alberta at the same time as the British Columbia class action. The Alberta class action duplicates the allegations in the British Columbia action, but has not proceeded to date and is not certified. Subject to a number of conditions, including court approval, we have now settled both the British Columbia and the Alberta class actions.

Uncertified class actions

Uncertified class actions against us include:

9-1-1 class actions

In 2008 a class action was brought in Saskatchewan against us and other Canadian telecommunications carriers alleging that, among other matters, we failed to provide proper notice of 9-1-1 charges to the public, have been deceitfully passing them off as government charges, and have charged 9-1-1 fees to customers who reside in areas where 9-1-1 service is not available. The plaintiffs advance causes of action in breach of contract, misrepresentation and false advertising and seek certification of a national class. A virtually identical class action was filed in Alberta at the same time, but the Alberta Court of Queen's Bench declared that class action expired against us as of 2009. No steps have been taken in this proceeding since 2016.

Public Mobile class actions

In 2014 class actions were brought against us in Quebec and Ontario on behalf of Public Mobile's customers, alleging that changes to the technology, services and rate plans made by us contravene our statutory and common law obligations. In particular, the Quebec action alleges that our actions constitute a breach of the Quebec *Consumer Protection Act*, the Quebec *Civil Code*, and the Ontario *Consumer Protection Act*. It has not yet proceeded to an authorization hearing. The Ontario class action alleges negligence, breach of express and implied warranty, breach of the *Competition Act*, unjust enrichment, and waiver of tort. No steps have been taken in this proceeding since it was filed and served.

Handset subsidy class action

In 2016 a class action was brought in Quebec against us and other telecommunications carriers alleging that we breached the Quebec *Consumer*

Protection Act and the *Civil Code of Quebec* by making false or misleading representations relating to the handset subsidy provided to our wireless customers, and by charging our wireless customers inflated rate plan prices and termination fees higher than those permitted under the *Act*. The claim was later amended to also seek compensation for amounts paid by class members to unlock their mobile devices. The authorization hearing was held on April 30 and May 1, 2019, and on July 15, 2019, the Quebec Superior Court dismissed the authorization application. The Plaintiff has appealed this decision and the appeal is expected to be heard in the first quarter of 2021.

Other claims

Claims and possible claims received by us include:

Area code 867 blocking claim

In 2018 a claim was brought against us alleging breach of a Direct Connection Call Termination Services Agreement, breach of a duty of good faith, and intentional interference with economic relations. The plaintiffs allege that we have improperly blocked calls to area code 867 (including to customers of a plaintiff), for which a second plaintiff provides wholesale session initiation trunking services. The plaintiffs seek damages of $135 million. On April 23, 2019, the Ontario Superior Court stayed this claim on the ground that the court has no jurisdiction over, or is not the appropriate forum for, the subject matter of this action. This matter has now been resolved and the Court has issued a consent order dismissing the action.

Summary

We believe that we have good defences to the above matters. Should the ultimate resolution of these matters differ from management's assessments and assumptions, a material adjustment to our financial position and the results of our operations, including cash flows, could result. Management's assessments and assumptions include that reliable

estimates of any such exposure cannot be made considering the continued uncertainty about: the nature of the damages that may be sought by the plaintiffs; the causes of action that are being, or may ultimately be, pursued; and, in the case of the uncertified class actions, the causes of action that may ultimately be certified.

(b) Indemnification obligations

In the normal course of operations, we provide indemnification in conjunction with certain transactions. The terms of these indemnification obligations range in duration. These indemnifications would require us to compensate the indemnified parties for costs incurred as a result of failure to comply with contractual obligations, or litigation claims or statutory sanctions, or damages that may be suffered by an indemnified party. In some cases, there is no maximum limit on these indemnification obligations. The overall maximum amount of an indemnification obligation will depend on future events and conditions and therefore cannot be reasonably estimated. Where appropriate, an indemnification obligation is recorded as a liability. Other than obligations recorded as liabilities at the time of the related transactions, historically we have not made significant payments under these indemnifications. As at December 31, 2020, we had no liability recorded in respect of our indemnification obligations.

See *Note 21(b)* for details regarding our guarantees to the real estate joint ventures.

30 related party transactions

(a) Transactions with key management personnel

Our key management personnel have authority and responsibility for overseeing, planning, directing and controlling our activities and consist of our Board of Directors and our Executive Leadership Team.

Total compensation expense for key management personnel, and the composition thereof, is as follows:

Years ended December 31 (millions)	**2020**	2019
Short-term benefits	**$ 9**	$ 12
Post-employment pension [1] and other benefits	**4**	4
Share-based compensation [2]	**27**	37
	$ 40	$ 53

1 Our Executive Leadership Team members are members of our *Pension Plan for Management and Professional Employees of TELUS Corporation* and certain other non-registered, non-contributory supplementary defined benefit pension plans.

2 In respect of restricted share units with neither an equity settlement feature nor market performance conditions, we accrue a liability equal to the product of the number of vesting restricted share units multiplied by the fair market value of the corresponding Common Shares at the end of the reporting period. Similarly, we accrue a liability for the notional subset of our restricted share units without an equity settlement feature and with market performance conditions using a Monte Carlo simulation-determined fair value. Restricted share units with an equity settlement feature are accounted for as equity instruments. The expense for restricted share units that do not ultimately vest is reversed against the expense that was previously recorded in their respect.

As disclosed in *Note 14*, we made initial awards of share-based compensation in 2020 and 2019, including, as set out in the following table, to our key management personnel. As most of these awards are cliff-vesting or graded-vesting and have multi-year requisite service periods, the related expense will be recognized rateably over a period of years and thus only a portion of the 2020 and 2019 initial awards are included in the amounts in the table above.

Years ended December 31	**2020**			2019		
($ in millions)	Number of restricted share units*	Notional value [1]	Grant-date fair value [1]	Number of restricted share units *	Notional value [1]	Grant-date fair value [1]
Awarded in period	**811,954**	**$ 20**	**$ 28**	949,408	$ 23	$ 15

1 Notional value is determined by multiplying the Common Share price at the time of award by the number of units awarded. The grant-date fair value differs from the notional value because the fair values of some awards have been determined using a Monte Carlo simulation (see *Note 14(b)*). No share options were awarded to our key management personnel in fiscal 2020 or 2019.

The liability amounts accrued for share-based compensation awards to key management personnel at December 31, 2019, were $25 million and $23 million for restricted share units and deferred shares, respectively; as at December 31, 2020, no liability-accounted awards were outstanding.

Our *Directors' Deferred Share Unit Plan* provides that, in addition to his or her annual equity grant of deferred share units, a director may elect to receive his or her annual retainer and meeting fees in deferred share units, TELUS Corporation Common Shares or cash. Deferred share units entitle directors to a specified number of TELUS Corporation Common Shares. Deferred share units are paid out when a director ceases to be a director, for any reason, at a time

* Amounts reflect retrospective application of March 17, 2020, share split (see *Note 28(b)*).

elected by the director in accordance with the *Directors' Deferred Share Unit Plan*; during the year ended December 31, 2020, $3 million (2019 – $4 million) was paid out.

Employment agreements with members of the Executive Leadership Team typically provide for severance payments if an executive's employment is terminated without cause: generally 18–24 months of base salary, benefits and accrual of pension service in lieu of notice, and 50% of base salary in lieu of an annual cash bonus. In the event of a change in control, Executive Leadership Team members are not entitled to treatment any different than that given to our other employees with respect to non-vested share-based compensation.

(b) Transactions with defined benefit pension plans

During the year ended December 31, 2020, we provided management and administrative services to our defined benefit pension plans; the charges for these services were on a cost recovery basis and amounted to $7 million (2019 – $6 million).

(c) Transactions with real estate joint venture and associate

During the years ended December 31, 2020 and 2019, we had transactions with the TELUS Sky real estate joint venture, which is a related party, as set out in *Note 21*. As at December 31, 2020, we had recorded lease liabilities of $76 million (2019 – $77 million) in respect of our TELUS Sky lease and monthly cash payments are made in accordance with the lease agreement; one-third of those amounts is due to our economic interest in the real estate joint venture.

31 additional statement of cash flow information

(a) Statements of cash flows – operating activities and investing activities

Years ended December 31 (millions)	*Note*	**2020**	2019
OPERATING ACTIVITIES			
Net change in non-cash operating working capital			
Accounts receivable		**$ (231)**	$ (329)
Inventories		**30**	(61)
Contract assets		**298**	123
Prepaid expenses		**79**	—
Accounts payable and accrued liabilities		**189**	73
Income and other taxes receivable and payable, net		**(49)**	(287)
Advance billings and customer deposits		**54**	(10)
Provisions		**(100)**	159
		$ 270	$ (332)
INVESTING ACTIVITIES			
Cash payments for capital assets, excluding spectrum licences			

Capital asset additions			
Gross capital expenditures			
Property, plant and equipment	*17*	**$ (2,672)**	$ (2,772)
Intangible assets subject to amortization	*18*	**(640)**	(660)
		(3,312)	(3,432)
Additions arising from leases	*17*	**530**	509
Additions arising from non-monetary transactions		**7**	17
Capital expenditures	*5*	**(2,775)**	(2,906)
Effect of asset retirement obligations		**(157)**	(153)
		(2,932)	(3,059)
Other non-cash items included above			
Change in associated non-cash investing working capital		**(50)**	(31)
Non-cash change in asset retirement obligation		**160**	138
		110	107
		$ (2,822)	$ (2,952)

(b) Changes in liabilities arising from financing activities

		Statement of cash flows		Non-cash changes		
(millions)	Beginning of period	Issued or received	Redemptions, repayments or payments	Foreign exchange movement (*Note 4(i)*)	Other	End of period
YEAR ENDED DECEMBER 31, 2019						
Dividends payable to holders of Common Shares	$ 326	$ —	$ (1,332)	$ —	$ 1,358	$ 352
Dividends reinvested in shares from Treasury	—	—	183	—	(183)	—
	$ 326	$ —	$ (1,149)	$ —	$ 1,175	$ 352
Short-term borrowings	$ 100	$ 850	$ (851)	$ —	$ 1	$ 100
Long-term debt						
TELUS Corporation senior notes	$ 12,186	$ 3,474	$ (1,000)	$ (145)	$ (36)	$ 14,479
TELUS Corporation commercial paper	774	4,135	(3,860)	(34)	—	1,015
TELUS Communications Inc. debentures	620	—	—	—	1	621
TELUS International (Cda) Inc. credit facility	419	96	(64)	(22)	2	431
Other	—	—	(8)	—	275	267
Lease liabilities	1,483	—	(333)	(16)	527	1,661
Derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt – liability (asset)	(73)	3,860	(3,856)	179	(147)	(37)
	15,409	11,565	(9,121)	(38)	622	18,437
To eliminate effect of gross settlement of derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt	—	(3,860)	3,860	—	—	—
	$ 15,409	$ 7,705	$ (5,261)	$ (38)	$ 622	$ 18,437
YEAR ENDED DECEMBER 31, 2020						
Dividends payable to holders of Common Shares	$ 352	**$ —**	**$ (1,469)**	**$ —**	**$ 1,520**	**$ 403**
Dividends reinvested in shares from Treasury	—	**—**	**539**	**—**	**(539)**	**—**
	$ 352	**$ —**	**$ (930)**	**$ —**	**$ 981**	**$ 403**
Short-term borrowings	$ 100	**$ 215**	**$ (223)**	**$ —**	**$ 8**	**$ 100**
Long-term debt						
TELUS Corporation senior notes	$ 14,479	**$ 1,500**	**$ (900)**	**$ (60)**	**$ 2**	**$ 15,021**
TELUS Corporation commercial paper	1,015	**1,782**	**(2,116)**	**50**	**—**	**731**
TELUS Communications Inc. debentures	621	**—**	**—**	**—**	**1**	**622**
TELUS International (Cda) Inc. credit facility	431	**1,600**	**(191)**	**(27)**	**(9)**	**1,804**
Other	267	**—**	**(319)**	**—**	**325**	**273**
Lease liabilities	1,661	**—**	**(365)**	**7**	**534**	**1,837**
Derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt – liability (asset)	(37)	**2,137**	**(2,109)**	**94**	**35**	**120**
	18,437	**7,019**	**(6,000)**	**64**	**888**	**20,408**

To eliminate effect of gross settlement of derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt	—	**(2,137)**	**2,137**	**—**	**—**	**—**
	$ 18,437	**$ 4,882**	**$ (3,863)**	**$ 64**	**$ 888**	**$ 20,408**



TELUS CORPORATION

Management's discussion and analysis

2020



Caution regarding forward-looking statements

The terms *TELUS, the Company, we, us* and *our* refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries.

This document contains forward-looking statements about expected events and our financial and operating performance. Forward-looking statements include any statements that do not refer to historical facts. They include, but are not limited to, statements relating to our objectives and our strategies to achieve those objectives, our targets, outlook, updates, our plans and expectations regarding the impact of the COVID-19 pandemic and responses to it, and our multi-year dividend growth program. Forward-looking statements are typically identified by the words assumption, goal, guidance, objective, outlook, strategy, target and other similar expressions, or future or conditional verbs such as *aim*, *anticipate*, *believe*, *could*, *expect*, *intend*, *may*, *plan*, *predict*, *seek*, *should*, *strive* and *will*. These statements are made pursuant to the "safe harbour" provisions of applicable securities laws in Canada and the United States *Private Securities Litigation Reform Act of 1995* .

By their nature, forward-looking statements are subject to inherent risks and uncertainties and are based on assumptions, including assumptions about future economic conditions and courses of action. These assumptions may ultimately prove to have been inaccurate and, as a result, our actual results or events may differ materially from expectations expressed in or implied by the forward-looking statements. Our general outlook and assumptions for 2021 are presented in *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* in this Management's discussion and analysis (MD&A).

Risks and uncertainties that could cause actual performance or events to differ materially from the forward-looking statements made herein and in other TELUS filings include, but are not limited to, the following:

- The COVID-19 pandemic including its impacts on our customers, suppliers and vendors, our team members and our communities, as well as changes resulting from the pandemic to our business and operations including to the demand for and supply of the products and services that we offer and the channels through which we offer them.

- Regulatory decisions and developments including: changes to our regulatory regime (the timing of announcement or implementation of which are uncertain) or the outcomes of proceedings, cases or inquiries relating to its application, including but not limited to those set out in *Section 9.4 Communications industry regulatory developments and proceedings* in this MD&A, such as the potential for government intervention to further increase competition, for example, through mandated wholesale access; the potential for additional government intervention on pricing, including the March 2020 announcement by the federal government (reiterated in June 2020) targeting a 25% price reduction over a two-year period by the national wireless carriers in wireless plans using between two to six GB of data; federal and provincial consumer protection legislation and regulation including the introduction by the federal government of Bill C-11, the *Digital Charter Implementation Act, 2020*, which, aims to *give consumers new rights and imposes new monetary penalties for non-compliance* ; amendments to existing federal legislation; potential threats to unitary federal regulatory authority over communications in Canada; potential threats to the CRTC's ability to enforce the *Wholesale Code*, which aims to ensure the fair treatment by vertically integrated firms of rival broadcasting distributors and programming services; regulatory action by the Competition Bureau or other regulatory agencies; spectrum and compliance with licences, including our compliance with licence conditions, changes to spectrum licence fees, spectrum policy determinations such as restrictions on the purchase, sale, subordination and transfer of spectrum licences, the cost, availability and timing of spectrum, and ongoing and future consultations and decisions on spectrum licensing and policy frameworks, auctions and allocation; the impact on us and other Canadian telecommunications carriers of government or regulatory actions with respect to certain countries or suppliers, including U.S. federal regulations pertaining to certain technology transactions deemed to constitute national security risks and the imposition of additional licence requirements on the export, re-export and transfer of goods, services and technology to Huawei Technologies Co. Ltd. and its non-U.S. affiliates, and decisions of other foreign governments, which could result in a general shortage of chip sets and other equipment; restrictions on non-Canadian ownership and control of the common shares of TELUS Corporation (Common Shares) and the ongoing monitoring of and compliance with such restrictions; unanticipated changes to the current copyright regime; and our ability to comply with complex and changing regulation of the healthcare and medical devices industry in the jurisdictions in which we operate, including as an operator of health clinics. The jurisdictions in which we operate, as well as the contracts that we enter into (particularly those of TELUS International (Cda) Inc.'s (TELUS International or TI) business), require us to comply with or facilitate our clients' compliance with numerous, complex and sometimes conflicting legal regimes, both domestically and internationally. See TELUS International financial performance which impacts our financial performance.

- Competitive environment including: our ability to continue to retain customers through an enhanced customer service experience that is differentiated from our competitors, including through the deployment and operation of evolving wireless and wireline infrastructure; intense wireless competition, including the ability of industry competitors to successfully combine a mix of internet services and, in some cases, wireless services under one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services; the success of new products, services and supporting systems, such as home automation security and Internet of Things (IoT) services for internet-connected devices; wireline voice and data competition, including continued intense rivalry across all services among wireless and wireline telecommunications companies, cable companies, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on current and future mobile phone average billing per subscriber per month (ABPU), mobile phone average revenue per subscriber per month (ARPU), cost of acquisition, cost of retention and churn rate for all services, as do customer usage patterns, increased data bucket sizes or flat-rate pricing trends for voice and data, such as our Peace of Mind™ plans and comparable plans, inclusive rate plans for voice and data and availability of Wi-Fi networks for data; mergers and acquisitions of industry competitors; pressures on internet and TV ARPU and churn rate resulting from market conditions, government actions and customer usage patterns; residential voice and business network access line losses; subscriber additions and retention volumes, and associated costs for wireless, TV and internet services; our ability to obtain and offer content on a timely basis across multiple devices on

wireless and TV platforms at a reasonable cost as content costs per unit continue to grow; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services, and timely and effective enforcement of related regulatory safeguards; TI's ability to compete with professional services companies that offer consulting services, information technology companies with digital capabilities, and traditional contact center and business process outsourcing companies that are expanding their capabilities to offer higher-margin and higher-growth digital services; in our TELUS Health business, our ability to compete with other providers of electronic medical records and pharmacy management products, claims adjudicators, systems integrators and health service providers including those that own a vertically integrated mix of health services delivery, IT solutions, and related services, global providers that could achieve expanded Canadian footprints, and in the provision of virtual healthcare services, preventative health services and personal emergency response services; and in our TELUS Agriculture business, while we maintain a broad solution set as compared to other agriculture technology providers, our ability to compete with focused software and IoT competitors.

- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice services (local and long distance) resulting from impacts of OTT applications and wireless substitution; a declining overall market for TV services, including as a result of content piracy and signal theft, a rise in OTT direct-to-consumer video offerings and virtual multichannel video programming distribution platforms; the increasing number of households that have only wireless and/or internet-based telephone services; potential declines in mobile phone ABPU and ARPU as a result of, among other factors, substitution by messaging and OTT applications; substitution by increasingly available Wi-Fi services; and disruptive technologies, such as OTT IP services, including software-defined networks in the business market, that may displace or cause us to reprice our existing data services.

- Challenges to our ability to deploy technology including: high subscriber demand for data that challenges wireless networks and spectrum capacity levels and may be accompanied by increases in delivery cost; our reliance on information technology and our ability to streamline our legacy systems; the roll-out and evolution of wireless broadband technologies and systems, including video distribution platforms and telecommunications network technologies (broadband initiatives, such as fibre-to-the-premises (FTTP), wireless small-cell deployment, 5G wireless and availability of resources and our ability to build out adequate broadband capacity); our reliance on wireless network access agreements, which have facilitated our deployment of wireless technologies; our choice of suppliers and those suppliers' ability to maintain and service their product lines, which could affect the success of upgrades to, and evolution of, technology that we offer; supplier limitations and concentration and market power for products such as network equipment, TELUS TV® and wireless handsets; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data and our ability to utilize spectrum we acquire; deployment and operation of new wireline broadband network technologies at a reasonable cost and the availability and success of new products and services to be rolled out using such network technologies; network reliability and change management; and our deployment of self-learning tools and automation that may change the way we interact with customers.

- Capital expenditure levels and potential outlays for spectrum licences in auctions or purchases from third parties , affect and are affected by: our broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing deployment of newer wireless technologies, including wireless small cells to improve coverage and capacity; investments in network resiliency and reliability, including to address changes in usage resulting from restrictions imposed in response to COVID-19; the allocation of resources to acquisitions and future wireless spectrum auctions held by Innovation, Science and Economic Development Canada (ISED), including the 3500 MHz spectrum auction scheduled to take place in June 2021 and the millimetre wave spectrum auction, which the Minister of Innovation, Science and Industry stated is expected to commence in 2021, but we believe may not take place until 2022 or later, and the announcement of a formal consultation on the auctioning of the 3800 MHz spectrum, expected to take place in 2023. Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results or by changes to our regulatory environment.

- Operational performance and business combination risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations in a timely manner; our ability to manage the requirements of large enterprise deals; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations (such as our ability to successfully complete and integrate acquisitions into our operations and culture, complete divestitures or establish partnerships in a timely manner and realize expected strategic benefits, including those following compliance with any regulatory orders); our ability to identify and manage new risks inherent in new service offerings that we may provide, including as a result of acquisitions, which could result in damage to our brand, our business in the relevant area or as a whole, and additional exposure to litigation or regulatory proceedings; and our ability to effectively manage our infrastructure and team member expansion.

- Data protection including risks that malfunctions or unlawful acts could result in unauthorized access to, change, loss, or distribution of data, which may compromise the privacy of individuals and could result in financial loss and harm to our reputation and brand.

- Security threats including intentional damage or unauthorized access or attempted access to our physical assets or our IT systems and networks, which could prevent us from providing reliable service or result in unauthorized access to our information or that of our customers.

- Ability to successfully implement cost reduction initiatives and realize planned savings, net of restructuring and other costs, without losing customer service focus or negatively affecting business operations. Examples of these initiatives are: our operating efficiency and effectiveness program to drive improvements in financial results; business integrations; business product simplification; business process automation and outsourcing; offshoring and reorganizations; procurement initiatives; and real estate rationalization.

- Foreign operations and our ability to successfully manage operations in foreign jurisdictions, including managing risks such as currency fluctuations and exposure to various economic, international trade, political and other risks of doing business globally.

- Business continuity events including: our ability to maintain customer service and operate our network in the event of human error or human-caused threats, such as cyberattacks and equipment failures that could cause various degrees of network outages; technical disruptions and infrastructure breakdowns; supply chain disruptions, delays and economics, including as a result of government restrictions or trade actions; natural disaster threats; extreme weather events; epidemics; pandemics (including the ongoing COVID-19 pandemic); political instability in certain international locations; information security and privacy breaches, including data loss or theft of data; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.

- TELUS International's financial performance which impacts our financial performance . Factors that may affect TI's financial performance are described in TI's public filings available on SEDAR and EDGAR and may include: intense competition from companies offering similar services; TI's ability to grow and maintain its profitability as changes in technology and client expectations outpace service offerings and internal tools and processes; TI maintaining its culture as it grows; effects of economic and geopolitical conditions on its clients' businesses and demand for its services; a significant portion of TI's revenue being dependent on a limited number of large clients; continued consolidation in many of the verticals in which TI offers services could result in the loss of a client; attracting and retaining qualified team members to support its operations; adverse impacts of COVID-19 on TI's business and financial results; TI's acquisition of Lionbridge AI remaining subject to review by the Committee on Foreign Investment in the United States; TI's business being adversely affected if certain independent contractors were classified as employees, and the costs associated with defending, settling or resolving any future lawsuits (including demands for arbitration) relating to the independent contractor classification; TI's ability to successfully identify, complete, integrate and realize the benefits of acquisitions and manage associated risks; cyberattacks or unauthorized disclosure resulting in access to sensitive or confidential information and data of its clients or their end customers could have a negative impact on its reputation and client confidence; business development not developing in ways it currently anticipates due to negative public reaction to offshore outsourcing, proposed legislation or otherwise; ability to meet client expectations regarding its content moderation services being adversely impacted due to factors beyond its control and its content moderation team members may suffer adverse emotional or cognitive effects in the course of performing their work; and TI's lack of history operating as a separate, publicly traded company. The price of the subordinate voting shares of TI (TI Subordinate Voting Shares) may be volatile and is likely to fluctuate due to a number of factors beyond its control, including actual or anticipated changes in profitability; general economic, social or political developments; changes in industry conditions; changes in governance regulation; inflation; the general state of the securities markets; and other material events. TI may choose to publicize targets or provide other guidance regarding its business and it may not achieve such targets. Failure to do so could also result in a reduction in the trading price of the TI Subordinate Voting Shares. A reduction in the trading price of the TI Subordinate Voting Shares due to these or other factors could result in a reduction in the fair value of TI multiple voting shares held by TELUS.

- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry (including retention of team members leading recent acquisitions in emerging areas of our business), the level of our employee engagement, our ability to maintain our unique culture as we grow, the risk that certain independent contractors of TI's Lionbridge AI business could be classified as employees, and the health of our team.

- Financing and debt requirements including: our ability to carry out financing activities, refinance our maturing debt, lower our net debt to EBITDA ratio to our objective range given the cash demands of spectrum auctions and/or maintain investment grade credit ratings in the range of BBB+ or the equivalent. Our business plans and growth could be negatively affected if existing financing is not sufficient to cover our funding requirements.

- Lower than planned free cash flow could constrain our ability to invest in operations, reduce leverage or return capital to shareholders, and could affect our ability to sustain our dividend growth program through 2022. This program may be affected by factors such as the competitive environment, economic performance in Canada, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, acquisitions, the management of our capital structure, regulatory decisions and developments, and business continuity events. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors based on our financial position and outlook. Common Shares may be purchased under a normal course issuer bid (NCIB) if and when we implement one and if we consider it opportunistic, based on our financial position and outlook, and the market price of our Common Shares. There can be no assurance that our dividend growth program or that any NCIB will be implemented, maintained, unchanged and/or completed.

- Taxation matters including: interpretation of complex domestic and foreign tax laws by the relevant tax authorities that may differ from our interpretations; the timing and character of income and deductions, such as tax depreciation and operating expenses; tax credits or other attributes; changes in tax laws, including tax rates; tax expenses being materially different than anticipated, including the taxability of income and deductibility of tax attributes; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and changes to the interpretation of tax laws, including those resulting from changes to applicable accounting standards or the adoption of more aggressive auditing practices by tax authorities, tax reassessments or adverse court decisions impacting the tax payable by us.

- Litigation and legal matters including: our ability to successfully respond to investigations and regulatory proceedings; our ability to defend against existing and potential claims and lawsuits (including intellectual property infringement claims and class actions based on consumer claims, data, privacy or security breaches and secondary market liability), or to negotiate and execute upon indemnity rights or other protections in respect of such claims and lawsuits; and the complexity of legal compliance in domestic and foreign jurisdictions, including compliance with competition, anti-bribery and foreign corrupt practices laws.

- Health, safety and the environment including: lost employee work time resulting from illness or injury; public concerns related to radio frequency emissions; environmental issues affecting our business, including climate-related risk (such as extreme weather events and other natural hazards), waste and waste recycling, risks relating to fuel systems on our properties, changing government and public expectations regarding environmental matters and our responses; and challenges associated with epidemics or pandemics, including the COVID-19 pandemic and our response to it, which may add to or accentuate these factors.

- Economic growth and fluctuations including: the state of the economy in Canada, which may be influenced by economic and other developments outside of Canada, including potential outcomes of yet unknown policies and actions of foreign governments and the ongoing COVID-19 pandemic as well as public and private sector responses to the pandemic; expectations of future interest rates; inflation; unemployment levels; effects of fluctuating oil prices; effects of low business spending (such as reducing investments and cost structure); pension investment returns, funding and solvency discount rates; fluctuations in foreign exchange rates of the currencies in the regions in which we operate; sovereign credit ratings and effects on the cost of borrowing; the impact of tariffs on trade between Canada and the U.S.; and global implications of the trade dynamic between major world economies.

These risks are described in additional detail in *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* and *Section 10 Risks and risk management* in this MD&A. Those descriptions are incorporated by reference in this cautionary statement but are not intended to be a complete list of the risks that could affect the Company.

Many of these factors are beyond our control or our current expectations or knowledge. Additional risks and uncertainties that are not currently known to us or that we currently deem to be immaterial may also have a material adverse effect on our financial position, financial performance, cash flows, business or reputation. Except as otherwise indicated in this document, the forward-looking statements made herein do not reflect the potential impact of any non-recurring or special items or any mergers, acquisitions, dispositions or other business combinations or transactions that may be announced or that may occur after the date of this document.

Readers are cautioned not to place undue reliance on forward-looking statements. Forward-looking statements in this document describe our expectations, and are based on our assumptions, as at the date of this document and are subject to change after this date. Except as required by law, we disclaim any intention or obligation to update or revise any forward-looking statements.

This cautionary statement qualifies all of the forward-looking statements in this MD&A.

Management's discussion and analysis (MD&A)
February 11, 2021

Contents

Section	Page	Subsection
1. Introduction	7	1.1 Preparation of the MD&A
	7	1.2 The environment in which we operate
	12	1.3 Highlights of 2020
	18	1.4 Performance targets (key performance measures)
2. Core business and strategy	19	2.1 Core business
	19	2.2 Strategic imperatives
3. Corporate priorities	20	
4. Capabilities	26	4.1 Principal markets addressed and competition
	29	4.2 Operational resources
	34	4.3 Liquidity and capital resources
	36	4.4 Disclosure controls and procedures and changes in internal control over financial reporting
5. Discussion of operations	36	5.1 General
	38	5.2 Summary of consolidated quarterly results, trends and fourth quarter recap
	42	
	45	5.3 Consolidated operations
	50	5.4 Wireless segment
		5.5 Wireline segment
6. Changes in financial position	54	
7. Liquidity and capital resources	55	7.1 Overview
	56	7.2 Cash provided by operating activities
	56	7.3 Cash used by investing activities
	58	7.4 Cash provided by financing activities
	60	7.5 Liquidity and capital resource measures
	61	7.6 Credit facilities
	62	7.7 Sale of trade receivables
	63	7.8 Credit ratings
	63	7.9 Financial instruments, commitments and contingent liabilities
	65	7.10 Outstanding share information
	65	7.11 Transactions between related parties
8. Accounting matters	65	8.1 Critical accounting estimates and judgments
	70	8.2 Accounting policy developments
9. General trends, outlook and assumptions, and regulatory developments and proceedings	70	9.1 Telecommunications industry in 2020
	72	9.2 Telecommunications industry general outlook and trends
	76	9.3 TELUS assumptions for 2021
	78	9.4 Communications industry regulatory developments and proceedings

10. Risks and risk management
82 10.1 Overview
83 10.2 Principal risks and uncertainties
86 10.3 Regulatory matters
88 10.4 Competitive environment
91 10.5 Technology
93 10.6 Suppliers
94 10.7 Organizational change
96 10.8 Customer service excellence
98 10.9 Our systems and processes
100 10.10 Security and data protection
101 10.11 Our team
103 10.12 Our environment
105 10.13 Financing, debt and dividends
107 10.14 Tax matters
108 10.15 The economy
109 10.16 Litigation and legal matters

11. Definitions and reconciliations
110 11.1 Non-GAAP and other financial measures
114 11.2 Operating indicators

Copyright © 2021 TELUS Corporation. All rights reserved. Certain products and services named in this report are trademarks. The symbols TM and ® indicate those owned by TELUS Corporation or its subsidiaries. All other trademarks are the property of their respective owners.

1. Introduction

The forward-looking statements in this section, including, for example, statements relating to the expected impact of the COVID-19 pandemic on our operations and financial condition, on demand for our products and services and subscriber growth, and on our assets, are qualified by the *Caution regarding forward-looking statements* at the beginning of this Management's discussion and analysis (MD&A).

1.1 Preparation of the MD&A

The following sections are a discussion of our consolidated financial position and financial performance for the year ended December 31, 2020, and should be read together with our December 31, 2020 audited consolidated statements of income and other comprehensive income, statements of financial position, statements of changes in owners' equity and statements of cash flows, and the related notes (collectively referred to as the Consolidated financial statements). The generally accepted accounting principles (GAAP) that we use are International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) and Canadian GAAP. In this MD&A, the term IFRS refers to these standards. In our discussion, we also use certain non-GAAP financial measures to evaluate our performance, monitor compliance with debt covenants and manage our capital structure. These measures are defined, qualified and reconciled with their nearest GAAP measures in *Section 11.1*. All currency amounts are in Canadian dollars, unless otherwise specified.

Additional information relating to the Company, including our annual information form and other filings with securities commissions or similar regulatory authorities in Canada, is available on SEDAR (**sedar.com**). Our filings with the Securities and Exchange Commission in the United States, including Form 40-F, are available on EDGAR (**sec.gov**). Additional information about our TELUS International (Cda) Inc. (TELUS International or TI) subsidiary, including discussion of its business and results, can be found in its public filings available on SEDAR and EDGAR.

Our disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management on a timely basis, so that appropriate decisions can be made regarding public disclosure. This MD&A and the Consolidated financial statements were reviewed by our Audit Committee and authorized by our Board of Directors (Board) for issuance on February 11, 2021.

In this MD&A, unless otherwise indicated, results for the year ended December 31, 2020 are compared with results for the year ended December 31, 2019.

All information pertaining to shares and per-share amounts in this MD&A for periods before March 17, 2020 reflects retrospective treatment of the share split as further described in *Section 1.3 Highlights of 2020 – Two-for-one share split completed*.

1.2 The environment in which we operate

The success of our business and the challenges we face can best be understood with reference to the environment in which we operate, including broader economic factors that affect our customers and us, and the competitive nature of our operations.

2020 Canadian telecom industry decline	**TELUS 2020 revenues and other income**	**TELUS subscriber connections**	**TELUS Corporation Common Share 2020 dividends declared and growth per share**
Est. 2%	$15.5 billion	16.0 million	$1.5 billion / 5.2%

Canadian telecommunications industry

We believe that the COVID-19 pandemic made apparent that connectivity is no longer a luxury but a basic necessity in order for Canadians to participate in the digital economy. The pandemic placed overwhelming pressures on the Canadian economy and we believe that the economic impact of the pandemic would have been much more severe if not for Canada's robust telecommunications networks. We estimate that Canadian telecommunications industry revenues (including TV revenue and excluding media revenue) declined by approximately 2% in 2020 (growth of 2% in

2019) and experienced network revenue declines of approximately 4.4%. We attribute these declines to the pandemic. Wireless revenues continued to account for the largest portion of telecommunications sector revenues. We estimate that the Canadian wireless industry added approximately 1.1 million subscribers in 2020. With respect to the wireline industry, the Canadian consumer high-speed internet penetration rate grew by approximately 1 percentage point to 88% in 2020 and subscriber growth is expected to continue. More Canadians are subscribing to internet services, as they continued to use more data, and subscribe to faster and larger packages while the percentage of households that have pay TV subscriptions declined. Competitive pressures continued in both the wireline consumer and business markets, while declines in higher-margin legacy voice services were ongoing, partially attributable to technological substitution. (See

Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings, Section 10.4 Competitive environment and *Section 10.15 The economy*.)

COVID-19

On December 9, 2020, Health Canada authorized the first COVID-19 vaccine. Health authorities began administering the vaccine the following week. However, on December 26, 2020, Canada's first known case of a coronavirus variant, which was first detected in the United Kingdom, was confirmed. Since the beginning of the pandemic, we have focused relentlessly on keeping Canadians connected and on the health, safety and well-being of our team members, our customers and our communities. Our Executive Team continues to be guided by advice from our Emergency Management Operating Committee (EMOC) and the TELUS Medical Advisory Council (MAC).

Impacts to our financial condition and results of operations

Throughout the COVID-19 pandemic, we have seen unprecedented volumes of traffic on our network, including an increase in wireless voice calls, short message service (SMS) traffic, multimedia message service (MMS) traffic, home internet usage, video calls, voice network traffic, and usage of 1-800 phone numbers and teleconference bridges, compared to the same periods one year prior. Many workers are continuing their telecommuting arrangements, while some students began the new school year with online learning as part of their education plans, leading to added network demand. Despite the increased traffic volumes, we are keeping our customers connected and providing them with a reliable, fast and consistent experience on our leading wireless and wireline broadband networks, in both urban and rural communities across the country.

We are committed to supporting Canadians throughout the pandemic, as demonstrated by our measures to help consumers and small and medium-sized business (SMB) customers financially affected by the pandemic. To assist our customers with the initial adaptation to COVID-19 pandemic norms and impacts, we waived wireless roaming fees through April 30, 2020. Up to June 30, 2020, we deferred planned price increases, extended promotional periods, delayed suspensions, cancellations and write-offs for our customers who were in collections, accepted payment arrangements and waived home internet overage charges for customers without unlimited data plans. In December 2020, we delayed suspensions and account cancellations for customers who were in collections during the holiday season. Through our Mobility for Good® program, we provided a credit for two months of free wireless service to frontline healthcare workers at select hospitals across the country, and we donated over 14,000 devices, many with $0 rate plans, to over 340 organizations, enabling isolated seniors, hospitalized patients and vulnerable Canadians to stay connected. Families who were enrolled in our Internet for Good® program as of March 31, 2020 were provided with a credit for two months of free service. The program provides low-cost high-speed internet access to citizens in need. In September, we expedited access to our Internet for Good program to provide students in need, from kindergarten to grade 12 in B.C. and Alberta, by partnering with schools, teachers and principals to support virtual learning. In response to the strict quarantines imposed at long-term care homes for seniors, we piloted our Local Camera Mobile service at 29 facilities across B.C. and Alberta by December 31, 2020. The service allows facility operators to share important information with residents via a live video broadcast, improving the communication stream for over 3,500 residents. Additionally, we continue to offer free channel previews on Optik TV® and Pik TV® and free educational content for youth in partnership with Microsoft, which integrates our TELUS Wise ® program into its free online learning platform *Learn, Do and Share*.

Our TELUS Business Solutions team continues to support businesses as they transition to providing their customers with virtual support. We shared our pandemic planning framework, as well as our contact tracing playbook, with 500,000 of our business customers at private and public sector organizations. This allowed them to leverage the effort and research completed by our team and medical experts. We also extended the advice and guidance of our dedicated TELUS MAC to our business customers. In addition, we introduced an offer for small business customers through our TELUS Secure Business security solution. Under the offer, these customers were given a $1,000 equipment credit and three months of free service. In May, our Business Solutions team launched the #StandWithOwners initiative in support of Canadian small businesses. Through this social media campaign, we committed $500,000 in direct revenue, marketing and expert advice, exceeding our target in just four days. We launched a voluntary suspension-of-service offer for the hard-hit hospitality sector. The offer allows hotels to temporarily suspend TV and Wi-Fi service, thereby reducing the cash flow impact on their business.

The pandemic has impacted our operations and financial condition and we expect this to continue into 2021. Both operating revenue and earnings before interest, income taxes, depreciation and amortization (EBITDA), in addition to certain operational metrics, have been negatively impacted. This is expected to continue well into 2021. We continue to take steps to mitigate the negative effects of the pandemic, including on cash flow. We have experienced decreases in wireless roaming revenues with the closure of borders and corresponding decline in customer travel. We expect declines in roaming revenue to persist throughout the health crisis as the closure of land borders, including those between Canada and the U.S., and declines in customer travel continue. With respect to

SMBs, we expect lower contributions from our business customers as we anticipate that many SMBs will be forced to reduce the scope of their operations and/or close. In our health business, by the end of the first quarter, to keep our customers and team members safe, we had temporarily

closed certain TELUS Health Care Centres. We saw a financial improvement as our health clinics re-opened in July, but due to restrictions in place to protect patients during the pandemic, the clinics are still unable to offer their full suite of core services. Our TI business was also financially impacted by temporary operating restrictions of certain centres. TI's ability to quickly enable team members to work and support customers from home and in other modified work locations has helped to mostly mitigate these impacts.

Operational challenges

The federal government has categorized all telecommunications providers, including TELUS, as essential services for purposes of the COVID-19 pandemic. In addition, emergency measures taken by most provincial and territorial governments also recognize telecommunications providers as essential service providers that must continue operations. We anticipate this to continue for the duration of the health crisis. As a result, we should be permitted to continue operations during these times, although subject to some restrictions (such as the number of people permitted in our retail stores).

Health and safety of our customers and team members

For more than a decade, our Work Styles® program has provided employees with flexible work options to accommodate their work preferences. As a result, when the pandemic struck, we were well prepared, with a substantial portion of our domestic team already equipped to work from home. At December 31, 2020, over 95% of domestic employees (excluding field technicians and retail store representatives) were working from home. With these team members continuing to work productively from home, we made the decision to extend this remote working arrangement until September 2021 at a minimum, providing team members with clarity on their working arrangements so they could manage the logistics and responsibilities of their professional and personal lives. For team members experiencing difficulties balancing pandemic-related impacts such as school closures, we are providing alternative arrangements that may include: allowing normal weekly hours of work to be spread over the entire calendar week; supporting hours of work outside of traditional business hours; and/or allowing the workday to be split into multiple, shorter segments.

In our second quarter 2020 MD&A, we reported that a limited number of team members were invited to return to our buildings. These were employees who we had determined required access to one of our buildings to be fully productive, such as employees requiring access to specialized equipment. We continue to take proactive steps to ensure those working in our buildings and in the field are protected, including enhanced safety measures to ensure physical distancing, daily health self-assessments, thermal screening, and reminders about the importance of personal protective equipment.

Throughout the health crisis, we have utilized our virtual technician model, enabling technicians to perform their work without entering a customer's premises. This new process was developed in under 72 hours and we were the first in the industry to create this capability across our future friendly home services. The technician pre-provisions the equipment, leaves the sanitized equipment at the customer's door and then walks the customer through the installation process via a smartphone video interaction. As the pandemic has evolved, we now activate this capability in a geo-specific manner as epidemiological situations change throughout Canada. When we do offer professional technician driven installations, upon agreement from the customer and technician, our technician follows medically-driven safety protocols while performing the complex installations and repairs that cannot be done virtually.

We recognize the mental health challenges the pandemic has generated. We continue to maintain our internal online COVID-19 hub, which is a virtual gathering place for team members to learn, connect, work and be well together. Additionally, we share information with team members through our internal blog and frequently asked questions on our intranet. Team members also receive regular communications from our Chief Neuroscience Officer (CNO) on topics related to mental well-being, and are invited to attend virtual town halls with our CNO to ask questions related to mental and physical health, as well as receiving regular communications from the Chair of the TELUS MAC focused on medical information such as vaccine safety and deployment. Starting in October, leaders have been taking part in a new Leading a mentally healthy workplace training program to help support the well-being and mental health of our team members.

For TI, over 90% of our team members are continuing to support customers from home and in other modified work locations. While some delivery locations have begun to welcome back more team members, TI is planning for the majority of its team to make a gradual return to its centres provided it has been deemed safe to do so by local government and health authorities, in addition to guidance from the TELUS MAC and its own best practices.

Sustainability impacts

Through initiatives taken during the pandemic such as: (i) the hibernation of most floors in our administrative office buildings; and (ii) the increased utilization of our Work Styles program, in which team members do not have to commute

to an office building, we have observed a decrease in our associated domestic greenhouse gas emissions compared to the pre-pandemic period. These initiatives are being evaluated for long-term application and contribute to our target of having our operations become net carbon neutral by 2030 (see *Section 3*).

Scorecard

We simplified our 2020 corporate scorecard, including targets, in May 2020 and re-prioritized our objectives to better reflect the new operating environment in response to the COVID-19 pandemic, representative of our culture and brand, customer growth as well as cash flow. Our decision to adjust the scorecard was consistent with past practices when circumstances changed significantly from those considered by the Human Resources and Compensation Committee (HRCC) of our Board and when the original performance measures were approved and were in alignment with our governance practices and timelines. Concurrent with the review and approval of the first quarter of 2020 corporate scorecard results, the HRCC and Board reviewed and approved the revised scorecard targets for the second quarter of 2020 to fourth quarter of 2020, which will include the metrics: TELUS engagement, brand and reputation, net client additions, customer experience and simple cash flow. The revised 2020 corporate scorecard metrics and targets formed the baseline for the business unit scorecards, which were also revised in the second quarter of 2020.

Impacts to demand for our products and services

As previously described, our network traffic has significantly increased since the start of the pandemic and through the fourth quarter of 2020, and higher volumes of traffic are expected to continue.

At the end of the first quarter of 2020, we made the decision to temporarily close approximately 90% of our retail stores in an effort to reduce the transmission of COVID-19 and to keep our customers and team members safe. The remaining 10% of stores were kept open for essential customer support and we added many enhanced safety protocols. For example, store capacity was kept to less than 25%, we created distancing rules, installed plexiglass barriers, added team member and customer masking rules before they were mandated by health authorities and created virtual line-ups so customers need not stand and wait. Frontline team members, including those directly impacted by store closures, were redeployed to other areas of the business that required additional support and to keep them actively employed. Late in the second quarter of 2020, we commenced re-opening those retail stores that were previously closed, and by July 31, 2020, the majority had been re-opened. As of the end of 2020, almost all stores were open and they have continued operating with the same safety protocols.

While the health crisis has had a negative impact on customer loading and overall store traffic, our wireless gross additions have been resilient and only marginally lower over prior periods as we successfully leveraged our digital assets to support customer growth and retention activities. Wireless industry retail stores had re-opened by the end of the third quarter of 2020 and the typical fourth quarter seasonal promotional intensity was exacerbated by pent-up demand resulting from retail closures and lockdowns from the second quarter of 2020. This led to industry churn starting to gravitate to pre-pandemic levels. Despite these pressures, in the fourth quarter of 2020, mobile phone net additions improved year-over-year notwithstanding lower gross additions, and connected device net additions increased year-over-year (see Section 5.4 Wireless segment for additional details).

With fewer traditional wireline installations being performed, there was the possibility of lower corresponding wireline net additions. Notwithstanding these challenges, our fourth quarter of 2020 internet, TV and security subscriber connection net additions all experienced year-over-year improvements and we continue to evolve our operations and support our customers virtually (see *Section 5.5 Wireline segment* for additional details).

We continued to attract and retain high-quality subscribers, including through our TELUS Peace of Mind offerings, and to create value for our customers by leading with our strengths: our leading network, superior customer service and product offerings, flexibility and simplification including through digital capabilities, as well as effective bundling. We experienced increased utilization of our digital assets in both our wireless and wireline segments, including **telus.com** and the My TELUS mobile app – for example, to support the purchase of new devices, the addition of new services, migrations to electronic billing and to facilitate payments – making transactions easier for customers.

In our health business, we saw increased demand for virtual care solutions carried into the fourth quarter of 2020. With the introduction of virtual fee codes by every provincial government to enable remote patient care during the pandemic, TELUS Health launched its pre-built video visit functionality integrated with our electronic medical records (EMR). As of December 31, 2020, more than 226,000 consultations had been conducted through the TELUS EMR Virtual Visit solution. We are seeing continued demand for our one-on-one virtual health solutions, with accelerated adoption of Akira by TELUS Health by publicly funded and business customers, as well as increased demand for Babylon by TELUS Health. Our virtual care offerings were augmented by the fourth-quarter acquisition of EQ Care. We are also seeing increased demand for Home Health Monitoring (HHM) solutions with certain provinces, as well as increased demand for our LivingWell Companion™ by TELUS Health, enabling Canadian seniors to access 24/7 emergency support. In addition, certain TELUS Health Care Centres re-opened in July for in-clinic services while maintaining virtual consultation offerings to clients; prior to that, they had re-opened

with restricted capacity to protect patients during the health crisis. Virtual consultations were launched as part of a COVID-19 business impact assessment strategy and, as a result of their successful client adoption, virtual consultations will be maintained in a post-pandemic environment.

For our TI subsidiary's customer care and business services (CCBS) business, operations have been impacted by government announcements that resulted in the temporary closure of certain centres. Despite these closures, our TI subsidiary's teams managed to enable more than 90% of its team members to provide remote support from home and in other modified work locations. While some team members have begun to return to those TI delivery locations that are deemed safe, the majority of TI team members continue to work effectively from home. Certain TI clients (in particular those clients in travel and hospitality-related businesses) continue to experience challenges; however, the decline in business from these clients was offset by increases in business from clients in the games, media and e-commerce food delivery industries.

In the second half of 2020, cash receipts from customers steadily recovered from declines experienced in the second quarter of 2020. We believe government assistance programs designed to support individuals and businesses, as well as the resumption of collections activities, were key contributing factors to the improvement in cash receipts in the second half of 2020. In addition, to help mitigate cash flow impacts, we deferred planned Canadian management professional salary increases for one quarter and paused our employer matching portion of our employee share plan for management professionals for that same period.

Impacts to our capital and financial resources, overall liquidity position and outlook

We have a strong liquidity position with a robust outlook and are not relying on COVID-19-related supplier finance programs to manage our cash flow. Our access to capital has not been materially impacted by the COVID-19 pandemic, as evidenced by our long-term debt issuances described in *Section 1.3*. Our credit facilities have not changed and are not reasonably likely to change due to the pandemic. We had available liquidity of approximately $2.8 billion at December 31, 2020, composed of cash and temporary investments of $848 million, a TELUS Corporation credit facility of $1.5 billion inclusive of commercial paper backstop and our trade receivables securitization program of $400 million. Also at December 31, 2020, we could offer $2.0 billion of debt or equity securities pursuant to a shelf prospectus that is in effect until June 2022. Following the June 2021 maturity of our TELUS Communications Inc. 10.65% debentures, Series 3 totalling $175 million, our next TELUS Corporation notes mature in March 2022.

As set out in *Note 28(d)* of the Consolidated financial statements, in February 2021, TELUS International made an initial public offering (IPO) of subordinate voting shares (TI Subordinate Voting Shares); both TELUS Corporation and a TELUS International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6

billion from the offering were used to reduce the amount of outstanding TELUS International (Cda) Inc. credit facility (TI credit facility) indebtedness and $0.2 billion (comprised of net proceeds on disposition of TI Subordinate Voting Shares by TELUS Corporation) from the offering was included in Cash and temporary investments, net; had such reduction, and inclusion, respectively, been made at December 31, 2020, the pro forma net debt to EBITDA – excluding restructuring and other costs ratio would have been 3.30 times.

Funding sources, covenants, debt and other obligations

COVID-19 pandemic-related impacts have not affected our ability to access traditional funding sources that were available to us in recent periods. As described in *Section 1.3*, we undertook two debt offerings in 2020. Notably, at the time of the announcement of the Series CAD debt issuance, this debt offering represented the lowest coupon on record in the Canadian market for a BBB 10-year corporate issuance.

We have not provided additional collateral, guarantees or equity to obtain funding, nor have we experienced material changes to our cost of capital due to the COVID-19 pandemic. As described in *Section 7.8*, there have been no changes to our credit ratings during the health crisis.

There is no material uncertainty about our ongoing ability to meet the covenants of our TELUS Corporation credit agreements. Our TI subsidiary continues to forecast remaining in compliance with its leverage ratio under the TI credit facility and will take appropriate mitigating actions if necessary.

We have been able to service our debt and other obligations on a regular basis without material changes compared to pre-COVID-19 levels. We have taken advantage of some payment deferrals that several government jurisdictions have provided. For example, corporate income tax instalments, property tax payments of certain jurisdictions and spectrum licence remittances were deferred until September 2020. However, we did not experience any liquidity challenges once those accommodations ended.

COVID-19 effect on assets

Due to the widespread, pre-COVID-19 adoption of our Work Styles program, our finance operations have not been significantly impacted by the pandemic. We expect to experience delays in collection of accounts receivable as the health crisis has created financial hardships for many of our customers. Throughout 2020, we have experienced an increase in bad debt expense compared to pre-pandemic periods, as we have provided for the financial and operational impacts of these considerations and concessions to our customers. We will continue to work with our customers who require hardship assistance in addition to receiving government programs that are intended to support those financially impacted. We do not expect significant changes in judgments in determining the fair value of assets.

Business continuity plans

For many years, we have had, and continue to have, business continuity plans in place, including an established EMOC that includes representatives of all of our business units. The EMOC had been monitoring COVID-19 prior to it being characterized as a pandemic. As COVID-19 progressed, in early March 2020, the EMOC was activated to a heightened state of readiness. The EMOC continues to meet regularly and leverages the expertise of the TELUS MAC, which is composed of five doctors specializing in infectious diseases, public health, occupational health and family practice. We do not foresee requiring material expenditures to implement our business continuity plans relating to the health crisis and do not face any material resource constraints in implementing those plans. (See *Section 10.12 Our environment* for additional details.)

Supply chain and methods of distribution

We continue to leverage our digital capabilities as a key sales channel to supplement sales in our bricks and mortar retail stores. Given the continuing challenges that our suppliers may have in sourcing their own materials, and their historic disposition to launch next-generation devices at certain times of the year, there may be delays to the launches of their latest devices causing a ripple effect with associated equipment revenues.

The pandemic has not materially changed the relationship between our costs and revenues.

Capital expenditures, other capital resources and social capitalism

Keeping Canadians connected during the pandemic is of utmost importance to our team. Some planned capital expenditure activity has been deferred in response to customer requests and/or our inability to access work sites. However, we have redirected other capital expenditures to ensure our networks continue to operate at leading levels, as well as to facilitate millions of Canadians now working and learning from home and the resultant increased demand for services such as online activity, video streaming, 1-800 phone numbers and teleconference bridges. Other capital expenditures have been expedited to take advantage of equipment and deployment cost opportunities, including network upgrades and expanding our next-generation 5G network.

We continued to make contributions and investments in the communities where team members live, work and serve and to the Canadian economy on behalf of customers, shareholders and team members. This included paying, collecting and remitting more than $2.1 billion in taxes in 2020 to federal, provincial and municipal governments in Canada.

During the course of the year, we did not reduce or suspend dividend payments. On May 6, 2020, the Board elected to declare a dividend of $0.29125 per share, the same amount per share first declared on November 6, 2019, thereby deferring the targeted semi-annual dividend increase under our dividend growth program. The Board has elected to declare a fourth quarter dividend for 2020 as we continued supporting our Canadian and other shareholders. This decision is described in greater detail in *Section 4.3* under *Report on financing and capital structure management plans*. We have not ceased any material business operations or reduced our human capital resource expenditures beyond normal operational efficiency programs.

Travel restrictions and border closure impacts

Given the effectiveness of our technology in bridging geographic divides, travel restrictions and border closures are not expected to have a material impact on our ability to operate or achieve business goals. For example, we were able to hold our 2020 annual general meeting of shareholders using a virtual-only format for the first time ever via a live webcast.

1.3 Highlights of 2020

Competence Call Center acquisition

On January 31, 2020, TI completed the acquisition of 100% of Competence Call Center (CCC) for approximately $1.3 billion (€915 million), less debt assumed. CCC is a provider of higher-value-added business services with a focus on customer relationship management and content moderation through 28 languages. CCC offers its services across 11 European countries and partners with industry-leading global brands primarily from fast-growing technology, media and telecommunications, retail, and travel and hospitality sectors.

Two-for-one share split completed

On February 13, 2020, we announced a subdivision of the common shares of TELUS Corporation (Common Shares) on a two-for-one basis. On March 17, 2020, TELUS shareholders received one additional share for each share owned on the record date of March 13, 2020. All information pertaining to shares and per-share amounts in this MD&A for periods before March 17, 2020 reflects retrospective treatment of the share split.

Equity offering

On February 26, 2020, we issued 57.5 million Common Shares at a price of $26.00 for total gross proceeds of $1.5 billion. Proceeds of the offering were used for general corporate purposes, including funding growth opportunities, capital expenditures and the reduction of indebtedness.

5G launch

In June 2020, we launched the first wave of our 5G network in Vancouver, Montreal, Calgary, Edmonton and the Greater Toronto Area. By December 31, 2020, we had expanded our 5G network to over 75 communities. TELUS 5G is being made available at no additional cost to customers on our Peace of Mind plans.

Mobile Klinik acquisition

On July 1, 2020, we acquired 100% of Mobile Klinik, a storefront wireless device repair and sales business complementary to our existing wireless lines of business. The investment was made with a view to growing our wireless business.

TELUS Agriculture

On November 12, 2020, we announced TELUS Agriculture, which is dedicated to providing innovative solutions to support the agriculture and related industry with connected technology. Our agriculture business optimizes the food value chain by leveraging data in new ways to increase efficiency, production and yields, delivering better food outcomes for businesses and the end consumer. Connecting each piece of the agriculture value chain empowers farmers and ranchers, the agri-business industry, and agri-food, consumer goods and retail companies to leverage advanced data systems and artificial intelligence (AI) to streamline operations, improve food traceability, and provide consumers with fresher and healthier food.

At launch, one of our acquired companies was AFS Technologies Inc. (AFS). The acquisition of AFS was completed in the third quarter of 2020. AFS provides trade promotion and supply chain software solutions to consumer packaged goods companies, food distributors and food manufacturers. Other companies acquired over the course of 2019 to 2020 prior to announcement include:

- AGIntegrated – Seamless API integration for agri-businesses (Pennsylvania, U.S.)
- Agrian – Unified management platform for precision, agronomy, sustainability, analytics, and compliance (California, U.S.)
- Decisive Farming – Precision agronomy and farm management expertise (Alberta)
- Farm At Hand – Simplified farm management software (B.C.)
- Feedlot Health Management Solutions – Critical insights and data-based knowledge (Alberta)
- Muddy Boots – Farm-to-food traceability and supply chain management (Ross-on-Wye, United Kingdom)
- TKXS – Custom data and program management (North Carolina, U.S.)

TELUS Pollinator Fund for Good

On November 24, 2020, we announced the launch of our TELUS Pollinator Fund for Good, a $100 million social impact investment fund created to power ideas in new responsible and sustainable start-up businesses. The fund will invest in early-stage (Seed and Series A) for-profit, purpose-driven companies with exceptional and diverse leadership. These companies' goals must align with our goals and should already have a product or service in-market, and demonstrated an ability to grow their customer base and generate revenue.

TELUS Health

In the fourth quarter of 2020, we relaunched our national network of medical centres to align our Medisys, Copeman Healthcare, Horizon Occupational Health Solutions, Union Health and Plexico clinics under the same name – TELUS Health Care Centres – with the same goal, using digital technology to provide advanced health and wellness care and putting patients at the centre of their health journey.

On December 16, 2020, we acquired 100% of EQ Care, a national virtual healthcare provider offering convenient and confidential bilingual access to doctors and specialists via secure text and video chat from anywhere at any time. This acquisition strengthens our virtual care offerings in Canada.

Lionbridge AI acquisition

On December 31, 2020, TI acquired Lionbridge AI, the data annotation business of Lionbridge Technologies, Inc. for approximately $1.2 billion (US$939 million). Lionbridge AI is a global provider of crowd-based training data and annotation platform solutions used in the development of AI algorithms to power machine learning. Lionbridge AI

annotates data in text, images, videos and audio in more than 300 languages and dialects for some of the world's largest technology companies such as Google, Inc. in social media, search, retail and mobile. In connection with the acquisition, we, along with Lionbridge AI, submitted a declaration filing with the Committee on Foreign Investment in the United States (CFIUS). At the end of its 30-day assessment of the declaration filing, CFIUS requested that we file a joint voluntary notice pursuant to Section 721 of the Defense Production Act, which triggered an additional 45-day review period. The statutory review period for the joint voluntary notice expires in March 2021. Based on our discussions with CFIUS staff, we determined we could close the acquisition of Lionbridge AI before the expiry of the 45-day period.

Long-term debt issues and early redemptions of 2021 Notes

On May 29, 2020, we issued $400 million through the re-opening of our 3.95% Notes, Series CAB, maturing on February 16, 2050, and $600 million of senior unsecured 2.35% Notes, Series CAC, maturing on January 27, 2028. The net proceeds were used for the early redemption of notes described in the following paragraph and for general corporate purposes.

On June 23, 2020, we early redeemed all of our $400 million 3.60% Notes, Series CM, due January 26, 2021, and all of our $500 million 3.20% Notes, Series CO, due April 5, 2021. The long-term debt prepayment premium for both redemptions was $18 million before income taxes ($0.01 per share after income taxes). As a result of this early redemption, we no longer have any TELUS Corporation notes maturing in 2021.

On October 5, 2020, we issued $500 million of senior unsecured 2.05% Notes, Series CAD, which will mature on October 7, 2030. The net proceeds from this offering were used for general corporate purposes, including investing in our broadband network and other capital investment consistent with our growth strategy, and repayment of commercial paper. This offering was our second lowest coupon ever, and at the time of announcement, represented the lowest coupon on record in the Canadian market for a BBB 10-year corporate issuance.

Our Board of Directors

At our 2020 annual general meeting held on May 7, 2020, the nominees listed in the TELUS 2020 information circular were elected as directors of TELUS, including a new nominee, Thomas Flynn. Tom is Vice Chair, BMO Financial Group, and served as BMO Financial Group's Chief Financial Officer from 2011 to 2020. Prior to that, he held several leadership positions at the Bank of Montreal, including Executive Vice President and Chief Risk Officer, Executive Vice President Finance and Treasurer, and Head of the Financial Services Corporate and Investment Banking Group in BMO Capital Markets.

During the second quarter of 2020, Stockwell Day stepped down from our Board.

TELUS International IPO – Subsequent to 2020

On February 5, 2021, TELUS Corporation and our TELUS International subsidiary announced the closing of the upsized TELUS International IPO of 42.55 million TI Subordinate Voting Shares at a price of US$25.00 per share, which includes 5.55 million TI Subordinate Voting Shares purchased upon the full exercise of the underwriters' over-allotment option to purchase additional TI Subordinate Voting Shares from TELUS Corporation and Baring Private Equity Asia (Baring), the selling shareholders. The offering generated aggregate gross proceeds to TELUS International, TELUS Corporation and Baring of approximately $1.4 billion (US$1.1 billion), including the exercise of the over-allotment option in full. The net proceeds to TELUS International totaled approximately $0.6 billion (US$0.5 billion), which will be used to repay outstanding borrowings under its revolving credit facilities. TELUS International will not receive any proceeds from the TI Subordinate Voting Shares sold by the selling shareholders. The TI Subordinate Voting Shares began trading on the New York Stock Exchange and the Toronto Stock Exchange on February 3, 2021 under the ticker "TIXT."

Consolidated highlights

Years ended December 31 ($ millions, except footnotes and unless noted otherwise)	**2020**	2019	Change
Consolidated statements of income			
Operating revenues and Other income	**15,463**	14,658	5.5%
Operating income	**2,482**	2,977	(16.6)%
Income before income taxes	**1,711**	2,244	(23.8)%
Net income	**1,260**	1,776	(29.1)%
Net income attributable to Common Shares	**1,207**	1,746	(30.9)%
Adjusted Net income [1]	**1,361**	1,727	(21.2)%

Earnings per share (EPS) ($)			
Basic EPS	**0.95**	1.45	(34.5)%
Adjusted basic EPS[1]	**1.06**	1.43	(25.9)%
Diluted EPS	**0.94**	1.45	(35.2)%
Dividends declared per Common Share ($)	**1.18495**	1.12625	5.2%
Basic weighted-average Common Shares outstanding (millions)	**1,275**	1,204	5.9%
Consolidated statements of cash flows			
Cash provided by operating activities	**4,574**	3,927	16.5%
Cash used by investing activities	**(6,165)**	(5,044)	22.2%
Acquisitions	**(3,205)**	(1,105)	n/m
Capital expenditures[2]	**(2,775)**	(2,906)	(4.5)%
Cash provided by financing activities	**1,904**	1,238	53.8%
Other highlights			
Subscriber connections[3] (thousands)	**15,972**	15,166	5.3%
EBITDA[1]	**5,494**	5,554	(1.1)%
EBITDA margin[1] (%)	**35.5**	37.9	(2.4) pts.
Restructuring and other costs[1]	**259**	134	93.3%
Adjusted EBITDA[1,4]	**5,701**	5,693	0.2%
Adjusted EBITDA margin[1] (%)	**37.0**	38.8	(1.8) pts.
Free cash flow[1]	**1,435**	932	54.0%
Net debt to EBITDA – excluding restructuring and other costs[1] (times)	**3.45**	3.20	0.25

Notations used in MD&A: n/m – not meaningful; pts. – percentage points.

1 These are non-GAAP and other financial measures. See *Section 11.1 Non-GAAP and other financial measures.*

2 Capital expenditures include assets purchased, excluding right-of-use lease assets, but not yet paid for, and consequently differ from Cash payments for capital assets, excluding spectrum licences, as reported in the Consolidated financial statements. Refer to *Note 31* of the Consolidated financial statements for further information.

3 The sum of active mobile phone subscribers, mobile connected device subscribers, internet subscribers, residential voice subscribers, TV subscribers and security subscribers, measured at the end of the respective periods based on information in billing and other source systems. December 31, 2019 security subscriber connections have been increased to include approximately 490,000 subscribers related to our acquisition of ADT Security Services Canada, Inc. (ADT Canada) (acquired on November 5, 2019). During the third quarter of 2020, we adjusted cumulative subscriber connections to add approximately 31,000 security subscribers as a result of a business acquisition.

4 Adjusted EBITDA excludes restructuring and other costs (see *Section 11.1* for restructuring and other costs amounts), other equity losses related to real estate joint ventures, as well as retirement of a provision arising from business acquisition-related written put options within TI.

Operating highlights

- **Consolidated Operating revenues and Other income** increased by $805 million in 2020.

  Service revenues increased by $877 million in 2020, due to growth in wireline data services revenues from business acquisitions, expanded services and subscriber base growth, including from TI, as well as growth in our wireless subscriber base, partly offset by the impacts of the COVID-19 pandemic in both the wireless and wireline segments, and the ongoing declines in wireline legacy voice and legacy data services revenues.

  Equipment revenues decreased by $125 million in 2020, primarily attributable to the impacts of the pandemic, including the temporary closure of a significant number of sales channels from March 2020 through the majority of the second quarter of 2020, as well as customers reducing their general shopping habits in retail outlets since the beginning of the pandemic along with mandated capacity restrictions, which resulted in lower wireless contracted volume and accessory sales.

  Other income increased by $53 million in 2020, largely reflecting an increase in net gains resulting from a decrease in, and subsequent retirement of, provisions arising from business acquisition-related written put options within TI, partly offset by higher other equity losses related to real estate joint ventures. These other equity losses include lease-up period losses related to our investment in the TELUS Sky real estate joint venture.

For additional details on Operating revenues and Other income, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

- During 2020, our total **subscriber connections** increased by 806,000. This reflected an increase of 2.5% in mobile phone subscribers, 21.4% in mobile connected device subscribers, 7.9% in internet subscribers, 4.7% in TV subscribers and 16.3% in security subscribers, partly offset by a decline of 3.3% in residential voice subscribers.

  Our mobile phone net additions were 280,000 in 2020, up 6,000, driven by strong execution in our digital sales channels and our successful efforts to drive high-value customer additions and lower churn, which more than offset the impacts of the pandemic. Our mobile phone churn rate was 0.95% in 2020, down from 1.08% in 2019, reflecting pandemic impacts, including changing customer behaviour due to travel restrictions, reduced switching activity between carriers due to the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, customers reducing their general shopping habits in retail outlets since the start of the pandemic along with mandated capacity restrictions, and our successful bundling of mobility and home services. Mobile connected device net additions were 257,000 in 2020,

down 6,000, primarily due to higher tablet net losses, partly offset by increased demand for IoT solutions. (See *Section 5.4 Wireless segment* for additional details.)

Internet net additions were 157,000 in 2020, up 50,000, due to continued net new demand for our leading TELUS PureFibre ® services from consumers and businesses, as we keep our customers connected, as well as lower customer churn. TV net additions were 55,000 in 2020, down 12,000, mainly due to lower gross additions as a result of the pandemic and the changing landscape of increased streaming services, partly offset by lower churn. Security net additions were 68,000 in 2020, up 22,000, reflecting strong growth as we keep our customers connected and protected and demand from our bundled product offerings including the adoption of the TELUS Whole Home bundle and our bundling of mobility and home services. Our continued focus on expanding our addressable high-speed internet and Optik TV footprint, connecting more homes and businesses directly to fibre, diversifying our product offerings, and bundling these products and services together, as well as our ongoing focus on our customer service and reliability, contributed to combined internet, TV and security subscriber growth of 311,000 or 8.3% over the past 12 months. We had made TELUS PureFibre available to approximately 81% of our broadband footprint by December 31, 2020. TI expanded its customer base in 2020 through acquisitions and organic growth, with Tech and Games experiencing its fastest growth among verticals. (See *Section 5.5 Wireline segment* for additional details.)

- **Operating income** decreased by $495 million in 2020. Excluding the effects of a gain on a retirement of a provision arising from business acquisition-related written put options within TI of $71 million, Operating income decreased by $566 million in 2020. This decline reflects multiple impacts from the COVID-19 pandemic, increased depreciation and amortization, lower wireline legacy voice and legacy data services, higher non-labour-related restructuring and other costs, higher employee benefits expense including support for business acquisitions, and other equity losses related to real estate joint ventures. (See *Section 5.3 Consolidated operations* for additional details.)

EBITDA, which includes restructuring and other costs and other equity losses related to real estate joint ventures, decreased by $60 million or 1.1% in 2020.

Adjusted EBITDA, which excludes restructuring and other costs, other equity losses related to real estate joint ventures and a gain on a retirement of a provision arising from business acquisition-related written put options within TI, increased by $8 million or 0.2% in 2020, reflecting: growth in wireline data service margins resulting from business acquisitions, expanded services and subscriber base growth; growth in our wireless subscriber base; an increased organic and inorganic contribution from TI; and a larger decrease in a provision arising from business acquisition-related written put options within TI. This growth was mostly offset by multiple impacts from the COVID-19 pandemic, declines in wireline legacy voice and legacy data services, and higher employee benefits expense and other costs largely resulting from an increase in the number of employees from business acquisitions. (See *Section 5.3 Consolidated operations* for additional details.)

- **Income before income taxes** decreased by $533 million in 2020 as a result of lower Operating income, as noted above, and increased Financing costs. The increase in Financing costs resulted from higher average long-term debt outstanding, in part attributable to business acquisitions. (See *Financing costs* in *Section 5.3*.)

- **Income tax** expense decreased by $17 million in 2020. The effective income tax rate increased from 20.8 to 26.3%, predominantly attributed to the prior year revaluation of the deferred income tax liability for the multi-year reduction in the Alberta provincial corporate tax rate that was substantively enacted in the second quarter of 2019.

- **Net income attributable to Common Shares** decreased by $539 million in 2020, resulting from the after-tax impacts of lower Operating income and higher Financing costs.

Adjusted Net income excludes the effects of restructuring and other costs, income tax-related adjustments, other equity losses related to real estate joint ventures, long-term debt prepayment premium and a gain on a retirement of a provision arising from business acquisition-related written put options within TI. Adjusted Net income decreased by $111 million or 27.8% in 2020.

Reconciliation of adjusted Net income

Years ended December 31 ($ millions)	**2020**	2019	Change
Net income attributable to Common Shares	**1,207**	1,746	(539)
Add (deduct):			
Restructuring and other costs, after income taxes	**182**	98	84
Income tax-related adjustments	**(26)**	(142)	116
Other equity losses related to real estate joint ventures	**19**	5	14
Long-term debt prepayment premium, after income taxes	**14**	20	(6)
Retirement of a provision arising from business acquisition-related written put options within TI, after income taxes	**(35)**	—	(35)
Adjusted Net income	**1,361**	1,727	(366)

- **Basic EPS** decreased by $0.50 or 34.5% in 2020 as a result of the after-tax impacts of lower Operating income and higher Financing costs, as well as the effect of a higher number of Common Shares outstanding.

Adjusted basic EPS excludes the effects of restructuring and other costs, income tax-related adjustments, other equity losses related to real estate joint ventures, long-term debt prepayment premium and a gain on a retirement of a provision arising from business acquisition-related written put options within TI. Adjusted basic EPS decreased by $0.37 or 25.9% in 2020.

Reconciliation of adjusted basic EPS

Years ended December 31 ($)	**2020**	2019	Change

Basic EPS	**0.95**	1.45	(0.50)
Add (deduct):			
Restructuring and other costs, after income taxes, per share	**0.14**	0.08	0.06
Income tax-related adjustments, per share	**(0.02)**	(0.12)	0.10
Other equity losses related to real estate joint ventures, per share	**0.01**	—	0.01
Long-term debt prepayment premium, after income taxes, per share	**0.01**	0.02	(0.01)
Retirement of a provision arising from business acquisition-related written put options within TI, after income taxes, per share	**(0.03)**	—	(0.03)
Adjusted basic EPS	**1.06**	1.43	(0.37)

- **Dividends declared per Common Share** were $1.18495 in 2020, reflecting an increase of 5.2% from 2019. Consistent with our target of increasing dividends between 7 to 10% in the near term, the Board declared a first quarter dividend of $0.3112 per share on our issued and outstanding Common Shares, payable on April 1, 2021, to shareholders of record at the close of business on March 11, 2021. The first quarter dividend increased by $0.01995 per share or 6.8% from the $0.29125 per share dividend declared one year earlier, consistent with our multi-year dividend growth program described in *Section 4.3 Liquidity and capital resources*.

Liquidity and capital resource highlights

- Net debt to EBITDA – excluding restructuring and other costs ratio was 3.45 times at December 31, 2020, up from 3.20 times at December 31, 2019, as the increase in net debt, partly attributable to business acquisitions, exceeded the effect of the increase in EBITDA – excluding restructuring and other costs as the COVID-19 pandemic impacts reduced EBITDA. As at December 31, 2020, business acquisitions over the past 12 months increased the ratio by approximately 0.45 and the acquisition of spectrum licences increased the ratio by approximately 0.20. (See *Section 4.3 Liquidity and capital resources* and *Section 7.5 Liquidity and capital resource measures.*)

  As set out in *Note 28(d)* of the Consolidated financial statements, in February 2021, TELUS International made an IPO of TI Subordinate Voting Shares; both TELUS Corporation and a TELUS International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6 billion from the offering were used to reduce the amount of outstanding TI credit facility indebtedness and $0.2 billion (comprised of net proceeds on disposition of TI Subordinate Voting Shares by TELUS Corporation) from the offering was included in Cash and temporary investments, net; had such reduction, and inclusion, respectively, been made at December 31, 2020, the pro forma net debt to EBITDA – excluding restructuring and other costs ratio would have been 3.30 times.

- **Cash provided by operating activities** increased by $647 million in 2020, largely attributable to other working capital changes, decreased income tax payments, which mainly reflected a higher final income tax payment of $270 million in the first quarter of 2019 for the 2018 income tax year and which did not recur in 2020, as well as lower restructuring and other costs disbursements, net of expense. (See *Section 7.2 Cash provided by operating activities*.)

- **Cash used by investing activities** increased by $1,121 million in 2020, primarily attributable to increased acquisitions, partially offset by the impact of the $931 million cash payments for the 600 MHz spectrum auction in the second quarter of 2019. Acquisitions increased by $2,100 million in 2020, as we made larger cash payments for business acquisitions, including CCC, Mobile Klinik, AFS, EQ Care and Lionbridge AI. Capital expenditures decreased by $131 million in 2020 due to the timing of our fibre build activities and efficiencies in our 4G network expenditures. We had made TELUS PureFibre available to approximately 81% of our broadband footprint by December 31, 2020. (See *Section 7.3 Cash used by investing activities*.)

- **Cash provided by financing activities** increased by $666 million in 2020, resulting from our February 26, 2020 equity issue, shares of a subsidiary issued to non-controlling interests and lower cash payments for dividends, partly offset by less long-term debt issued, net of redemptions and repayment. (See *Section 7.4 Cash provided by financing activities.*)

- **Free cash flow** increased by $503 million in 2020, resulting primarily from: decreased income tax payments, as there was a higher final income tax payment of $270 million in the first quarter of 2019 for the 2018 income tax year; the timing related to device subsidy repayments and associated revenue recognition and our TELUS Easy Payment® device financing program; lower capital expenditures; and lower restructuring and other costs disbursements, partly offset by lower EBITDA attributable to pandemic impacts. Our definition of free cash flow, for which there is no industry alignment, is unaffected by accounting changes that do not impact cash, such as IFRS 15 and IFRS 16. (See calculation in *Section 11.1 Non-GAAP and other financial measures*.)

1.4 Performance targets (key performance measures)

On May 7, 2020, given the uncertain magnitude, duration and potential outcomes of the COVID-19 pandemic, we withdrew our 2020 financial guidance targets, which were originally announced on February 13, 2020. As a result, we do not have 2020 financial guidance targets to report against for 2020 revenues and Other income, Adjusted EBITDA, free cash flow or capital expenditures.

- Adjusted EBITDA was $5.701 billion in 2020, an increase of $8 million compared to 2019. Despite numerous pandemic pressures including: (i) reduced roaming revenue from changing customer behaviour related to travel restrictions; (ii) the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, as well as customers reducing their general shopping habits in retail outlets since the start of the pandemic along with mandated capacity restrictions, which hindered customer opportunities for device upgrades and the upgrade or selection of higher-tier plans; (iii) decreases in chargeable data usage as more people work from home and offload their mobile device traffic onto Wi-Fi networks; (iv) the temporary disruption of the TI business due to government-mandated site closures; (v) lower revenue from our business customers as they redeploy their resources; (vi) the temporary closures of our TELUS Health Care Centres and reduced health benefit claims from the lingering pandemic impacts on business recovery, which partly offset growth in virtual care solutions; (vii) increased bad debt expense; and (viii) initiatives to support customers, including temporary overage waives, we were able to successfully execute numerous customers first initiatives, such as the enhanced capabilities of our digital footprint and our virtual technician model. In addition to executing on our high-quality customer growth strategy, we also implemented cost initiatives and were able to attain a flat Adjusted EBITDA performance.

- Free cash flow was $1.435 billion, an increase of $503 million compared to 2019. We implemented cash preservation initiatives during 2020 to help offset the previously described pandemic pressures with our effective cash management measures.

- Capital expenditures were $2.775 billion in 2020, a decrease of $131 million compared to 2019. Our capital expenditures allowed us to achieve strong internet, TV and security subscriber growth, and enabled us to deliver greater resiliency, scalability and efficiency in IT infrastructure and remote work capabilities in response to the COVID-19 pandemic. We advanced numerous capital expenditures initiatives, such as supporting increased TELUS PureFibre broadband coverage in Alberta during the pandemic. See *Section 4.2 Our technology, systems and properties* and *Section 7.3 Cash used by investing activities* for additional details.

2. Core business and strategy

2.1 Core business

We provide a wide range of telecommunications products and services. Wireless products and services include network revenue (data and voice) and equipment sales arising from mobile technologies. Wireline products and services include data revenues (which include revenues from internet protocol; television; hosting, managed information technology and cloud-based services; home and business smart technology (including security and agriculture); and certain healthcare solutions), voice revenues, and other telecommunications services and equipment revenues. Our TELUS International (TI) subsidiary provides customer experience and digital enablement transformation through its customer care and business services (CCBS) business and designs, builds and delivers next-generation digital solutions to enhance the customer experience for clients across high-growth industry verticals. We currently earn the majority of our revenue from access to, and usage of, our telecommunications infrastructure, and from providing services and products that facilitate access to, and usage of, our infrastructure.

2.2 Strategic imperatives

Since 2000, we have maintained a proven national growth strategy. Our strategic intent is to unleash the power of the internet to deliver the best solutions to Canadians at home, in the workplace and on the move.

We also developed six strategic imperatives in 2000 that remain relevant for future growth, despite changing regulatory, technological and competitive environments. We believe that a consistent focus on these imperatives guides our actions and contributes to the achievement of our financial goals. To advance these long-term strategic imperatives and address near-term opportunities and challenges, we confirm or set new corporate priorities each year, as further described in *Section 3*. Our six strategic imperatives are listed below.

- Focusing relentlessly on growth markets of data, IP and wireless
- Providing integrated solutions that differentiate TELUS from our competitors
- Building national capabilities across data, IP, voice and wireless
- Partnering, acquiring and divesting to accelerate the implementation of our strategy and focus our resources on core business
- Going to market as one team under a common brand, executing a single strategy
- Investing in internal capabilities to build a high-performance culture and efficient operation.

3. Corporate priorities

We confirm or set new corporate priorities each year to advance our long-term strategic imperatives (see *Section 2.2*) and address near-term opportunities and challenges. These priorities have been affected by the COVID-19 pandemic as we have focused on keeping Canadians connected and on the safety and well-being of our customers, team members and communities (see *Section 1.2* for further discussion of pandemic impacts). The following table provides a discussion of activities and initiatives that relate to our 2020 corporate priorities.

Honouring our customers, communities and social purpose by our team delivering on our brand promise

- In November 2020, the Commission for Complaints for Telecom-television Services (CCTS) issued its annual report for the 12-month period ended July 31, 2020, which determined that TELUS was again the subject of the fewest customer complaints among national carriers and Koodo® was again the subject of the fewest complaints among the national flanker brands. TELUS, Koodo and Public Mobile ® each saw year-over-year reductions in the total customer complaints accepted by the CCTS with improvements of (27.6)%, (9.0)% and (41.4)%, respectively. Total industry complaints decreased year-over-year by 18.8%.

- Each year, we conduct an employee Pulsecheck engagement survey to gather confidential team member feedback about TELUS as a place to work in order to measure our progress in creating a high-performance culture. Following each survey, leaders share results with team members and use fair process to build and refine action plans focused on high-priority areas where improvement is required based on Pulsecheck results. In 2020, we achieved an engagement score of 87% (a 3 percentage point increase over 2019) – our highest engagement score achieved to date (tied with 2015) amidst a year like no other given the numerous COVID-19 pandemic impacts. This result continues to place TELUS within the top 10% of employers worldwide according to our survey provider, Kincentric.

- Throughout 2020, we continued to leverage our Connecting for Good ® programs to support marginalized Canadians through the global pandemic and also expanded program eligibility to support those who need it most.

  - We expedited access to our Internet for Good TM program to kindergarten to grade 12 students in need through partnerships with school boards and principals and expanded the program to include low-income people with disabilities. Now over 400,000 vulnerable Canadians are eligible to receive low cost, high-speed internet in B.C., Alberta and Quebec. During the year, we supported nearly 33,000 Canadians, bringing the number of Canadians benefiting from our Internet for Good program since its launch close to 72,000.

  - In partnership with the Children's Aid Foundation of Canada, we expanded our Mobility for Good TM program nationally to all youth aging out of foster care. In December, we expanded the program to include low-income seniors across Canada who are receiving the guaranteed income supplement (GIS), providing access to the technology they need to stay connected to loved ones and address feelings of isolation, enjoy their favourite online games and books, and obtain important healthcare resources and information. Including both youth and seniors, we added close to 2,500 Canadians to the program in 2020, providing them with a free smartphone and a free or subsidized wireless plan. Since its inception, more than 6,300 marginalized Canadians have benefited from our Mobility for Good program.

  - Through our Mobility for Good COVID-19 Emergency Response program, we distributed 14,200 devices and rate plans to more than 340 organizations. This enabled at-risk individuals to keep in contact with health practitioners and social workers, while helping hospitalized patients and vulnerable seniors stay connected with family. The free rate plans will be supported until June 30, 2021.

  - We expanded our Health for Good® program and launched seven new mobile health clinics in 2020. This year, our 11 mobile clinics offered health services to homeless and other marginalized Canadians from coast to coast and supported more than 28,000 patient visits, including assisting in the pandemic response by supporting 12,700 COVID-19 assessments and tests. Since inception in 2014, our Health for Good program has supported over 50,000 patient visits.

- We continued to evolve our TELUS Wise program during 2020 to build digital literacy and safety in our connected world.

  - More than 90,000 Canadians participated in our online TELUS Wise workshops this year. These workshops are free of charge and help foster the safe and responsible use of technology in our digital world. Approximately 85% of participants felt more empowered to stay safe online as a result of attending a workshop.

  - In line with our commitment to keep Canadians safe online, we launched two new online TELUS Wise workshops, *Empowering you to stay safe in our digital world for adults* and *Supporting youth in our digital world* for parents. Available at **telus.com/WiseWorkshops**, the first workshop offers important tips about protecting one's online safety and privacy, while the second workshop shares tips and guidance on navigating screen time, gaming, sexting, cyberbullying and helping youth stay safe in our digital world.

- We continued to make contributions and investments in the communities where team members live, work and serve and to the Canadian economy on behalf of customers, shareholders and team members. This included paying, collecting and remitting more than $2.1 billion in taxes in 2020 to federal, provincial and municipal governments in Canada consisting of corporate income taxes, sales taxes, property taxes, employer portion of payroll taxes and various regulatory fees. When including spectrum remittances, we have remitted approximately $34 billion in taxes and spectrum since 2000.

- In February 2020 and in November 2020, we were named one of Canada's Best Diversity Employers (2020) and one of Canada's Top 100 Employers (2021), respectively, by Mediacorp Canada Inc.

- In March 2020, the arm's-length TELUS Friendly Future Foundation™, which we capitalized in 2018 with an initial $100 million donation, together with the TELUS Community Boards, announced a $10 million commitment to help build public healthcare capacity throughout the COVID-19 pandemic and beyond, including funding for new technology and equipment, such as ventilators, as well as increased support for food banks, elderly Canadians and mental health programs. As of December 2020, the Foundation had contributed $8.9 million to 597 charitable health projects, including $6.5 million through TELUS Community Board grants and $2.4 million through Foundation national and provincial response grants.

- We donated $500,000 to a research team from the Vancouver General Hospital and University of British Columbia Hospital Foundation to assist in the search for therapeutic antiviral treatments for COVID-19.

- In the first quarter of 2020, we launched our #StayStrongStayConnected video in English and French on our social media handles, intended to help share positive messages and keep citizens connected during the COVID-19 pandemic.

- In March 2020, we introduced our TELUS Talks podcast. We produced 49 podcast episodes throughout the year, including episodes with guests Dr. Bonnie Henry, Dr. Michael Osterholm, Dr. Gabor Maté and Carol Todd. We garnered more than 118,000 listens, helping to support Canadians with information and insights to manage through a most unprecedented year.

- For the first time, our annual TELUS Days of Giving ® became a year-long virtual event in 2020, with TELUS team members, retirees and fellow Canadians volunteering – safely and virtually – to support our local communities. As of December 31, 2020, our TELUS family had participated in 1.2 million safe acts of giving, including more than 1.25 million volunteer hours of service, sewing 150,000 masks and donating 210,000 TELUS-branded masks.

- Commencing in the second quarter of 2020, TELUS-branded, non-medical masks were made available in adult and youth sizes to help keep Canadians safe, with all proceeds going to the TELUS Friendly Future Foundation to support COVID-19 pandemic relief efforts. As of December 31, 2020, we had sold 79,000 masks, raising more than $535,000 to support the work of our Foundation.

- Through a partnership with Alberta's science centres (TELUS World of Science – Edmonton and TELUS Spark in Calgary) and Microsoft, we collaborated to bring science camps online with the launch of Virtual Summer Camps powered by TELUS.

- In 2011, we initiated our first set of long-term energy and greenhouse gas emission reduction goals and surpassed them in early 2019, ahead of our 2020 target. As such, in our 2019 sustainability report issued during the second quarter of 2020, we released our new transformational climate action targets, including having our operations become net carbon neutral by 2030.

- In April 2020, we announced that we had been recognized by the Business Continuity Institute Americas with the Most Effective Recovery award for our response to the 2019 wildfires in Northern Alberta.

- In April 2020, we launched our broadband push-to-talk service for business and government customers, which includes secure push-to-talk, live location tracking and mapping, and secure group multimedia messaging.

- In May 2020, both TELUS and Koodo launched a free optional Call Control feature that helps screen out unwanted robo-callers.

- In May 2020, we launched our #StandWithOwners program in support of Canadian small businesses through the pandemic, committing $500,000 in direct revenue, marketing and expert advice to support, promote and celebrate small business owners.

- As part of our Data for Good program, which launched in the second quarter of 2020, we partnered with 24 public sector and/or research organizations to provide de-identified and aggregated network mobility data free of charge in support of COVID-19 research. In November 2020, we were awarded the Privacy Innovation Award by the International Association of Privacy Professionals in recognition of our Data for Good program.

- In June 2020, we ranked 20th on the Corporate Knights Best 50 Corporate Citizens in Canada list for 2020, up from 38th in 2019.

- As part of our annual Kits for Kids program, we donated 13,000 backpacks filled with essential school supplies and reusable youth-sized face masks to support a successful return to learning.

- We offered our Optik TV customers in B.C. and Alberta who have four or more theme packs the flexibility to choose Amazon Prime as a benefit in their Optik TV package.

- We donated close to $20,000 in video-on-demand proceeds from Black Panther and more than 60 other films by Black creators to Canada's Black Health Alliance, supporting the health and well-being of Black Canadians.

- On World Mental Health Day in October, we premiered our latest TELUS Originals documentary, Dark Cloud, which spotlights the stories and life-altering impacts of cyberbullying in Canada. As of year-end, we achieved 709,000 documentary views across Optik TV and YouTube. With Canadians spending more time than ever online during the COVID-19 pandemic, from socializing to schooling, this film is relevant for parents, youth and all Canadians, as it shares insights into what causes cyberbullying and how we can stop it.

- In October 2020, we launched TELUS Presents, a curated collection of hard-to-find shows from abroad, including the U.K. and Australia, and made it available to all Optik TV and Pik TV subscribers at no additional charge.

- In October 2020, we were recognized as Canada's leading global workplace in the Forbes *World's Best Employers 2020* report. TELUS, including TELUS International (TI), was ranked first among 25 Canadian companies recognized by Forbes and 40th globally, listed alongside 750 leading worldwide brands.

- We introduced our Owner's Advantage plan in October 2020 to meet the specific needs of small business owners, offering them exclusive benefits designed to provide greater value and more flexibility.

- As described in *Section 1.3*, in November 2020, we launched the TELUS Pollinator Fund for Good, a $100 million social impact investment fund, to power ideas in new responsible and sustainable start-up businesses. The fund will invest in entrepreneurs and innovative companies who are developing solutions aimed at improving healthcare, furthering social and economic inclusion, ensuring sustainable food production and reducing humanity's environmental footprint.

- In the fourth quarter of 2020, we were recognized by the Wall Street Journal as the only telecommunications company in the

world named to its Top 100 Most Sustainably Managed Companies, ranking 29th overall and 15th in respect of social capitalism. We were one of only three Canadian companies named to this global list. This worldwide recognition reinforces our global leadership in corporate citizenship and philanthropy, environmental and business innovation.

- In November 2020, we were recognized for corporate social responsibility by being named to the Dow Jones Sustainability World Index for the fifth consecutive year and to the North American Index for the 20th year in a row, ranking at the 90th percentile in the telecommunications industry for our leadership in sustainability. Notably, we were the only North American telecommunications company and one of only five Canadian companies recognized on the World Index across 24 industries. This ranking demonstrates our global leadership in key categories including corporate citizenship and philanthropy, innovation management, and environmental and social reporting.

- Our Connecting for Good initiatives won Gold for Most Innovative Corporate Social Responsibility Program of the Year by the Best in Biz Awards International. The program has a unique status of being the only global business awards program that is judged by diverse panels composed solely of members of the press from all over the world.

- From April to December 2020, we maintained the number one global position on the Didtheyhelp.com COVID-19 Heroes Leaderboard for nine consecutive months. We ranked first internationally as a leading corporate citizen for our efforts to support Canadians during the COVID-19 pandemic. The Heroes Leaderboard ranks global brands and individuals by awarding a point for each positive action and good deed they perform.

- We received the BEST Award for excellence in employee learning and development from the Association for Talent Development for the 15th consecutive year.

- We ended the year with record-high Consumer likelihood-to-recommend (L2R) by leading our national peers within each wireless tier (premium, flanker and value). Our L2R was also ahead of our largest Western Canadian cable competitor for TV and internet. Additionally, our Business Solutions L2R increased by four points compared to 2019 and continues to lead among national telecom companies.

- In January 2021, we were named to the Corporate Knights 2021 Global 100 Most Sustainable Corporations in the World for the ninth time since inception of the recognition in 2005.

Leveraging our broadband networks to drive TELUS' growth and fuel our future

- We continued to invest in our leading-edge broadband technology, which has enabled the success of our internet, Optik TV and Pik TV offerings and business services, as well as our Mobility solutions, and has helped allow us to deploy our 5G technology in 2020.
    - Our 4G LTE infrastructure covered 99% of Canada's population at December 31, 2020.
    - Approximately 2.5 million households and businesses in B.C., Alberta and Eastern Quebec were connected with fibre-optic cable (representing approximately 81% of our total high-speed broadband footprint), which provides these premises with immediate access to our fibre-optic infrastructure. This is up from approximately 2.2 million households and businesses at December 31, 2019.
    - Our 5G network, launched in the second quarter of 2020, connected over 10.5 million Canadians, representing more than 28% of the population at December 31, 2020.
- We were recognized with various accolades from U.K.-based Opensignal throughout 2020.
    - In the *Mobile Network Experience Canada* report released in February 2020, we were recognized as being number one for Video Experience, Download Speed Experience, Upload Speed Experience, Latency Experience and 4G Availability, and we tied for number one for Voice App Experience. Additionally, according to the *Mobile Experience during the COVID-19 pandemic: 4G Download Speed* report issued on April 8, 2020, Canada's speeds held up extremely well under the demands of the COVID-19 pandemic.
    - In the report entitled *The State of Mobile Network Experience 2020: One Year into the 5G Era* , released in May 2020, Canada tied with South Korea for the fastest Download Speed Experience in the world and Canada continued to have the fastest Download Speed Experience among the G7 countries.
    - According to the report entitled *State of Rural Canada's Mobile Network Experience* , dated May 2020, we were recognized as having the fastest network in rural Canada. If Canada's rural networks were categorized as a stand-alone country, rural Canada would rank second only to Japan among the G7 countries, which is notable given Canada's vast geography and population dispersion.
    - In the *Mobile Network Experience: Canada Report* (August 2020), we won the top spot in four awards (Download Speed Experience, Upload Speed Experience, Video Experience and Voice App Experience), and tied for first in two awards (Games Experience and 4G Coverage Experience). Our speed in the Download Speed Experience category was 72.7 Mbps, which is 5.2 Mbps faster than the second place finisher. This Opensignal recognition for fastest download speed experience marks our seventh consecutive win in this category since January 2017.
    - The *Global Mobile Network Experience Awards 2020* (September 2020) report recognized us as having the world's fastest network. We were the global winner for Download Speed Experience as our 4G LTE download speeds achieved a score of 75.8 Mbps and won the highest average overall download speeds in the world. The second fastest country in the world was South Korea's average of 59 Mbps on their 5G networks, which were launched nationally in 2019.
- In February 2020, we were named the Best Gaming Internet Service Provider (ISP) for Canada 2020 according to the U.S.-based PCMag Gaming Quality Index. Additionally, in the PCMag report entitled *The Fastest ISPs of 2020: Canada* released in June 2020, we were ranked as the fastest internet service provider in Canada among major ISPs.

- We won two Speedtest Awards from U.S.-based Ookla for Canada's Fastest Mobile Network and Canada's Best Mobile Coverage.

- In its *2020 Canada Wireless Network Quality Study* released in April 2020, U.S.-based J.D. Power ranked TELUS first in network quality in the East region and in Ontario. This achievement marks six consecutive years that we have won a J.D. Power Award for our network quality across one or more of the regions evaluated.

- In Canada-based Tutela's report entitled *Canada: State of Mobile Networks April 2020*, TELUS was awarded three of the national awards for Core Consistent Quality, Download Throughput and Latency, and tied for Excellent Consistent Quality, based on data from September 1, 2019 to February 29, 2020. Additionally, in Tutela's report *Canada: Mobile Experience Report June 2020*, based on data from March 1 to May 31, 2020, our wireless network was rated as best in consistent quality, lowest latency and fastest download speeds.

- In January 2020, we acquired a 28% basic equity interest in Miovision Technologies Incorporated (Miovision), with a view to advancing our Internet of Things (IoT) and smart cities strategy. Miovision is a developer of intelligent mobility systems and traffic management solutions for municipalities worldwide.

- In February 2020, we announced that we had succeeded in bringing wireless connectivity to every community in B.C. with a population of 1,000 people or more. This significant milestone aligns with the federal government's rural connectivity goals.

- We reinforced our commitment to supporting Alberta and its economy by expediting capital investments in 2020.

- In June 2020, we launched TELUS PureFibre 1.5 Gigabit Internet with up to 1,500 Mbps download and 940 Mbps upload speeds for homes and businesses in B.C. and Alberta.

- Building on our November 2019 announcement that we had provided several communities in Quebec's Lower North Shore region with access to high-speed internet and wireless phone services for the first time, we continued this deployment in June 2020 to the communities of Kegaska and La Romaine.

- We have enhanced and automated our processes to better support the hiring and remote onboarding for new team members, including recent graduates and co-op students.

- In September 2020, we officially unveiled GoCo™, simplifying access to robust and flexible business communications technologies for Canadian businesses. Combining the collective strengths and expertise of bluArc, BroadConnect Canada, Infra-Solutions, Netrium, Radiant and Ubity (all previously acquired by TELUS), GoCo provides businesses with simple and scalable solutions for unified communications, managed connectivity and network security.

- In September 2020, along with the Government of Canada, we announced a $15 million investment for the deployment of a submarine fibre-optic cable between Sept-Îles and the Gaspésie region, which will improve the reliability and security of telecommunications services in Quebec's North Shore region, ensuring we keep Canadians connected and reach as many rural Canadians as we can.

- In September 2020, we announced that we are expanding our high-speed internet and wireless services to reach an additional 25,000 homes and businesses in 45 remote, low-density communities in the Quebec City region and in Eastern Quebec by early 2021, bridging the digital divide in remote communities.

- We partnered with the University of Windsor and St. Clair College to make each institution a 5G-connected campus. Fully funded by us, both institutions will receive a TELUS-designed, 5G-enabled wireless network. We will operate these networks at no cost to the institutions, provide complementary connectivity to students, faculty and researchers, and collaborate on research projects to further the understanding and use cases of 5G technologies.

- In September 2020, we announced a new partnership with BlackBerry Limited to provide secure emergency management and crisis communications to organizations across Canada. We will offer BlackBerry AtHoc to organizations, helping to ensure that emergency personnel, first responders and government officials are provided with the technology and connectivity that enable better outcomes in crisis scenarios. Edmonton Police Service was also announced as an early client.

- Our 2020 Indigenous Connectivity Report, released in November 2020, highlighted the transformative benefits of connectivity that have resulted from partnerships between us and Indigenous communities throughout B.C. In partnership with Indigenous governments, we have brought high-speed internet to approximately 18,500 premises across 56 Indigenous communities (87 Indigenous Lands) across our footprint.

- We accelerated our commitment to Smart City solutions that empower municipalities to leverage technology and data in new ways to benefit residents' health and safety, meet sustainability goals, and increase operational efficiencies.

- At the 2020 World Procurement Awards, we were recognized as a global supply chain leader with the *Supply Chain Initiative Award*, for our efforts to transform and improve our network spares supply chain. Additionally, we were the only Canadian organization to be shortlisted for the Innovation Award, for the development of a robotic process automation (RPA) Centre of Excellence, and the Internal Transformation Award, in recognition of our procurement transformation journey.

Driving emerging opportunities to build scale in TELUS Health and TELUS Agriculture

- During the ongoing COVID-19 pandemic, both our Akira by TELUS Health and Babylon by TELUS Health virtual care offerings have benefited from significant adoption. These offerings have helped Canadians stay safe at home and avoid higher-risk environments such as clinics and emergency rooms wherever possible and, in turn, freed up healthcare system capacity to respond to the viral outbreak. Combined, Akira by TELUS Health and Babylon by TELUS Health provide millions of Canadians with the opportunity to seek primary care, virtually, across the country. In the fourth quarter of 2020, we also augmented our virtual care offerings through the acquisition of EQ Care, a national virtual healthcare provider offering convenient and confidential bilingual access to doctors and specialists.

- Our LivingWell Companion personal emergency response service (PERS) continues to support the health and well-being of seniors across Canada. With COVID-19 disproportionately impacting the elderly, LivingWell Companion helps seniors stay connected to emergency support and offers a remote caregiving solution to those who may be unable to physically support their elderly loved ones during the pandemic.

- Throughout the pandemic, the TELUS Healthy Living Network ® has been providing Optik TV customers with informative and compelling content related to COVID-19 prevention and well-being, and helping them to stay active and healthy at home with leading fitness, yoga, nutrition and mental health content available for free, rent or to Own-on-Optik. In October 2020, we announced a global-first partnership with Calm to offer leading mental health content on the TELUS Healthy Living Network, providing support to Canadians as they deal with the stresses brought on by the COVID-19 pandemic. We offer free content for all Optik TV and Pik TV subscribers and additional premium content via our Calm Optik TV theme pack, that includes guided meditations, breathing exercises and Calm's Sleep Stories (bedtime stories for adults).

- In the second quarter of 2020, TELUS Health announced that it was enabling Canadian clinicians to conduct virtual visits with their patients by integrating patient videoconferencing into its electronic medical records (EMR) across Canada. This new feature allows clinicians to virtually support their own roster of patients while maintaining continuity of care and fully up-to-date health records. As of December 31, 2020, more than 226,000 consultations have been conducted through the TELUS EMR Virtual Visit solution.

- In response to the pandemic, TELUS Health has been working to deploy our Home Health Monitoring (HHM) platform across the country to urgently equip healthcare professionals with vital digital tools to provide supportive care to Canadians. With initiatives in progress in B.C., Alberta, Saskatchewan and Nova Scotia, our HHM solution enables clinicians to remotely manage, track and care for people diagnosed with or exposed to COVID-19, relieving pressure from hospitals, driving efficiencies and decreasing exposure to the virus. Additional programs supporting chronic disease, acute, specialty and primary care have been deployed to support patients in a clinically supportive environment from the comfort of their home. As of December 31, 2020, more than 14,000 patients have been monitored.

- In the fourth quarter of 2020, we launched our new Espri™ by TELUS Health app, which is designed to deliver mental health and wellness resources for Canada's frontline workers. The app aims to provide timely access to features and tools for mental wellness, while also providing support for crisis and prevention to physicians, nurses, care workers, emergency medical services, firefighters, police, correctional officers and their family members.

- In the fourth quarter of 2020, TELUS Health, along with Canada Life and Innomar Strategies, launched Canada's first electronic drug prior authorization solution. The TELUS Health ePrior Authorization solution offers an end-to-end digital experience with the ability to save time and accelerate access to specialty medicines. While the current prior authorization process leverages paper-based forms, sent by fax or regular mail to be completed and reviewed by various stakeholders, the new TELUS Health ePrior Authorization will enable key players to complete required forms and provide electronic signatures all through a web-based platform.

- As noted in *Section 1.3*, we relaunched our TELUS Health Care Centres. In addition, these centres have been complemented by two new public Babylon by TELUS Health clinics in B.C., with more planned across Canada in 2021.

- We continue to build scale in TELUS Health through expanded services for existing customers, as well as through business acquisitions and strategic partnerships to strengthen our collaborative health ecosystem.

- As described in *Section 1.3*, in November 2020, we announced the launch of TELUS Agriculture, which aims to digitally transform the global food system. By empowering our food system through technology, we can, for example, enable grocers to dramatically reduce their perishable waste through effectively tracking the temperature of their products across the supply chain, also resulting in a reduction of food-borne illnesses. Through TELUS Agriculture, we support sustainable production practices that promote a more resilient and environmentally friendly food supply.

- By the launch of TELUS Agriculture, we had acquired eight trusted and experienced agricultural companies with footprints across the globe with expertise that spans the entire agricultural value chain, from "seed to the fork." These companies include AFS Technologies, AGIntegrated, Agrian, Decisive Farming, Farm At Hand, Feedlot Health Management Solutions, Muddy Boots and TKXS.

- TELUS Agriculture is investing $1 million in the Olds College Smart Farm in Olds, Alberta. The Olds College Smart Farm will act as TELUS Agriculture's living lab to conduct applied research and test the real-world application of new technology in a commercial-scale agriculture setting.

Driving growth in TELUS International to fuel further scaling opportunities

- As noted in *Section 1.3*, in January 2020, we completed the acquisition of 100% of Competence Call Center, a provider of higher-value-added business services with a focus on customer relationship management and content moderation. CCC added significant scale to TI and resulted in a sizeable diversification of its operations and client base in Europe. CCC partners with industry-leading global brands such as Google, Inc. primarily from the fast-growing technology, media and telecommunications, retail, and travel and hospitality sectors.

- In response to the pandemic, TI was able to rapidly enable more than 90% team members to provide remote support from home and in other modified work locations, leveraging this capability in new ways to serve its clients. TI has successfully trained and equipped teams to support new clients through 100% virtual training and remote servicing, forgoing the traditional in-person training at a brick and mortar facility.

- As described in *Section 1.3*, TI completed the acquisition of 100% of Lionbridge AI, a leading global provider of crowd-based

training data and annotation platform solutions. Lionbridge AI is one of only two globally scaled managed data annotation service providers in the world, preparing high-quality data that is critical for the development and training of AI algorithms for some of the world's largest technology companies in social media, search, retail and mobile, such as Google, Inc.

- TI has furthered its leadership in digital solutions and customer experience with a range of industry recognition. In 2020, TI was:
  - Named a *Leader* and *Star Performer* in the Everest Group PEAK Matrix.
  - Instrumental in helping TELUS win the 2020 Digital Transformation Award under the category of AI-fueled Digital Transformation from IT World Canada.
  - A 2020 Stevie Winner in the following categories:
    - Business Intelligence Solution category for Customer Journey Analytics
    - Customer Service Outsourcing Provider of the Year category at the 2020 Stevie Awards for Sales & Customer Service
    - Most Innovative Use of HR Technology During the Pandemic – United States
    - Internationally recognized in the Exemplary Employer category for demonstrating extra commitment to keeping their employees working, paid and safe during the COVID-19 pandemic
    - Internationally recognized in the Valuable Corporate Response category for ensuring the well-being of its employees, customers, and communities
  - Recognized as one of the world's best outsourcing providers across size and growth, customer references, awards, and certifications, programs for innovation and corporate social responsibility by being named on the International Association of Outsourcing Professionals Global Outsourcing 100 list in the Leader category with an All-Star ranking for 2020.
  - Named to Silicon Valley-based Constellation Research's Constellation ShortList for Customer Experience Operations Services: Global in Q3 2020.
- TI has continued to scale effectively, supporting new digital opportunities with leading social media customers, leveraging its deep experience serving fast-growing technology companies.
- As noted in *Section 1.3*, in February 2021, TI successfully completed its IPO, further positioning the organization for years of continued growth.

Our 2021 corporate priorities are provided in the table below.

2021 corporate priorities

- Elevating our customers, communities and social purpose by honouring our brand promise, Let's make the future friendly
- Leveraging TELUS' world-leading technology to drive superior growth across mobile, home and business services
- Scaling our innovative digital capabilities in TELUS International, TELUS Health and TELUS Agriculture to build assets of consequence.

4. Capabilities

The forward-looking statements in this section, including statements regarding our dividend growth program and our financial objectives in *Section 4.3*, are qualified by the *Caution regarding forward-looking statements* at the beginning of this MD&A.

4.1 Principal markets addressed and competition

Wireless products and services for consumers and businesses across Canada

Our products and services

- Data and voice – Fast internet access (via our 4G and 5G network available to over 99% and 28% of Canadians, respectively) for video, social networking, messaging and mobile applications, such as My TELUS, TELUS SmartHome, Optik TV, Pik TV and virtual care apps; mobile voice service with features such as Call Control, which helps subscribers avoid nuisance calls; clear and reliable voice services, including TELUS Business Connect®; and international roaming.
- Devices – The latest smartphones, tablets, mobile internet keys, mobile Wi-Fi devices, M2M modems, digital life devices and wearable technology, such as smart watches and our LivingWell Companion.
- Suite of Internet of Things (IoT) solutions, including machine-to-machine (M2M) connectivity, to support Canadian businesses locally and internationally, including asset tracking, fleet management, remote monitoring, digital signage, security, smart hospital solutions, intelligent traffic solutions, contact tracing and data analytics.

Our capabilities

- Licensed gross national mobile spectrum holdings averaging 172 MHz.

- Coast-to-coast digital 4G LTE access technology and growing 5G deployment:
  - Overall coverage of 99% of Canada's population, with LTE advanced (LTE-A) technology covering more than 97% of Canada's population and 5G covering 28% of Canada's population at December 31, 2020. Coverage includes domestic roaming agreements.
  - Manufacturer's rated download speeds: 5G, up to 1.7 Gbps; LTE-A, up to 1.5 Gbps; LTE, up to 150 Mbps; HSPA+, up to 42 Mbps. Average expected speeds: LTE-A, 12-250 Mbps; LTE, 12-45 Mbps; HSPA+, 4-14 Mbps.[1]
  - Reverts to LTE technology and speeds when customers are outside 5G coverage areas.
  - International voice and data roaming capabilities in more than 225 destinations, including voice over LTE (VoLTE) roaming, which is available with three major U.S. carriers and in 15 international destinations as of the date of this MD&A.
- IoT technology:
  - LTE-machine (LTE-M) technology across Canada, which supports large numbers of devices that transmit infrequent short bursts of data.
  - Multi-service multi-billing capabilities provide the ability to separately classify, rate and bill data traffic across IoT devices.
  - Specialized automated vehicle location IoT solutions that support municipalities, construction, utilities and speciality transport.
- Our leading customer service generates increased customer loyalty and reduced wireless churn. Having our TELUS International (TI) team members assist with performing customer-serving activities strengthens our ability to continue delivering exceptional customer service.

Competition overview

- Facilities-based national competitors Rogers Wireless and Bell Mobility, as well as provincial or regionally focused telecommunications companies Shaw, Quebecor, SaskTel, Eastlink, Tbaytel and Xplornet.
- Fixed wireless services.
- Resellers of competitors' wireless networks.
- Services offered by cable and wireless competitors over wireless and metropolitan Wi-Fi networks.
- Competition for our IoT solutions include other providers of LTE-M low-power wide-area network capabilities, IoT connectivity tools and platforms, and automated vehicle location and transportation solutions.

1 Network speeds vary with location, signal and customer device. Compatible device required.

Wireline products and services: Residential services in British Columbia, Alberta and Eastern Quebec; business services across Canada; automation and security solutions; customer care and business services (CCBS) solutions offered internationally; healthcare solutions; and global agriculture solutions

Our products and services

- Internet – Comprehensive high-speed internet access with TELUS PureFibre, which covers approximately 81% of our broadband footprint at December 31, 2020; fixed high-speed internet access (HSIA) service, with email and a comprehensive suite of security solutions; and wireless HSIA, with reliable Wi-Fi and cloud storage. TELUS offers multiple plans, including 940 Mbps symmetrical download and upload speeds.

- Television – High-definition entertainment service with Optik TV and Pik TV. Optik TV offers extensive content options, including 4K and 4K HDR live TV, On Demand content and streaming services such as Prime Video (included in the Amazon Prime membership), Netflix, YouTube and hayu. Optik TV also delivers innovative features, including a voice assistant that allows customers to control their TV, a wireless digital box, large PVR capacity and the ability to restart live TV in progress or from the past 30 hours. In addition, our Optik TV app allows customers to watch live TV, set recordings and access On Demand content from a smartphone, tablet or computer. Pik TV delivers a streamlined offer for customers through our Pik TV media box, Apple TV or NVIDIA SHIELD TV and SHIELD TV Pro. It is also accessible through an internet browser or our Android or iOS mobile applications. Pik TV embraces the changing environment, where content is increasingly available from over-the-top (OTT) services.

- Voice – Reliable fixed phone service with long distance and calling features such as Call Control; voice over IP (VoIP) supporting voice services into the future.

- Home and business security and automation – Real-time 24/7 central monitoring station, guard response service (where available), and wireless and hard-wired security technology, integrated with smart internet-connected devices. These services are enabling smart homes and smart businesses by allowing customers to remotely monitor and manage their premises via cameras, smoke detectors, lights, door locks, environmental controls, appliances and other systems for enhanced security, comfort, convenience and energy efficiency.

- Fixed wireless services – Wireless HSIA and wireless home phone.

- IP connectivity for businesses – Converged voice, video and data services and internet access, offered on a high-performing network. Also includes software-defined wide area network (SD-WAN) offerings.

- Cloud and managed information technology (IT) services – Suite of hybrid IT solutions provides traditional and cloud technologies, network connectivity, security, managed IT and cloud advisory services.

- Security consulting and managed services – Cloud and on-premises solutions ensuring security for data, email, websites, networks and applications.

- Unified Communications conferencing and collaboration – Full range of equipment and application solutions, including Unified Communications as a Service (UCaaS), to support meetings and webcasts by means of phone, video and internet. Recent acquisitions are bolstering our capabilities in the small and mid-market business segments.

- Customer care and business services (CCBS) – With the acquisition of Competence Call Center (CCC) and Lionbridge AI in 2020, TI, a digital customer experience (CX) innovator that designs, builds and delivers next-generation digital solutions for some of the world's most established and disruptive brands, has almost 50,000 team members, providing services in almost 50 languages from 50 delivery locations across over 20 countries in North and Central America, Europe and Asia. TI's integrated solutions and capabilities span digital strategy, innovation, consulting and design, digital transformation and IT lifecycle solutions, data annotation and intelligent automation, and CX solutions that include content moderation, trust and safety solutions and other managed solutions. TI partners with brands across high-growth industry verticals, including tech and games, communications and media, e-commerce and fintech, healthcare, and travel and hospitality.

- Healthcare – TELUS Health's services, including virtual care, pharmacy management, electronic medical records (EMR) and mobile EMR, electronic health records, drug information systems, regional clinical information systems, personal health record systems, remote patient monitoring, online settlement claims management solutions, e-prescribing services, TELUS Health Exchange Platform and MedDialog®, as well as employee wellness, comprehensive primary care, and workplace health and well-being services via TELUS Health Care Centres.

- Agriculture – TELUS Agriculture's solutions include farm management, precision agronomy, feedlot health management, application programming interface (API) and application integration services, compliance management, food traceability and quality assurance, data management solutions and software solutions for trade promotion management and retail execution.

Our capabilities

- Ongoing connection of households and businesses directly to fibre-optic cable; approximately 2.5 million households and businesses connected with TELUS PureFibre in B.C., Alberta and Eastern Quebec at December 31, 2020, and we have reached approximately 81% of our total high-speed broadband footprint.
- Broadcasting distribution licences allowing us to offer digital television services in incumbent territories, as well as a licence to offer commercial video-on-demand services.
- Security technology to support central monitoring and guard response service (where available), integrated with automated smart devices. Field services capabilities to install, upgrade and repair security technology at customers' premises.
- An IP-based national network overlaying an extensive switched network in B.C., Alberta and Eastern Quebec, as well as global interconnection arrangements.
- Seven data centres in six communities directly connected to the national TELUS IP network, creating an advanced and regionally diverse computing infrastructure in Canada.
- Provide access for businesses across Canada through our extensive network, and product capabilities bolstered by our national delivery teams.
- CCBS solutions, next-generation IT and digital business services with global delivery capabilities through our multinational, multi-language programs, supported by almost 50,000 employees across North and Central America, Europe and Asia, as at December 31, 2020, along with a crowdsourced community of data annotation professionals through our recent acquisition of Lionbridge AI.
- Technology solutions to assist regional health authorities, hospitals, insurers, consumers and employers; as well as solutions to improve connectivity and collaboration among healthcare providers, including physicians, nurses, pharmacists and physiotherapists.
- Technology solutions to assist agribusinesses, farmers, ranchers, commodity aggregators, processors, distributors, retailers and consumer packaged goods companies in sustainably improving the efficiency, traceability and responsiveness of the food system.
- Our leading customer service generates increased customer loyalty and reduced wireline churn. Having our TI team members assist with performing customer-serving activities strengthens our ability to continue delivering exceptional customer service.

Competition overview

- Cable competitors for internet, telephone and entertainment services, such as Shaw Communications (in B.C. and Alberta) and Cogeco Cable and Videotron (in Eastern Quebec).
- Substitution of wireless services, including our own wireless offerings, for residential local and long distance services. The percentage of households with wireless-only telephone services (among all providers, including TELUS) is estimated to be 56% in B.C. and Alberta, and 20% in Eastern Quebec in 2020, compared to 52% and 20%, respectively, in 2019.
- Our national telecommunications competitors Rogers Communications Inc. and BCE Inc. also offer telecommunications services for business and enterprise customers, as do various suppliers that are increasingly selling directly to customers.
- Competitors for home and business security range from local to national companies, such as BCE Inc., Rogers Communications Inc., Chubb-Edwards, Stanley Security and Fluent Home.
- Various other small, non-traditional companies offering OTT business solutions, including SD-WAN and UCaaS solutions. These competitors are more prevalent in the small and medium-sized business segments.
- Various others offering VoIP-based local and long distance, as well as internet and data services, or reselling those services.
- OTT and direct-to-consumer voice and/or entertainment services.
- Satellite-based entertainment and internet services offered by BCE Inc., Shaw Communications and Xplornet.
- Competitors for TI include in-house technology and customer experience management teams; digital transformation services providers, such as Endava, EPAM and Globant; globally diversified IT and business process outsourcing service providers, such as Accenture, Cognizant, Genpact and WNS; and customer experience providers such as 24-7 Intouch, TaskUs, Teleperformance S.A. and Webhelp.
- Competitors for TELUS Health include providers of EMR and pharmacy management products, such as Omnimed, Familiprix, Medfar, Fillware, ARI and Logipharm. Competitors also include systems integrators; health service providers, such as Loblaws, McKesson and the Jean Coutu Group, that have also become vertically integrated and own a mix of health services delivery, IT solutions and related services; and potentially, global providers, such as EPIC and Cerner, that could achieve expanded Canadian footprints. Competitors for TELUS Health's corporate and preventative health service offerings include Medcan, Cleveland Clinic, Dialogue and Wellpoint.
- Competitors for TELUS Agriculture range from local to global companies, such as AgData, Proagrica, Farmers Edge and Food LogiQ.

4.2 Operational resources

Our team

- We had approximately 78,100 employees at December 31, 2020 including 49,700 from TI. Of our 78,100 employees, 27,900 were located in Canada and 50,200 were located internationally. We also use external consultants and contractors, including crowdsourced providers through TI's recent acquisition of Lionbridge AI.

- Approximately 8,630 of our employees are covered by collective agreements. The agreement with the Telecommunications Workers Union (TWU), United SteelWorkers Local 1944, which covers approximately 6,985 employees, expires on December 31, 2021. The agreement with the Syndicat québécois des employés de TELUS (SQET), which covers approximately 735 employees, expires on December 31, 2022. The agreement with the Syndicat des agents de maîtrise de TELUS (SAMT), which covers approximately 575 employees in the TELUS Quebec region, expires on March 31, 2022. Our TELUS Employer Solutions Inc. subsidiary is signatory to a collective agreement with the B.C. Government and Services Employees' Union, which covers fewer than 100 employees and expires on July 31, 2023.

    - Approximately 280 employees acquired through the 2019 acquisition of ADT Security Services Canada, Inc. (ADT Canada) are unionized. These employees are covered by 10 separate collective agreements between ADT Canada and a number of different unions in multiple provinces. The expiry dates of these collective agreements vary. ADT Canada is in the process of negotiating a renewal agreement for one expired collective agreement in Quebec and is engaged in a first contract arbitration for a group of newly unionized Quebec-based employees.

- Our operations at Canadian and international locations support CCBS solutions for external customers, as well as for certain internal functions. Additionally, for our CCBS solutions, we have ready access to labour in the United States for management and support positions, and in various international locations for digital business services.

- Our objective is to attract, develop and retain talented employees in Canada and internationally. We achieve this objective by investing in our people throughout their careers, and by offering diverse and inclusive employment prospects and development opportunities.

- In May 2020, we launched a team member survey to assess our team's health and wellness, as well as their feelings about our new work environment in light of changes due to the COVID-19 pandemic. Key highlights included team members feeling that their safety is a priority for their leaders; communication is timely, transparent and informative; and they have the support they need during this extraordinary time. Team member engagement was measured again through our annual fall Pulsecheck survey resulting in an 87% score, a three percentage point increase over the 2019 result and the highest engagement score achieved, matched only in 2015. The score places TELUS within the top 10% of employers surveyed worldwide according to our survey provider, Kincentric.

- Having one of the most engaged teams worldwide leads to a better team member experience, which in turn drives an improved customer service experience – our customers are more satisfied, resulting in a lower churn rate with our products and services.

- In 2020, we continued to reach out to our team members to share TELUS' stance against all forms of systemic bias, including racism; reaffirming our commitment to standing united in our pursuit of equity, fairness, social justice and systemic change. Consistent with TELUS' culture and use of our fair process engagement model, our Diversity and Inclusiveness team invited all team members to participate in open and meaningful dialogue on how to best combat racial inequity, and to use these "Share, listen, learn and reflect" sessions to apply a wider lens and increase inclusiveness and help remediate social injustice for all of our team members and the communities where we live, work and serve.

- We aim to attract and retain key team members through both monetary and non-monetary approaches. Our compensation and benefits program is designed to support our high-performance culture and is both market-driven and performance-based. Where required, we implement targeted retention solutions for team members with critical skills or talents that are scarce in the marketplace, and we have a succession planning process to identify top talent for senior-level positions.

- For further details related to our team, see description under *Mitigation* in *Section 10.11 Our team*.

Resources

Our major brands and distribution channels

- TELUS – A national communications and information technology company serving customers across wireless, data, IP, voice, television, entertainment, video and security, driven by a social purpose to connect all Canadians for good.
- Koodo Mobile® – A national provider of postpaid and prepaid wireless voice and data services with a broad distribution network, including TELUS-owned stores, dealers and third-party electronics retailers.
- Public Mobile – A prepaid wireless service provider with web-based and physical distribution, providing customers with a SIM-only service.
- Optik TV, launched in 2010. Pik TV, launched in 2017.
- TELUS PureFibre – Our next-generation fibre-optic network, which delivers fast internet and provides the backbone for our 5G network.
- TELUS SmartHome Security and TELUS Secure Business – Full-service security offerings for residential and business customers.
- TELUS International – A digital customer experience innovator that designs, builds and delivers digital next-generation solutions for global and disruptive brands.
- TELUS Health – A national provider of electronic medical and personal health records, home health monitoring, benefits and pharmacy management solutions, preventive healthcare services and virtual care solutions for consumers, employers and insurers. We are improving health outcomes for all Canadians, including those in rural and Indigenous communities, through our TELUS Health Care Centres, virtual care offerings, including Babylon by TELUS Health and Akira by TELUS Health, LivingWell Companion personal emergency response service, the TELUS Healthy Living Network and Health for Good mobile health clinics.
- TELUS Agriculture – A global provider of agriculture and food technology and data solutions, serving customers across the food value chain.
- TELUS Ventures – A corporate venture capital fund that has invested in more than 70 market-transforming companies since 2001.
- GoCo – An agile entity that brings next-generation unified communications and managed network solutions to the business market in a highly differentiated and entrepreneurial manner.
- Our sales and support distribution channels:
  - Wireless services are supported through a broad network of TELUS-owned and branded stores, including our 50% ownership of the kiosk channel WOW! Mobile, and an extensive distribution network of exclusive dealers and large third-party national retail partners (e.g. Best Buy, Walmart and London Drugs), as well as online self-serve applications, intuitive virtual-assistant chatbots, mass marketing campaigns and customer care telephone agents. With the 2020 acquisition of Mobile Klinik, we offer on-site professional smartphone and tablet repair services and sales.
  - Wireline residential services are supported through TELUS-owned and branded stores, customer care telephone agents, digital home technicians and partners and online and TV-based self-serve applications.
  - Through **telus.com**, we sell wireless (including digital accessories), wireline, SmartHome Security and Secure Business, health and business products and services. We provide online account management tools (e.g. My TELUS), enabling wireless and wireline customers to manage their accounts through our website or mobile applications, as well as online chats for customer support. We also provide video calling solutions to enable installations without having technicians enter a customer's premises.
  - Dedicated direct-to-consumer channel with approximately 500 field sales agents throughout B.C., Alberta, Saskatchewan, Manitoba and Ontario; safety protocols are maintained at all times when team members interact with customers.
    - In areas where it was decided not to proceed with field activity due to the pandemic, our teams were mobilized to make proactive outbound calls.
  - Business services, including healthcare and security, across wireless and wireline are supported through certain dedicated stores for business, TELUS sales representatives, product specialists, independent dealers, direct business channels and online self-serve applications for small and medium-sized businesses.
  - CCBS solutions are supported through sales representatives and client relationship management teams.
  - TELUS Health provides some of its services – personal health records and home health monitoring – in partnership with provincial governments.
  - TELUS Agriculture solutions are supported through online self-serve applications, sales representatives and client relationship management teams.

Resources

Our technology, systems and properties

- We are a technology-enabled company with a multitude of IT systems and processes. We are focused on driving innovation and making generational investments to deliver state-of-the-art broadband solutions in an increasingly digital society.

- Broadband consumer and business networks

  - In 2012, we launched our 4G LTE wireless technology capable of speeds of up to 110 Mbps, and today, our wireless technology covers 99% of Canada's population. Our LTE technology allows customers to take advantage of the newest mobile devices and enjoy a seamless experience across multiple devices. In 2015, we launched the newest LTE advanced (LTE-A) network technology, and we have been working to expand our LTE capabilities with this technology since then. In April 2016, we enhanced our LTE-A technology with the first global implementation of frequency division duplex (FDD) 4x4 multiple-input-multiple-output (MIMO) technology. We implemented another key enhancement to our LTE-A infrastructure in June 2017 by introducing quad-band LTE-A carrier aggregation technology – this technology covers 97% of Canada's population and enables theoretical peak speeds of 1.5 Gbps. Our LTE CAT-M1 IoT network now covers 97.9% of Canada's population. See *Leveraging our broadband networks to drive TELUS' growth and fuel our future* in *Section 3 Corporate priorities* for additional information.

    - In 2014, we deployed a centralized radio access network technology (C-RAN) in Vancouver, and in 2016, launched VoLTE service in B.C. and Alberta communities. Both deployments were key transformations in our wireless capabilities. We were also the first national operator to provide high-speed internet service over our LTE infrastructure for rural customers in B.C., Alberta and Quebec through our Smart Hub wireless internet solution. Today, we serve over 100,000 households in rural Canada that do not have the same level of access to broadband service that urban Canadians have, continuing to make progress toward our objective of providing broadband internet access to all Canadians.

    - We have made significant investments in heterogeneous network (HetNet) technology, one of the key building blocks for 5G. HetNet combines multiple types of cells, such as outdoor macro cells and microcells, as well as indoor pico cells, to enhance coverage and capacity in crowded urban areas and inside buildings. By taking continuous strides to evolve our small-cell technology concurrent with the evolution of network technologies to LTE-A pro (i.e. 4.5G), in 2017, we became the first operator in Canada to introduce licensed assisted access (LAA) small cells for both outdoor and indoor environments, capable of speeds of up to 970 Mbps. In 2019, we continued advancing LAA technology with speeds of up to 1.2 Gbps, and we have deployed more than 400 LAA sites to date.

    - In 2018, we became the first operator globally to introduce LTE FDD Massive MIMO 32TRx technology on the 2600 MHz band as part of the LTE-A pro technology evolution, and in 2020, we introduced dual-band massive MIMO technology in the 1900 MHz and AWS bands, also a global first. This technology will further enhance the capacity of our wireless infrastructure, enable a stronger customer experience and help to sustain our long-term wireless leadership.

    - In 2019, we progressed the virtualization of our core network infrastructure with the voice core, providing a stepping stone into 5G service readiness. The network virtualization improves our network scalability, resiliency and cost efficiency.

  - Our investments to deploy our gigabit-enabled TELUS PureFibre technology have brought fibre-optic connectivity further into our infrastructure and directly to homes and businesses. At the end of 2020, approximately 2.5 million homes and businesses in communities across B.C., Alberta and Quebec had access to ultra-fast, symmetrical 150/150 and 750/750 internet download and upload speeds with TELUS PureFibre. Recognizing the need for highly reliable, high-capacity connectivity with low latency to support emerging services such as virtualized networks and IoT applications, we have also begun rolling out a next-generation nationwide optical backbone network.

    - We started the next evolution of our wireline IP and optical core/edge technology, smart Edge architecture. This architecture enables significant per-port cost improvement to support network growth and evolution.

    - We continue to roll out our third-generation national dense wavelength division multiplexing (DWDM) transport backbone (packet transport 3.0) CDC (colourless, directionless and contentionless) network overlay that will connect from B.C. to Quebec and into the U.S. This architecture will allow network growth without the need for costly re-generation, enable optimal optical rerouting during a fibre cut and improve network growth costs.

    - In 2020, we continued evolving our PureFibre and HSIA technologies to deliver a superior customer experience, propelling our market leadership in wireline home and business services by launching 1.5 Gbps HSIA service to customers in B.C. and Alberta while continuing to bring broadband network speeds to thousands of homes in rural areas in B.C., Alberta and Quebec.

    - We are evolving our world-class emergency services to harness the power of IP through our implementation of Next-gen 9-1-1.

    - As Canada's primary provider, we delivered on our regulatory commitment to upgrade our Message Relay and IP Relay service, enhancing customer experience for the deaf and hard of hearing community with improved smartphone-friendly operator services.

Resources

Our technology, systems and properties (continued)

- We have continued to innovate for our customers through our Optik TV and Pik TV platforms. In 2018, we introduced HDR (high dynamic range) colour capability to our 4K Optik TV customers, making us the first operator in Canada to deliver 4K HDR video across live TV, video-on-demand and Netflix services. We also launched an Apple TV application for Pik TV and gave customers the option to purchase Pik TV using only a web browser. By investing in the cloudification of video infrastructure and innovative applications, we will continue to advance our priority of enabling "anytime, everywhere" access to content and entertainment, thereby continuing to deliver an exceptional customer experience.

- In 2018, we also launched TELUS Boost Wi-Fi, a network of boosters that extends the reach of strong and reliable in-home Wi-Fi signals.

- We are enhancing our TV offerings by launching innovative Optik TV enhancements, including a new home screen, Amazon Prime and integrated Nanocasting, along with new Apple TV and iOS clients for Optik TV, driving several improvements to the Pik and Optik TV customer experience across iPhone, iPad, Apple TV, Android STB and Android Mobile platforms, and deploying advanced Cujo-based parental controls for Optik TV.

- We are accommodating dramatic increases in network traffic during the COVID-19 pandemic by investing in our network and rapidly pivoting to maintain service and support to Canadians:

  - Re-engineering and increasing core voice network capacity nationally to support a 50% traffic increase, adding approximately 1,000 additional trunks, enabling the ability to process two million additional calls per hour.

  - Upgrading internet peering links by 20% to support home internet data usage increases of up to 40% as customers spend more time online, streaming, gaming, accessing essential information and working remotely.

  - Expanding capacity for Optik video-on-demand and new solutions to enable scaling to support a 40% increase in video-on-demand consumption and a 25% increase in broadcast viewing at peak levels.

  - Re-dimensioning part of the LTE voice network to increase capacity by 20% in response to wireless voice calls demand, improving customer experience with faster connections and fewer dropped calls.

  - Doubling virtual private network (VPN) and DefensePro capacities by 50% to 12 Gbps to support a 60% growth in VPN daily usage to approximately 19,000 users per day.

  - Doubling virtual desktop infrastructure (VDI) gateway capacity and adding 40% more TELUS Authentication Services (TAS) tokens (10,000) to support 21 times growth in VDI peak connections from home.

  - Deploying Mission Critical Environment Pods (a self-containing unit with HVAC and power supply) to support our critical network equipment and reduce the risk of equipment outages.

- Real estate – Our network facilities are constructed under or along streets and highways, pursuant to rights-of-way granted by the owners of land, including municipalities and the Crown, or on freehold land we own.

  - Our real estate properties (owned or leased) also include administrative office spaces, mixed-use office, commercial and residential properties, all of which may be developed through joint ventures, as well as other real estate development projects that advance our social purpose, work centres and space for telecommunications equipment. Some buildings are constructed on leasehold land and the majority of wireless radio antennae are on towers that are situated on lands or are on buildings held under leases or licences with varying terms. We currently participate in two real estate joint ventures. (See *Section 7.11*.)

- Intangible assets – Our intangible assets include wireless spectrum licences from Innovation, Science and Economic Development Canada (ISED), which are essential to providing wireless services. We have assets averaging 172 MHz nationally. We have deployed 700 MHz, 2300 MHz, 2500 MHz, 1900 MHz, AWS and 850 MHz spectrum to evolve our wireless infrastructure, and we are looking to the introduction of new bands that will enable the realization of 5G technology, including the 600 MHz spectrum acquired in the 2019 auction. We intend to continue acquiring spectrum within the rules set out by ISED to meet our future capacity requirements.

  - Intellectual property, which we own or which we have been granted the right to use, is an essential asset for us. Intellectual property enables us to be known and recognized in the marketplace through our brand style, trade dress, domain names and trademarks. It protects our know-how and software, systems, processes and method of doing business through copyrights, patents and information treated as confidential. It also helps us to improve our competitiveness by fostering an innovative work environment. Each form of intellectual property is important to our success. For instance, the TELUS brand plays a key role in product positioning and our Company's reputation. We aim to maximize the value of our intangible assets in the areas of innovation and invention by ensuring that they are appropriately used, protected and valued. To protect our intellectual property assets, we rely on a combination of legal protections afforded under copyright, trademark, patent and other intellectual property laws, as well as contractual provisions under licensing arrangements. Further information on recognized tangible and intangible assets can be found in *Section 8.1 Critical accounting estimates and judgments* .

  - Our broadcasting distribution licences enable us to provide entertainment services. See *Broadcasting-related issues* in *Section 9.4*, which discusses developments relating to these licences.

Our technology, systems and properties (continued)

- Future technologies – In addition to evolving our existing wireless and wireline infrastructure, we are investing in the technologies of the future that will serve as the foundation to provide next-generation services to Canadians.
  - We continue to invest in enabling systems such as our Jasper connected device platform (CDP) and our dedicated machine-to-machine virtual evolved packet core (M2M vEPC) to support IoT applications, where the ease of onboarding partners is crucial for emerging services such as connected vehicles, fleet management and more.
  - In 2018, we deployed our LTE-M technology across Canada. LTE-M is a low-power wide-area network (LPWAN) technology, which is ideal for IoT because it supports large numbers of devices that transmit infrequent short bursts of data, like IoT sensors. It will enable a plethora of IoT applications through long-range connectivity, extended battery life and carrier-grade security and quality of service.
  - In 2020, our focus was on enabling the digitization of TELUS through modernizing our technology and continuing our journey to the cloud, foundational to our ability to deliver value to our customers by onboarding new applications, supporting projects/environments onto the cloud, and driving and delivering a cross-company integrated cloud transformation strategy.
  - Advancing our drive to simplify and consolidate systems across several fronts, such as unlocking customer relationship management (CRM)/billing systems in Quebec with LivingWell Companion and SmartHome products now supported for Quebec incumbent local exchange carrier (ILEC) and new fibre customers, opening new Quebec territory growth opportunities, automating copper to fibre (C2F) FIFA processes to create a one-click C2F order, reducing call handling time and billing errors, and completing copper on CRM/billing system trials, each paving the way for consolidating consumer wireline ordering into one system stack.
  - Modernizing our enterprise communication platform to be fully cloud-enabled and to improve system redundancy while processing millions of messages, including wireless eBill SMS reminders, Koodo data threshold SMS and upsell messages, and wireless number portability messages.
  - Converting customers to our new cloud-based email platform, improving reliability and mailbox storage capacity.
  - Reducing manual work through automation and advancing Agile and DevOps capabilities:
    - Leading to improved agility, cost to serve and speed to market, while also driving reliability, including expanding test automation capabilities
    - Scaling deploy-on-demand release frameworks, enabling faster speed to market and mitigating risks early in the release cycle, expanding automated software development and self-serve test data management capabilities to improve quality of software
    - Standardizing test case and defect management toolset, mitigating reliability risk related to unsupported tools.
  - Improving our data analytics and telemetry capabilities to deliver business outcomes through enhanced customer targeting, visualization and business intelligence tools while also making significant accuracy, reliability and enhancements to our geo-analytics platform to support new and personalized/targeted market campaigns.
- Through TI, we continue to design, build and deliver next-generation digital solutions to enhance the CX for global and disruptive brands, as described in *Section 4.1*. These services are provided from facilities located in North and Central America, Europe and Asia.
- Through TELUS Health's services – such as pharmacy management, electronic medical records (EMRs) (including mobile EMRs), electronic health records, personal health records, clinical information systems, remote patient monitoring, virtual care offerings and online claims settlement management software solutions, including the online renewal of prescriptions, e-prescribing services and MedDialog – TELUS Health facilitates the integration of electronic health records from the home to the doctor's office to the hospital, making critical health information available to healthcare providers over our wireless and wireline broadband network.
  - Through its TELUS Health Care Centres, TELUS Health also provides executive benefits, occupational health, employee health and wellness services, and individual preventive health services. With its preventive health assessments, 24/7 virtual care support and health specialists, TELUS Health Care Centres provide proactive health services to individuals and their families.
- Through TELUS Agriculture, we now provide solutions, as described in *Section 4.1*.

4.3 Liquidity and capital resources

Capital structure financial policies

Our objective when managing capital is to maintain a flexible capital structure that optimizes the cost and availability of capital at acceptable risk.

In the management of capital and in its definition, we include Common equity (excluding Accumulated other comprehensive income), Long-term debt (including long-term credit facilities, commercial paper backstopped by long-term credit facilities and any hedging assets or liabilities associated with Long-term debt items, net of amounts recognized in Accumulated other comprehensive income), Cash and temporary investments, and Short-term borrowings arising from securitized trade receivables.

We manage our capital structure and make adjustments to it in light of changes in economic conditions and the risk characteristics of our business. In order to maintain or adjust our capital structure, we may adjust the amount of dividends paid to holders of Common Shares, purchase

Common Shares for cancellation pursuant to normal course issuer bid (NCIB) programs (if and when implemented), issue new shares, issue new debt, issue new debt to replace existing debt with different characteristics, and/or increase or decrease the amount of trade receivables sold to an arm's-length securitization trust.

We monitor capital utilizing a number of measures, including our net debt to EBITDA – excluding restructuring and other costs ratio, coverage ratios and dividend payout ratios. (See definitions in *Section 11.1 Non-GAAP and other financial measures* .)

Financing and capital structure management plans

Report on financing and capital structure management plans

Pay dividends to the holders of the common shares of TELUS Corporation (Common Shares) under our multi-year dividend growth program

- In May 2019, we announced our intention to target ongoing semi-annual dividend increases, with the annual increase in the range of 7 to 10% from 2020 through to the end of 2022, thereby extending the policy first announced in May 2011. In May 2020, given the uncertain magnitude, duration and potential outcomes of the COVID-19 pandemic, the Board determined to sustain the current dividend per share and defer any dividend increase until the release of our third quarter 2020 results on November 6, 2020. On November 5, 2020, the Board elected to declare a fourth quarter dividend of $0.3112 per share payable on January 4, 2021. The fourth quarter dividend for 2020 reflected a cumulative increase of $0.01995 per share or 6.8% from the $0.29125 per share dividend declared one year earlier. Dividends declared in 2020 totalled $1.18495 per share, an increase of $0.0587 per share or 5.2% compared to the dividends declared in 2019. On February 10, 2021, the Board elected to declare a first quarter dividend of $0.3112 per share, payable on April 1, 2021, to shareholders of record at the close of business on March 11, 2021. The first quarter dividend for 2021 reflects a cumulative increase of $0.01995 per share or 6.8% from the $0.29125 per share dividend declared one year earlier. Notwithstanding this target, dividend decisions will continue to be subject to our Board's assessment and the determination of our financial position and outlook on a quarterly basis. Our long-term Common Share dividend payout ratio guideline is 60 to 75% of free cash flow on a prospective basis. (See *Section 7.5 Liquidity and capital resource measures.*) There can be no assurance that we will maintain a dividend growth program or that it will be unchanged through 2022. (See *Caution regarding forward-looking statements – Ability to sustain our dividend growth program through 2022* and *Section 10.13 Financing, debt and dividends*.)

- TELUS International intends to retain all available funds and any future earnings to support operations and to finance the growth and development of its business. As such, TELUS International does not intend to declare or pay cash dividends on its subordinate voting shares in the foreseeable future.

- Our dividend reinvestment and share purchase (DRISP) plan trustee acquired shares from Treasury for the DRISP plan, rather than acquiring Common Shares in the stock market. We may, at our discretion, offer Common Shares at a discount of up to 5% from the market price under the plan. Effective with the dividends paid beginning on October 1, 2019, we offered Common Shares from Treasury at a discount of 2%. During 2020, our DRISP plan trustee acquired from Treasury approximately 24 million dividend reinvestment Common Shares for $539 million. For the dividends paid on January 4, 2021, the DRISP participation rate, calculated as the DRISP investment of $152 million (including the employee share purchase plan) as a percentage of gross dividends, was approximately 38%.

Purchase Common Shares

- In December 2019, we received approval from the Toronto Stock Exchange (TSX) for a 2020 NCIB to purchase and cancel up to 8 million Common Shares for an aggregate purchase price of up to $250 million over a 12-month period, from January 2, 2020 to January 1, 2021, through the facilities of the TSX, the New York Stock Exchange and alternative trading platforms, or as otherwise permitted by applicable securities laws. We did not purchase any shares pursuant to the 2020 NCIB.

Use proceeds from securitized trade receivables (Short-term borrowings), bank facilities and commercial paper as needed, to supplement free cash flow and meet other cash requirements

- Our issued and outstanding commercial paper was $731 million at December 31, 2020, all of which was denominated in U.S. dollars (US$574 million), compared to $1,015 million (US$781 million) at December 31, 2019.

- Net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TELUS International (Cda) Inc. credit facility (TI credit facility) were US$1,428 million at December 31, 2020, compared to US$336 million at December 31, 2019. The TI credit facility is non-recourse to TELUS Corporation.

- Proceeds from securitized trade receivables were $100 million at December 31, 2020, unchanged from December 31, 2019.

Maintain compliance with financial objectives

- Maintain investment grade credit ratings in the range of BBB+ or the equivalent – On February 11, 2021, investment grade credit ratings from the four rating agencies that cover TELUS were in the desired range. (See *Section 7.8 Credit ratings*.)

- Net debt to EBITDA – excluding restructuring and other costs ratio of 2.20 to 2.70 times – As measured at December 31, 2020, this ratio was 3.45 times, outside of the objective range, primarily due to the reduction of EBITDA caused by the COVID-19 pandemic, as well as business acquisitions and the acquisition of spectrum licences. Given the cash demands of the 2019 600 MHz and upcoming spectrum auctions and the inability to predict impacts of the COVID-19 pandemic, the assessment of the guideline and return to the objective range remains to be determined; however, it is our intent to return to a ratio below 2.70 times in the medium term (following upcoming 2021, 2022 and 2023 spectrum auctions), consistent with our long-term strategy. (See *Section 7.5 Liquidity and capital resource measures* .)

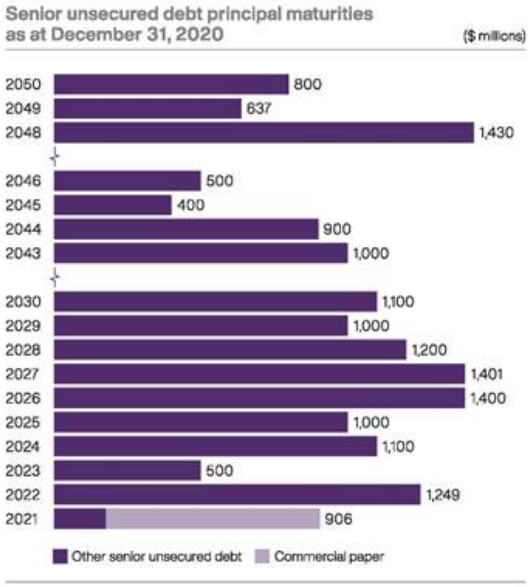
- Common Share dividend payout ratio of 60 to 75% of free cash flow on a prospective basis – Our objective range is on a prospective basis. The Common Share dividend payout ratio we present in this MD&A is a historical measure utilizing the most recent four quarters of dividends declared, net of dividend reinvestment plan effects, and free cash flow, and is disclosed for illustrative purposes in evaluating our target guideline. As at December 31, 2020, the ratio was 67%. During 2020, the historical measure of our Common Share dividend payout ratio was within the range due to the discounted DRISP participation level. (See *Section 7.5 Liquidity and capital resource measures* .)

- Generally maintain a minimum of $1 billion in available liquidity – As at December 31, 2020, our available liquidity on a consolidated basis was approximately $2.8 billion. (See *Section 7.6 Credit facilities*.)

Financing and capital structure management plans for 2021

At the end of 2020, our senior unsecured debt (excluding unamortized discount) was $16.5 billion. For our long-term debt, the weighted average term to maturity was approximately 12.2 years (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt). Our weighted average interest rate on long-term debt (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt) was 3.80% at December 31, 2020, down from 3.94% one year ago. Aside from Short-term borrowings of $100 million, commercial paper of $731 million (US$574 million), the utilized revolving component of the TI credit facility (excluding TELUS Corporation) of $831 million (US$653 million) and lease liabilities of $1,837 million, all of our debt was on a fixed-rate basis.

During 2021, we may use proceeds from the TELUS International IPO directly received by TELUS Corporation or we may issue notes to fund spectrum purchases, to accelerate future debt reduction by prepaying certain notes or to use for general corporate purposes. Anticipated free cash flow and sources of capital are expected to be more than sufficient to meet requirements. For the related risk discussion, see *Section 10.13 Financing, debt and dividends.*



4.4 Disclosure controls and procedures and changes in internal control over financial reporting

Disclosure controls and procedures

Disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management, including the President and Chief Executive Officer (CEO) and the Executive Vice-President and Chief Financial Officer (CFO), on a timely basis so that appropriate decisions can be made regarding public disclosure.

The CEO and the CFO have assessed the effectiveness of our disclosure controls and procedures related to the preparation of this MD&A and the December 31, 2020, Consolidated financial statements. They have concluded that our disclosure controls and procedures were effective, at a reasonable assurance level, in ensuring that material information relating to TELUS and its consolidated subsidiaries would be made known to them by others within those entities, particularly during the period in which the MD&A and the Consolidated financial statements were being prepared.

Internal control over financial reporting

Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS-IASB and the requirements of the Securities and Exchange Commission in the United States, as applicable. TELUS' CEO and CFO have assessed the effectiveness of our internal control over financial reporting as of December 31, 2020, in accordance with the criteria established in *Internal Control – Integrated Framework (2013)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, TELUS' CEO and CFO have concluded that our internal control over financial reporting is effective as of December 31, 2020, and have certified TELUS' annual filings within our annual report on Form 40-F, as required by the United States' *Sarbanes-Oxley Act of 2002*, and TELUS' Annual Information Form, as required by National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings*.

Deloitte LLP, our auditor, has audited our internal control over financial reporting as of December 31, 2020.

Changes in internal control over financial reporting

There were no changes in internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting in 2020.

5. Discussion of operations

This section contains forward-looking statements, including those with respect to mobile phone average billing per subscriber per month (ABPU) and mobile phone average revenue per subscriber per month (ARPU) growth, wireless trends regarding loading and retention spending, equipment margins, subscriber growth and various future trends. There can be no assurance that we have accurately identified these trends based on past results or that these trends will continue, in particular given uncertainty with regard to the COVID-19 pandemic and associated economic impacts. See *Caution regarding forward-looking statements* at the beginning of this MD&A.

5.1 General

A significant judgment we make is in respect of distinguishing between our wireless and wireline operations and cash flows (and this extends to allocations of both direct and indirect expenses and capital expenditures). The clarity of this distinction has been increasingly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure technology and operations. Recently, our judgment was that our wireless and wireline telecommunications infrastructure technology and operations had not experienced sufficient convergence to objectively make their respective operations and cash flows practically indistinguishable. The continued build-out of our access-technology-agnostic fibre-optic infrastructure, in combination with converged edge network technology, has significantly affected this judgment, as have the commercialization of fixed-wireless telecommunications solutions for customers and the consolidation of our non-customer facing operations. As a result, it has become increasingly difficult and impractical to objectively and clearly distinguish between our wireless and wireline operations and cash flows, and the assets from which those cash flows arise. Our judgment as to whether these operations can continue to be judged to be individual components of the business and discrete operating segments has changed. Effective January 1, 2020, we embarked upon modifying our internal and external reporting processes, systems and internal controls to accommodate the technology convergence-driven cessation of the historical distinction between our wireless and wireline operations at the level of regularly reported discrete performance measures that are provided to our Chief Executive Officer (CEO) (our chief operating decision-maker). Prior to the World Health Organization characterizing COVID-19 as a pandemic, we had anticipated transitioning to a new segment reporting structure during 2020 but did not, and do not, anticipate a substantive change to our products and services revenue and related performance indicator reporting from such

transition; such transition is now anticipated in the first quarter of 2021. Segmented information in *Note 5* of the Consolidated financial statements is regularly reported to our CEO.

Selected annual information

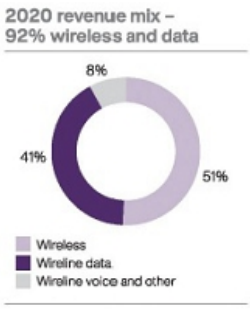
Years ended December 31 ($ in millions, except per share amounts)	**2020**	2019	2018
Operating revenues and Other income	**15,463**	14,658	14,368
Net income	**1,260**	1,776	1,624
Net income attributable to TELUS Corporation Common Shares (Common Shares)	**1,207**	1,746	1,600
Net income per Common Share			
Basic earnings per share	**0.95**	1.45	1.34
Diluted earnings per share	**0.94**	1.45	1.34
Dividends declared per Common Share	**1.18495**	1.12625	1.05000

At December 31 ($ millions)	**2020**	2019	2018
Total assets	**43,332**	37,985	33,057
Current maturities of long-term debt	**1,432**	1,332	836
Non-current financial liabilities[1]			
Provisions	**54**	43	395
Long-term debt	**18,856**	17,142	13,265
Other long-term financial liabilities	**225**	113	162
Total non-current financial liabilities	**19,135**	17,298	13,822
Deferred income taxes	**3,776**	3,214	3,148
Common equity	**12,074**	10,548	10,259

1 In our specific current instance, financial liabilities do not include liabilities that are excluded by definition (e.g. employee benefits and share-based compensation liabilities) or liabilities that do not involve a future outlay of economic resources (e.g. deferred recognition of customer activation and connection fees; deferred gains on sale-leaseback of buildings).

Operating revenues and Other income: Combined wireless revenue and wireline data revenue represented approximately 92% of consolidated Operating revenues and Other income in 2020, approximately 91% in 2019 and approximately 90% in 2018.

Total assets: Growth in Total assets includes increases in Property, plant and equipment and Intangible assets, which increased by a combined $2,962 million in 2020 and $4,053 million in 2019. These increases resulted primarily from business acquisitions, our ongoing investments in broadband infrastructure, connecting additional homes and businesses directly to our fibre-optic technology and supporting the capacity, expansion and evolution of our wireless network. See *Section 7.3 Cash used by investing activities*.



For changes in **Long-term debt**, see *Section 6 Changes in financial position and Section 7.4 Cash provided by financing activities*.

5.2 Summary of consolidated quarterly results, trends and fourth quarter recap

Summary of quarterly results

($ millions, except per share amounts)	2020 Q4	2020 Q3	2020 Q2	2020 Q1	2019 Q4	2019 Q3	2019 Q2	2019 Q1
Operating revenues and Other income	**4,060**	**3,981**	**3,728**	**3,694**	3,858	3,697	3,597	3,506
Operating expenses								
Goods and services purchased [1]	**1,766**	**1,632**	**1,458**	**1,412**	1,681	1,502	1,466	1,421
Employee benefits expense [1]	**958**	**959**	**911**	**873**	809	761	758	706
Depreciation and amortization	**789**	**773**	**725**	**725**	678	649	633	617
Total operating expenses	**3,513**	**3,364**	**3,094**	**3,010**	3,168	2,912	2,857	2,744
Operating income	**547**	**617**	**634**	**684**	690	785	740	762
Financing costs before long-term debt prepayment premium	**190**	**187**	**184**	**192**	175	173	189	168
Long-term debt prepayment premium	**—**	**—**	**18**	**—**	—	28	—	—
Income before income taxes	**357**	**430**	**432**	**492**	515	584	551	594
Income taxes	**86**	**109**	**117**	**139**	136	144	31	157
Net income	**271**	**321**	**315**	**353**	379	440	520	437
Net income attributable to Common Shares	**260**	**307**	**290**	**350**	368	433	517	428
Net income per Common Share:								
Basic earnings per share (EPS)	**0.20**	**0.24**	**0.23**	**0.28**	0.30	0.36	0.43	0.36
Adjusted basic EPS [2]	**0.22**	**0.28**	**0.25**	**0.32**	0.32	0.39	0.35	0.38
Diluted EPS	**0.20**	**0.24**	**0.23**	**0.23**	0.30	0.36	0.43	0.36
Dividends declared per Common Share	**0.31120**	**0.29125**	**0.29125**	**0.29125**	0.29125	0.28125	0.28125	0.27250
Additional information:								
EBITDA [2]	**1,336**	**1,390**	**1,359**	**1,409**	1,368	1,434	1,373	1,379
Restructuring and other costs [2]	**71**	**58**	**70**	**60**	40	29	29	36
Other equity losses related to real estate joint ventures	**2**	**8**	**3**	**6**	5	—	—	—
Retirement of a provision arising from business acquisition-related written put options within TI	**—**	**—**	**71**	**—**	—	—	—	—
Adjusted EBITDA [2]	**1,409**	**1,456**	**1,361**	**1,475**	1,413	1,463	1,402	1,415
Cash provided by operating activities	**1,033**	**902**	**1,462**	**1,177**	829	1,148	1,160	790
Free cash flow [2]	**218**	**161**	**511**	**545**	135	320	324	153

1 Goods and services purchased and Employee benefits expense amounts include restructuring and other costs.
2 See *Section 11.1 Non-GAAP and other financial measures*.

Trends

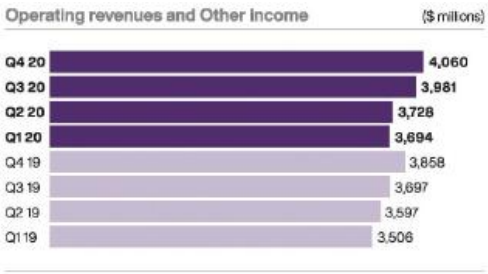
COVID-19 was characterized as a pandemic in March 2020 and has had significant impacts on our business. The nature of the pandemic and the uncertainty of its magnitude, length and the time to recovery are not currently able to be estimated. Therefore, trends identified prior to the first quarter of 2020 and described below may not be indicative of trends effective from the first quarter of 2020 onwards, as the COVID-19 pandemic prevents us and our customers from operating in the normal course of business in certain areas.

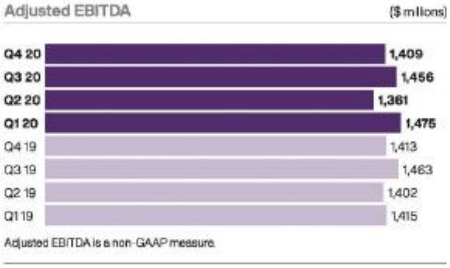
The trend of year-over-year increases in consolidated revenue reflects: (i) wireless network revenue generated from growth in our subscriber base, partially reduced by COVID-19 pandemic impacts such as reduced roaming revenue related to travel restrictions; and (ii) growth in wireline service revenue – this segment includes TELUS International (Cda) Inc. (TELUS International or TI) revenues, internet and third wave data services revenues, health revenues, TV revenues, home and business smart technology (including security and agriculture) revenues, and other advanced

application offerings; partly offset by declining equipment revenue growth, as well as COVID-19 pandemic impacts such as the temporary closure of TELUS Health Care Centres and the centres being unable to offer their full suite of core services upon re-opening, and business customers faced with reduced and/or closed operations.

Increased wireline data services revenues also include revenues from business acquisitions, including our acquisitions of ADT Security Services Canada, Inc. (ADT Canada) on November 5, 2019 (where there were significant integration and customer retention costs in 2019 and 2020, which are expected to continue into early 2022, with the full expected operations rate anticipated after that time), and Competence Call Center (CCC) on January 31, 2020. Increased internet and third wave data services and TV service revenues are being generated by subscriber growth and higher internet revenue per customer, and there has been increased customer adoption of our home and business smart

technology (including security and agriculture). For additional information on wireless and wireline revenue and subscriber trends, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.





The trend of year-over-year increases in Goods and services purchased reflects increases in external labour, administrative and other expenses to support growth in our TI business, our subscriber base and business acquisitions; higher wireless equipment expenses associated with higher-value smartphones in the sales mix, partly offset by a general decrease in new wireless contracts; and increased wireline product costs of sales associated with a growing subscriber base.

The trend of year-over-year increases in net Employee benefits expense reflects increases in the number of employees related to business acquisitions, including those supporting the growth of TI revenue, our health offerings, our agriculture business and our other complementary businesses. This was partly offset by moderating salaries expense resulting from reductions in the number of full-time equivalent (FTE) domestic employees, excluding business acquisitions, related to cost efficiency and effectiveness programs. We experienced year-over-year increases in net Employee benefits expense in the first quarter of 2020 and through most of 2019 related to April 2019 compensation increases. Additionally, we expect year-over-year increases in net Employee benefits expense related to compensation increases.

The trend of year-over-year increases in Depreciation and amortization reflects increases due to business acquisitions, growth in capital assets, in support of the expansion of our broadband footprint, including our generational investment to connect homes and businesses to TELUS PureFibre and enhanced LTE technology coverage, and growth in internet, TV and security subscriber loading. The investments in our fibre-optic technology also support our technology strategy to improve coverage and capacity, which helped us prepare for a more efficient and timely evolution to 5G as we launched the first wave of our 5G network in June 2020.

The trend of year-over-year increases in Financing costs reflects an increase in long-term debt outstanding, mainly associated with our investments in spectrum, fibre and wireless technology, as well as our business acquisitions. Financing costs include a long-term debt prepayment premium of $18 million in the second quarter of 2020 and $28 million in the third quarter of 2019. Moreover, Financing costs are net of capitalized interest related to spectrum licences acquired during the 600 MHz wireless spectrum auction, which we expect to deploy into our existing network in 2021. Financing costs also include Interest accretion on provisions (asset retirement obligations and written put options) and Employee defined benefit plans net interest. Additionally, for the eight periods shown, Financing costs include varying amounts of foreign exchange gains or losses and varying amounts of interest income.

The trend in Net income reflects the items noted above, as well as non-cash adjustments arising from substantively enacted changes in income tax and adjustments recognized in the current periods for income taxes of prior periods. Historically, the trend in basic EPS has reflected trends in Net income.

The general trend of year-over-year increases in Cash provided by operating activities reflects lower year-over-year income taxes paid, partly offset by higher interest payments arising from increases in debt outstanding and year-over-year variations in fixed-term interest rates. The general trend of year-over-year increases in free cash flow reflects the factors affecting Cash provided by operating activities, except that accounting policies that do not impact cash (IFRS 15 and IFRS 16) do not affect the determination of free cash flow. For further discussion of these trends, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

Fourth quarter recap

Results for the fourth quarter of 2020 (three-month period ended December 31, 2020) are discussed in our February 11, 2021 news release and are compared with results from the fourth quarter of 2019 (three-month period ended December 31, 2019).

- Consolidated operating revenues and other income were $4,060 million in the fourth quarter of 2020, an increase of $202 million.
  - Service revenues were $3,409 million in the fourth quarter of 2020, an increase of $253 million, reflecting growth in wireline data services revenues resulting from business acquisitions, expanded services and subscriber base growth, as well as growth in our wireless subscriber base, partly offset by the impacts of the COVID-19 pandemic in both the wireless and wireline segments, and continued declines in wireline legacy voice and legacy data service revenues.
  - Equipment revenues were $652 million in the fourth quarter of 2020, a decrease of $18 million, reflecting the impacts of the pandemic, including customers reducing their general shopping habits in retail outlets, which resulted in lower wireless contracted volume and accessory sales, partly offset by higher-value wireless devices in the sales mix.
  - Other loss was $1 million in the fourth quarter of 2020 compared to other income of $32 million in the fourth quarter of 2019, mainly attributable to the 2019 decrease in a provision related to written put options in respect of non-controlling interests, as well as lower net gains from the sale of certain assets, partly offset by lower other equity losses related to real estate joint ventures.
- Consolidated operating expenses were $3,513 million in the fourth quarter of 2020, an increase of $345 million.
  - Goods and services purchased were $1,766 million in the fourth quarter of 2020, an increase of $85 million, due to higher operating and administrative costs associated with business acquisitions, in addition to supporting organic TI revenue growth, higher non-labour restructuring and other costs related to the pandemic, and higher product costs in support of our growing wireline subscriber base. These increases were partly offset by enhanced cost-savings initiatives in response to the economic impacts of the COVID-19 pandemic and lower wireless equipment expenses resulting from lower contracted volumes and accessory sales, which were moderated by higher-value devices in the sales mix, as described above.
  - Employee benefits expense was $958 million in the fourth quarter of 2020, an increase of $149 million, largely due to higher compensation and benefit costs resulting from an increase in the number of employees related to business acquisitions; higher offshore FTEs supporting organic TI revenue growth; and compensation increases. These employee benefits expense increases were partly offset by a decrease in the number of domestic FTEs, excluding business acquisitions, higher capitalized labour costs and lower labour-related restructuring and other costs.
  - Depreciation was $539 million in the fourth quarter of 2020, an increase of $39 million, primarily due to growth in capital assets over the past 12 months, including our expanded broadband footprint and business acquisitions.
  - Amortization of intangible assets was $250 million in the fourth quarter of 2020, an increase of $72 million arising from business acquisitions and higher expenditures associated with the intangible asset base over the past 12 months, including customer experience service delivery systems.
  - Financing costs were $190 million in the fourth quarter of 2020, an increase of $15 million, mainly due to the following factors:
    - Interest expense was $180 million in the fourth quarter of 2020, an increase of $6 million, largely resulting from:
      - Gross interest on long-term debt, excluding lease liabilities was $168 million in the fourth quarter of 2020, an increase of $5 million, driven by an increase in average long-term debt balances outstanding in part attributable to the acquisition of spectrum licences and business acquisitions (including ADT Canada, CCC, Mobile Klinik and AFS Technologies Inc.), partially offset by a decrease in the effective interest rate.
      - Capitalized long-term debt interest, excluding lease liabilities was $9 million in the fourth quarter of 2020, compared to $10 million in the fourth quarter of 2019. (See *Financing Costs* in *Section 5.3 Consolidated operations* for further details.)
    - Employee defined benefit plans net interest was $4 million in the fourth quarter of 2020, an increase of $4 million, primarily due to the change in the defined benefit plan deficit as at December 31, 2019 to $425 million (net of the plan asset ceiling limit of $121 million), compared to a defined benefit plan surplus of $57 million (net of the plan asset ceiling limit of $263 million) one year earlier, partly offset by a decrease in the discount rate.
    - Foreign exchange losses were $8 million in the fourth quarter of 2020, compared to $2 million in the fourth quarter of 2019, primarily reflecting changes in the value of the Canadian dollar relative to the U.S. dollar.

  - Income tax expense was $86 million in the fourth quarter of 2020, a decrease of $50 million. The effective tax rate decreased from 26.3 to 24.1% in the fourth quarter of 2020, due to the reduction in corporate income tax rates implemented in Alberta and Nova Scotia, in addition to an increased portion of income earned in non-Canadian jurisdictions with lower statutory income tax rates than in Canada.
- EBITDA, which includes restructuring and other costs, and other equity losses related to real estate joint ventures, was $1,336 million in the fourth quarter of 2020, a decrease of $32 million or 2.3%.
- Adjusted EBITDA, which excludes restructuring and other costs, and other equity losses related to real estate joint ventures, was $1,409 million in the fourth quarter of 2020, a decrease of $4 million or 0.2%. This reflects multiple impacts of the COVID-19 pandemic, lower wireline legacy voice and data services revenues, and higher employee benefits and other costs including support for business acquisitions. This was partly offset by: growth in wireline data service margins resulting from business acquisitions, expanded services and subscriber base growth; growth in our wireless subscriber base; an increased organic and inorganic contribution from TI; and enhanced cost efficiency programs.

- Net income attributable to Common Shares was $260 million in the fourth quarter of 2020, a decrease of $108 million, resulting from the after-tax impacts of lower Operating income and higher Financing costs. Adjusted Net income excludes the effects of restructuring and other costs, income tax-related adjustments, and other equity losses related to real estate joint ventures. Adjusted Net income in the fourth quarter of 2020 was $289 million, a decrease of $111 million or 27.8%.

- Basic EPS was $0.20 in the fourth quarter of 2020, a decrease of $0.10 or 33.3%, as a result of the after-tax impacts of lower Operating income and higher Financing costs. Adjusted basic EPS excludes the effects of restructuring and other costs, income tax-related adjustments, and other equity losses related to real estate joint ventures. Adjusted basic EPS was $0.22 in the fourth quarter of 2020, a decrease of $0.10 or 31.3%.

- Cash provided by operating activities was $1,033 million in the fourth quarter of 2020, an increase of $204 million, largely attributable to other working capital changes, partly offset by increased income tax payments and lower EBITDA.

- Cash used by investing activities was $2,207 million in the fourth quarter of 2020, an increase of $596 million, primarily attributable to increased business acquisitions, including EQ Care and Lionbridge AI. Capital expenditures were $613 million in the fourth quarter of 2020, a decrease of $129 million, due to the timing of our fibre build activities, efficiencies in our 4G network expenditures, as well as lower investments in IT infrastructure and systems development. These decreases were partially offset by increased investments in our 5G network and investments to support subscriber growth.

- Cash provided by financing activities was $1,401 million in the fourth quarter of 2020, an increase of $454 million, primarily reflecting less long-term debt issued, net of redemptions and repayments, and shares of a subsidiary issued to non-controlling interests.

- Free cash flow was $218 million in the fourth quarter of 2020, an increase of $83 million, largely reflecting lower capital expenditures, partly offset by lower EBITDA attributed to pandemic impacts.

- In the fourth quarter of 2020, we had wireless subscriber net additions of 175,000.

    - Mobile phone gross additions were 374,000 in the fourth quarter of 2020, a decrease of 8,000, as the impacts of the pandemic, including fewer activations from travellers due to border restrictions and customers reducing their general shopping habits in retail outlets since the start of the pandemic, more than offset growth in high-value customer additions, successful promotions and expanded channels.

    - Our mobile phone churn rate was 1.09% in the fourth quarter of 2020, compared to 1.20% in the fourth quarter of 2019. The decrease reflects the impacts of the pandemic, including changing customer behaviour due to travel restrictions and customers reducing their general shopping habits in retail outlets. This was in addition to the utilization of our TELUS Easy Payment device financing program, Peace of Mind endless data plans, Bring-It-Back and TELUS Family Discount offerings, as well as our focus on executing customers first initiatives and retention programs, and our leading network quality.

    - Mobile phone net additions were 87,000 in the fourth quarter of 2020, reflecting an increase of 17,000 compared to the prior year as strong execution in our digital sales channels, successful efforts to drive high-value customer additions and lower mobile churn more than offset the impacts of the pandemic.

    - Mobile connected device net additions were 88,000 in the fourth quarter of 2020, reflecting an increase of 28,000 due to increased demand for IoT solutions, partly offset by lower tablet net additions.

- In the fourth quarter of 2020, we had wireline subscriber connection net additions of 78,000.

    - Internet net additions were 44,000 in the fourth quarter of 2020, an increase of 16,000, reflecting continued net new demand from consumers and businesses for our TELUS PureFibre service as we continued to keep our customers connected through a range of installation options, as well as lower customer churn resulting from our customers first initiatives and retention programs, the success of our bundled product offerings and reduced switching activity between providers due to the COVID-19 pandemic.

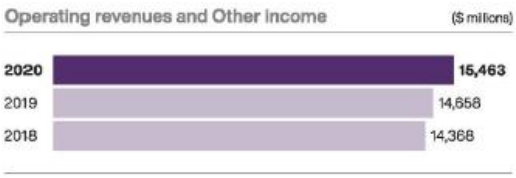
    - TV net additions were 20,000 in the fourth quarter of 2020, an increase of 5,000, mainly due to a lower customer churn rate from strong retention efforts, the success of our bundled product offerings and reduced switching activity due to the pandemic.

    - Residential voice net losses were limited to 9,000 in the fourth quarter of 2020, representing our lowest fourth quarter net losses since 2002, as compared to residential voice net losses of 12,000 in the fourth quarter of 2019. The residential voice subscriber losses continue to reflect the trend of substitution by wireless and internet-based services, partially mitigated by our expanding fibre footprint and bundled product offerings, as well as our strong retention efforts, including lower-priced offerings.

    - Security net additions were 23,000 in the fourth quarter of 2020, an increase of 8,000, driven by strong growth as we continued to keep our customers connected and protected by offering a range of installation options, and demand for our bundled product offerings.

5.3 Consolidated operations

The following is a discussion of our consolidated financial performance. Segment information in *Note 5* of the Consolidated financial statements is regularly reported to our CEO. We discuss the performance of our segments in *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*. Refer to *Section 1.2* for further discussion of the COVID-19 pandemic and its impacts on our consolidated operations.



Operating revenues and Other income

Years ended December 31 ($ in millions)	**2020**	2019	Change
Operating revenues			
Service	**13,277**	12,400	7.1%
Equipment	**2,064**	2,189	(5.7)%
Operating revenues (arising from contracts with customers)	**15,341**	14,589	5.2%
Other income	**122**	69	76.8%
Operating revenues and Other income	**15,463**	14,658	5.5%

Consolidated Operating revenues and Other income increased by $805 million in 2020.

- **Service revenues** increased by $877 million in 2020, reflecting growth in wireline data services revenues resulting from business acquisitions, expanded services and subscriber base growth, including from TI, as well as growth in our wireless subscriber base, partly offset by the impacts of the COVID-19 pandemic in both the wireless and wireline segments, and continued declines in wireline legacy voice and legacy data service revenues.

- **Equipment revenues** decreased by $125 million in 2020, reflecting the impacts of the pandemic, including the temporary closure of a significant number of sales channels from March 2020 through the majority of the second quarter of 2020, as well as customers reducing their general shopping habits in retail outlets since the beginning of the pandemic, along with mandated capacity restrictions, which resulted in lower wireless contracted volumes and accessory sales. Device financing programs, which provide transparency of full device costs resulting in customers deferring device upgrade purchases, also contributed to the decrease. These impacts were partly offset by higher-value smartphones in the sales mix for both gross adds and retention units.

- **Other income** increased by $53 million in 2020, largely related to increased net gains resulting from a decrease and subsequent retirement of provisions arising from business acquisition-related written put options within TI, partly offset by higher other equity losses related to real estate joint ventures.

Operating expenses

Years ended December 31 ($ in millions)	**2020**	2019	Change
Goods and services purchased	**6,268**	6,070	3.3%
Employee benefits expense	**3,701**	3,034	22.0%
Depreciation	**2,107**	1,929	9.2%
Amortization of intangible assets	**905**	648	39.7%
Operating expenses	**12,981**	11,681	11.1%

Consolidated operating expenses increased by $1,300 million in 2020.

- **Goods and services purchased** increased by $198 million in 2020 due to higher operating and administrative costs associated with business acquisitions, in addition to supporting organic TI revenue growth, higher non-labour restructuring and other costs related to the pandemic, higher product costs in support of our growing wireline subscriber base, and increases to our bad debt expense. These increases were partly offset by enhanced cost-savings initiatives in response to the economic impacts of the COVID-19 pandemic and lower wireless equipment expenses from lower contracted volumes and accessory sales, which were moderated by higher-value devices in the sales mix, as described above.

- **Employee benefits expense** increased by $667 million in 2020, largely due to higher compensation and benefit costs resulting from an increase in the number of employees related to business acquisitions; higher offshore FTEs supporting organic TI revenue growth; compensation increases; and an increase in deferred vacation related to the pandemic. These employee benefits expense increases were partly offset by a decrease in the number of domestic FTEs, excluding business acquisitions, lower labour-related restructuring and other costs and higher capitalized labour costs.

- **Depreciation** increased by $178 million in 2020, primarily due to growth in capital assets over the past 12 months, including our expanded broadband footprint and business acquisitions, partly offset by the impact of our continuing program of asset life studies.

- **Amortization of intangible assets** increased by $257 million in 2020 arising from business acquisitions and higher expenditures associated with the intangible asset base over the past 12 months, including customer experience service delivery systems.

Operating income

Years ended December 31 ($ in millions)	**2020**	2019	Change
Wireless EBITDA[1] (see *Section 5.4*)	**3,642**	3,693	(1.4)%

Wireline EBITDA[1] (see *Section 5.5*)	**1,852**	1,861	(0.5)%
EBITDA[1]	**5,494**	5,554	(1.1)%
Depreciation and amortization (discussed above)	**(3,012)**	(2,577)	16.9%
Operating income	**2,482**	2,977	(16.6)%

1 See *Section 11.1 Non-GAAP and other financial measures* .

Operating income decreased by $495 million in 2020, while EBITDA decreased by $60 million in 2020. Excluding the second quarter 2020 effects of a gain on a retirement of a provision arising from business acquisition-related written put options of $71 million within TI, Operating income decreased by $566 million in 2020, while EBITDA decreased by $131 million in 2020. These declines reflect the impacts of the COVID-19 pandemic, including: (i) the decline in roaming revenues attributable to travel restrictions; (ii) the temporary closure of approximately 90% of our retail stores from March through most of the second quarter, as well as customers reducing their shopping habits in retail outlets since the beginning of the pandemic, along with mandated capacity restrictions; (iii) lower revenue from our business customers as they redeploy their resources; (iv) the temporary disruptions to our TI business due to government-mandated site closures; (v) the temporary closure of our TELUS Health Care Centres and reduced health benefit claims processing; (vi) increases to our bad debt expense; (vii) higher non-labour-related restructuring and other costs; and (viii) an increase in deferred vacation related to the pandemic.

EBITDA also declined from lower wireline legacy voice and legacy data services, higher non-labour-related restructuring and other costs related to efficiency initiatives, higher employee benefits expense and other costs, including support for business acquisitions, and other equity losses related to real estate joint ventures. EBITDA declines were partly offset by growth in wireline data service margins resulting from business acquisitions, expanded services and subscriber base growth, growth in our wireless subscriber base, an increased contribution from our organic and inorganic TI business, enhanced cost efficiency programs, and a decrease and subsequent retirement of a provision arising from business acquisition-related written put options within TI.

Adjusted EBITDA

Years ended December 31 ($ in millions)	**2020**	2019	Change
Wireless Adjusted EBITDA[1] (See *Section 5.4*)	**3,689**	3,728	(1.0)%
Wireline Adjusted EBITDA[1] (See *Section 5.5*)	**2,012**	1,965	2.3%
Adjusted EBITDA[1]	**5,701**	5,693	0.2%

1 See *Section 11.1 Non-GAAP and other financial measures* .

Adjusted EBITDA increased by $8 million or 0.2% in 2020, reflecting: growth in wireline data service margins resulting from business acquisitions, expanded services, and subscriber base growth; growth in our wireless subscriber base; an increased organic and inorganic contribution from TI; enhanced cost efficiency programs; and a greater decrease in a provision arising from business acquisition-related written put options within TI. Adjusted EBITDA growth was mostly offset by the impacts of the COVID-19 pandemic as described above, lower wireline legacy voice and legacy data services, and higher employee benefits expense and other costs including support for business acquisitions.

Financing costs

Years ended December 31 ($ in millions)	**2020**	2019	Change
Interest on long-term debt, excluding lease liabilities – gross	**676**	634	6.6%
Interest on long-term debt, excluding lease liabilities – capitalized	**(37)**	(23)	60.9%
Interest on lease liabilities	**70**	67	4.5%
Interest on short-term borrowings and other	**5**	8	(37.5)%
Interest accretion on provisions	**16**	22	(27.3)%
Long-term debt prepayment premium	**18**	28	(35.7)%
Interest expense	**748**	736	1.6%
Employee defined benefit plans net interest	**16**	1	n/m
Foreign exchange losses	**14**	3	n/m
Interest income	**(7)**	(7)	—
Financing costs	**771**	733	5.2%

Financing costs increased by $38 million in 2020, mainly due to the following factors:

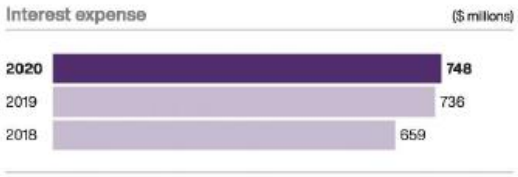
- **Interest expense** increased by $12 million in 2020, resulting from:
  - Gross interest on long-term debt, excluding lease liabilities, increased by $42 million in 2020, driven by an increase in average long-term debt balances outstanding in part attributable to business acquisitions (including ADT Canada, CCC, Mobile Klinik and AFS Technologies Inc.), partially offset by a decrease in the effective interest rate. Our weighted average interest rate on long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility, lease liabilities and other long-term debt) was 3.80% at December 31, 2020, compared to 3.94% one year earlier. (See *Long-term debt issues, redemptions and repayments* in *Section 7.4*.)
  - Capitalized long-term debt interest, excluding lease liabilities, is in respect of debt incurred for the purchase of spectrum licences during the 600 MHz wireless spectrum auction held in April 2019 by Innovation, Science and Economic Development Canada (ISED), which we expect to deploy in our existing network in 2021.

- Interest accretion on provisions decreased by $6 million due to a decrease in the provision related to written put options in respect of non-controlling interest.

- In the second quarter of 2020, we recorded a long-term debt prepayment premium of $18 million before income taxes related to the early redemption of all our $400 million Series CM Notes and all our $500 million Series CO Notes. In the third quarter of 2019, we recorded a long-term debt prepayment premium of $28 million before income taxes related to the early redemption of all our $1.0 billion of senior unsecured 5.05% Notes, Series CH.

- **Employee defined benefit plans net interest** increased by $15 million in 2020, primarily due to the change in the defined benefit plan deficit as at December 31, 2019 to $425 million (net of the plan asset ceiling limit of $121 million), compared to a defined benefit plan surplus of $57 million (net of the plan asset ceiling limit of $263 million) one year earlier, partly offset by a decrease in the discount rate.

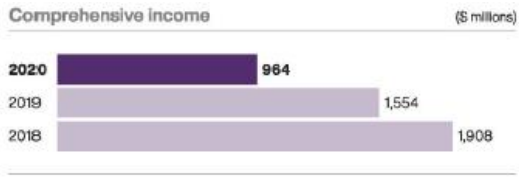
- **Foreign exchange losses** have fluctuated, primarily reflecting changes in the value of the Canadian dollar relative to the U.S. dollar.



Income taxes

Years ended December 31 ($ in millions, except tax rates)	**2020**	2019	Change
Income taxes computed at applicable statutory rates (%)	**26.1**	26.9	(0.8) pts.
Revaluation of deferred income tax liability to reflect future income tax rates (%)	**(0.4)**	(5.5)	5.1pts.
Adjustments recognized in the current period for income taxes of prior periods (%)	**(1.3)**	(0.8)	(0.5) pts.
Other (%)	**1.9**	0.2	1.7pts.
Effective tax rate (%)	**26.3**	20.8	5.5pts.
Income tax computed at applicable statutory rates	**446**	604	(26.2)%
Revaluation of deferred income tax liability to reflect future income tax rates	**(6)**	(124)	(95.2)%
Adjustments recognized in the current period for income taxes of prior periods	**(20)**	(17)	17.6%
Other	**31**	5	n/m
Income taxes	**451**	468	(3.6)%

Total income tax expense decreased by $17 million in 2020. The effective tax rate increased from 20.8 to 26.3% in 2020, predominantly attributable to the prior-year revaluation of the deferred income tax liability for the multi-year reduction in the Alberta provincial corporate tax rate that was substantively enacted in the second quarter of 2019.



Comprehensive income

Years ended December 31 ($ in millions)	**2020**	2019	Change
Net income	**1,260**	1,776	(29.1)%
Other comprehensive income (net of income taxes):			
Items that may be subsequently reclassified to income	**2**	104	(98.1)%
Items never subsequently reclassified to income	**(298)**	(326)	(8.6)%
Comprehensive income	**964**	1,554	(38.0)%

Comprehensive income decreased by $590 million in 2020, mainly attributable to lower Net income, in addition to changes in unrealized fair value of derivatives classified as cash flow hedges. Items that may subsequently be reclassified to income are composed of changes in the unrealized fair value of derivatives designated as cash flow hedges and foreign currency translation adjustments arising from translating financial statements of foreign operations. Items never subsequently reclassified to income are composed of employee defined benefit plans re-measurement amounts.

5.4 Wireless segment

Mobile phone subscribers	**Mobile phone ABPU**	**Mobile phone blended churn**	**Mobile connected device subscribers**
2020: 8,952,000 +2.5% 2019: 8,733,000	**2020**: $70.84 (3.4)% 2019: $73.37	**2020**: 0.95 (0.13) pts. 2019: 1.08	**2020**: 1,796,000 +21.4% 2019: 1,480,000

Wireless trends and seasonality

The nature of the COVID-19 pandemic has had significant impacts on our business and the uncertainty of its magnitude, length and the time to recovery are not currently able to be estimated. Therefore, trends identified prior to the first quarter

of 2020 and described below may not be indicative of trends effective from the first quarter of 2020 onwards, as the COVID-19 pandemic prevents us and our customers from operating in the normal course of business in certain areas. For example, with government and land border restrictions, consumer and business travel levels are uncertain. As well, our business customers who use our wireless services are faced with reduced and/or closed operations. Refer to *Section 1.2* for further discussion of the COVID-19 pandemic and its impacts on our wireless operations.

The historical trend over the past eight quarters in wireless network revenue reflects growth in our subscriber base, partly offset by declines in chargeable data usage revenue, and more recently, the effects of the pandemic on reduced roaming revenue. Equipment revenue growth has been declining as an increase of higher-value smartphones in the sales mix has been more than offset by a lower volume of new contracts due to: (i) the improving quality and increasing cost of popular devices that result in customers deferring upgrades; (ii) the industry introduction of device financing programs, which provide transparency of full device costs and result in customers deferring device upgrades; and (iii) most recently, the effects of the pandemic on customers, the industry, our supply chain and methods of distribution, and the Canadian economy. Impacts directly associated with the pandemic, such as the reduction of roaming revenue, a portion of the decline in churn, and lower gross and net addition volumes, may be temporary in nature and have the potential to return to pre-pandemic levels once the pandemic has subsided or ended. The general trend of year-over-year increases in mobile phone subscriber net additions resulted from: (i) the success of our promotions and the leveraging of our digital sales channels; (ii) the effects of market growth arising from a growing population, changing population demographics and an increasing number of customers with multiple devices; (iii) continuous improvements in the speed and quality of our network, combined with our low churn rate, which reflects our focus on customers first initiatives, and more recently, reduced switching activity between carriers due to the pandemic; and (iv) customer behaviour of using additional devices while travelling, however, this trend has been altered by the pandemic. Our capital expenditures on network improvements increase capacity and coverage, allowing us to grow revenue through net additions of wireless subscribers.

Prior to the pandemic, mobile phone ABPU growth had been moderating, primarily due to: (i) carriers offering larger allotments of data, as well as rate plans that include plans with bonus data and unlimited data plans, data sharing and, prior to the pandemic and the significant impact to travel, international roaming features; and (ii) consumer behavioural response to more frequent customer data usage notifications and offloading of data traffic to increasingly available Wi-Fi hotspots; partly offset by (iii) an increased mix of higher-value rate plans, in addition to an increase in higher-value smartphones in the sales mix, including the effects of customers financing more of the cost of these devices through our TELUS Easy Payment program, launched in the third quarter of 2019, and an increased proportion of higher-value customers in the subscriber mix. As a result of changing industry dynamics, customers have been able to gain access to higher network speeds and larger allotments of data included for a given price point, further limiting mobile phone ABPU expansion, as customers are continuing to obtain plans with a lower cost per megabyte.

The trend of our comparatively low mobile phone blended churn rate reflects our customers first efforts, retention programs and our focus on building, maintaining and enhancing our high-quality network. Additionally, the pandemic has caused customers to change their behaviour, such as making fewer visits to retail outlets, thereby reducing churn.

Our connected device subscriber base has been growing primarily as a result of our expanded Internet of Things (IoT) offerings, partly offset by our strategic decision to reduce loading of low or negative-margin tablets.

Wireless operating indicators

As at December 31	**2020**	2019	Change
Subscribers[1] (000s):			
Mobile phones	**8,952**	8,733	2.5%
Mobile connected devices	**1,796**	1,480	21.4%
Total	**10,748**	10,213	5.2%
LTE population coverage[2] (millions)	**37.0**	36.9	0.3%
5G population coverage[2] (millions)	**10.5**	—	n/m

Years ended December 31	**2020**	2019	Change
Mobile phones gross additions (000s):	**1,277**	1,375	(7.1)%
Subscriber net additions (000s):			
Mobile phones	**280**	274	2.2%
Mobile connected devices	**257**	263	(2.3)%
Total	**537**	537	—
Mobile phones ABPU, per month[3] ($)	**70.84**	73.37	(3.4)%
Mobile phones ARPU, per month[3] ($)	**57.81**	60.14	(3.9)%
Mobile phones churn, per month[3] (%)	**0.95**	1.08	(0.13)pts.

1 Effective January 1, 2020 on a prospective basis, as a result of subscribers substantially loaded prior to 2019 and were identified as having limited or no cellular voice capability through an in-depth review of our mobile phone subscriber base, we made an adjustment to transfer approximately 60,000 mobile phone subscribers to our mobile connected devices subscriber base.
2 Including network access agreements with other Canadian carriers.
3 See *Section 11.2 Operating indicators*. These are industry measures useful in assessing operating performance of a wireless company, but are not measures defined under IFRS-IASB.

Operating revenues and Other income – Wireless segment

Years ended December 31 ($ in millions)	**2020**	2019	Change
Network revenue	**6,030**	6,124	(1.5)%
Equipment and other service revenues	**1,875**	2,005	(6.5)%
Operating revenues (arising from contracts with customers)	**7,905**	8,129	(2.8)%
Other income	**9**	20	(55.0)%
External Operating revenues and Other income	**7,914**	8,149	(2.9)%
Intersegment revenues	**60**	53	13.2%
Wireless Operating revenues and Other income	**7,974**	8,202	(2.8)%

Wireless Operating revenues and Other income decreased by $228 million in 2020.



Network revenue decreased by $94 million or 1.5% in 2020, due to declining mobile phone ARPU primarily from reduced roaming related to travel restrictions and chargeable data usage revenue, as discussed below, partly offset by growth of 5.2% in the subscriber base over the past 12 months, in addition to growth in monthly recurring charges reflecting a greater mix of high-value customer additions and selection of higher-tier plans.

Mobile phone ABPU was $70.84 in 2020, a decrease of $2.53 or 3.4%. This decrease reflects the impacts caused by the COVID-19 pandemic including: (i) significantly reduced roaming revenue from changing customer behaviour related to travel restrictions; (ii) the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, as well as customers reducing their general shopping habits in retail outlets since the start of the pandemic, along with mandated capacity restrictions, which hindered customer opportunities for device upgrades and the upgrade or selection of higher-tier plans; and (iii) decreases in chargeable data usage, as more people work from home and offload their mobile device traffic onto Wi-Fi networks.

Mobile phone ABPU was also impacted by continued declines in chargeable data usage and the impact of the competitive environment putting pressure on base rate plan prices in the current and prior periods. The decline in mobile

phone ABPU was partly offset by growth resulting from our combined TELUS Easy Payment device financing, Peace of Mind endless data plans and TELUS Family Discount offerings, with customers selecting plans with endless data or larger data buckets, and higher-value smartphones in the sales mix in the current and prior periods.

Mobile phone ARPU was $57.81 in 2020, a decrease of $2.33 or 3.9%. Mobile phone ARPU was impacted by the same items noted above for mobile phone ABPU, with the exception of: (i) our TELUS Easy Payment device financing program; (ii) prior to the launch of TELUS Easy Payment, devices with subsidies; and (iii) contracted device upgrades.

- **Mobile phone gross additions** were 1,277,000 in 2020, a decrease of 98,000, as the impacts of the pandemic, including fewer activations from travellers due to border restrictions, the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, and customers reducing their general shopping habits in retail outlets since the start of the pandemic, along with mandated capacity restrictions, more than offset growth in high-value customer additions, successful promotions and expanded channels. During the year, as we adapted to various public health restrictions to ensure the safety of our customers and team members by not having them enter a physical premises, we successfully executed our customers first initiatives including the enhanced capabilities of our digital footprint.

- Our **mobile phone churn rate** was 0.95% in 2020, compared to 1.08% in 2019. The decrease reflects the impacts of the pandemic, including changing customer behaviour due to travel restrictions, reduced switching activity between carriers due to the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, and customers reducing their general shopping habits in retail outlets since the start of the pandemic, along with mandated capacity restrictions. This was in addition to the utilization of our TELUS Easy Payment device financing program, Peace of Mind endless data plans, Bring-It-Back™ and TELUS Family Discount offerings, our successful bundling of mobility and home services, and our focus on executing customers first initiatives and retention programs, as well as our leading network quality.

- **Mobile phone net additions** were 280,000 in 2020, an increase of 6,000 compared to the prior year, as our strong execution in our digital sales channels, successful efforts to drive high-value customer additions and lower churn more than offset the impacts of the pandemic.

- **Mobile connected device net additions** were 257,000 in 2020, inclusive of approximately 40,000 tablet net losses in 2020 and reflecting a decrease of 6,000, primarily due to higher tablet net losses, partly offset by increased demand for IoT solutions.

Subscriber loading results discussed above were impacted at times throughout 2020 by the COVID-19 pandemic and by the restrictions put in place to protect our customers and team members, including the temporary closure of certain stores in shopping malls and other retail outlets. Our digital sales channels are well equipped to handle the additional traffic left unaddressed by physical sales.

Equipment and other service revenues decreased by $130 million in 2020, reflecting the impacts of the pandemic, including the temporary closure of approximately 90% of our retail stores from March 2020 through most of the second quarter, and customers reducing their general shopping habits in retail outlets since the start of the pandemic, which resulted in lower contracted volume and accessory sales. Device financing programs, which provide transparency of full device costs resulting in customers deferring device upgrade purchases, also contributed to the decrease, predominantly in the first half of the year. These impacts were partly offset by higher-value smartphones in the sales mix for gross adds and retention units.

Other income decreased by $11 million in 2020, attributable to higher other equity losses related to real estate joint ventures and lower net gains from the sale of certain assets.

Intersegment revenues represent network services that are eliminated upon consolidation, along with the associated wireline expenses.

Operating expenses – Wireless segment

Years ended December 31 ($ in millions)	**2020**	2019	Change
Goods and services purchased:			
Equipment sales expenses	**1,800**	1,959	(8.1)%
Network operating expenses	**787**	789	(0.3)%
Marketing expenses	**343**	394	(12.9)%
Other[1]	**768**	702	9.4%
Employee benefits expense[1]	**634**	665	(4.7)%
Wireless operating expenses	**4,332**	4,509	(3.9)%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures*.

Wireless operating expenses decreased by $177 million in 2020.

Equipment sales expenses decreased by $159 million in 2020, largely due to lower contracted volumes and accessory sales, partly offset by higher-value devices in the sales mix, as discussed above.

Network operating expenses decreased by $2 million in 2020, mainly due to increased costs resulting from our larger subscriber base and increased expenses related to the Canadian Radio-television and Telecommunications Commission (CRTC) Broadband Fund, partly offset by network site utilities savings and lower roaming expense resulting from decreased travel.

Marketing expenses decreased by $51 million in 2020, driven by lower commissions expense associated with lower volumes and an increased mix of digital sales, as well as a reduction in advertising and promotional activities in response to the pandemic.

Other goods and services purchased increased by $66 million in 2020, primarily as a result of the economic impacts and response to the COVID-19 pandemic, including higher bad debt expense and non-labour-related restructuring and other costs, partly offset by enhanced cost efficiency programs, including the suspension of corporate travel and lower external labour costs. Higher costs related to the scaling of our digital capabilities also contributed to this increase.

Employee benefits expense decreased by $31 million in 2020, primarily due to increased capitalized labour costs, lower labour-related restructuring and other costs and the Canada Emergency Wage Subsidy (CEWS) program, a federal government initiative offered to eligible employers during the COVID-19 pandemic. These factors were partly offset by an increase in deferred vacation related to the pandemic, and compensation increases committed prior to the declaration of the pandemic.

EBITDA – Wireless segment

Years ended December 31 ($ in millions, except margins)	**2020**	2019	Change
EBITDA[1]	**3,642**	3,693	(1.4)%
Add restructuring and other costs included in EBITDA	**38**	32	n/m
Add other equity losses related to real estate joint ventures	**9**	3	n/m
Adjusted EBITDA[1]	**3,689**	3,728	(1.0)%
EBITDA margin[1] (%)	**45.7**	45.0	0.7pts.
Adjusted EBITDA margin[1,2] (%)	**46.2**	45.4	0.8pts.

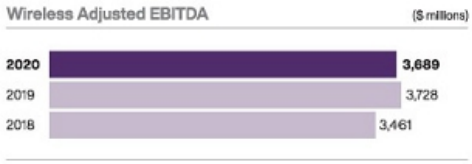
1 See description under *EBITDA* in *Section 11.1 Non-GAAP and other financial measures*.

2 Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues and Other income, where the calculation of Operating revenues and Other income excludes other equity losses related to real estate joint ventures.

Wireless EBITDA decreased by $51 million or 1.4% in 2020. Wireless Adjusted EBITDA decreased by $39 million or 1.0%, reflecting the impacts of the COVID-19 pandemic, including lower roaming revenue resulting from restricted travel, the temporary closure of approximately 90% of our retail stores from March through most of the second quarter, customers reducing their general shopping habits in retail outlets since the beginning of the

pandemic, along with mandated capacity restrictions, and decreases in chargeable usage as more people work from home and offload their mobile device traffic onto Wi-Fi networks. This was partially offset by higher equipment margins, enhanced cost efficiency programs, and increases in our subscriber base.





5.5 Wireline segment

Internet subscriber net additions	TV subscriber net additions	Security subscriber net additions	Total wireline subscriber net additions
2020: 157,000 +46.7% 2019: 107,000	**2020**: 55,000 (17.9)% 2019: 67,000	**2020**: 68,000 +47.8% 2019: 46,000	**2020**: 240,000 +36.4% 2019: 176,000

Wireline trends

The nature of the COVID-19 pandemic has had significant impacts on our business and the uncertainty of its magnitude, length and the time to recovery are not currently able to be estimated. Therefore, trends identified prior to the first quarter of 2020 and described below may not be indicative of trends effective from the first quarter of 2020 onwards, as the COVID-19 pandemic prevents us and our customers from operating in the normal course of business in certain areas. For example, the COVID-19 pandemic has constrained our ability to complete installations in the traditional manner. As well, our business customers are faced with reduced and/or closed operations. Refer to *Section 1.2* for further discussion of the COVID-19 pandemic and its impacts on our wireline operations.

The trend over the past eight quarters of increases in wireline service revenue reflects growth in internet and third wave data services, TI revenues, TV revenues, health revenues, and home and business smart technology (including security and agriculture) revenues, and is partly offset by declining wireline legacy voice and legacy data revenues, as well as pandemic impacts such as the temporary closure of TELUS Health Care Centres and the centres being unable to offer their full suite of core services upon re-opening. The trend of increased TI revenues reflects growth in both business volumes from external customers and internal services provided to the wireless segment. Our business smart technology (including agriculture) offers the ability to improve the efficient production, transportation, quality and safety of food by leveraging our technology innovation, while also driving strong financial and operating performance. As well, increased wireline data services revenues reflect revenues from business acquisitions, including our acquisitions of ADT Canada on November 5, 2019 (where there were significant integration and customer retention costs in 2019 and 2020, which are expected to continue into early 2022, with the full expected operations rate anticipated after that time), and CCC acquired on January 31, 2020. The increases in year-over-year internet and TV service revenues are being generated by subscriber growth and higher internet revenue per customer resulting from upgrades to faster speeds, larger data usage rate plans, diverse bundled product offerings, and the ongoing expansion of our fibre footprint.

We expect ongoing internet subscriber base growth as we continue our investments in expanding our fibre-optic infrastructure, supplemented with our low customer churn rate. The total number of TV subscribers has increased (in contrast to market-reported declines in traditional television viewing habits) as a result of stable net additions in response to our diverse and flexible product offerings, combined with our low customer churn rate. Security subscriber base growth is increasing as a result of business acquisitions and organic growth. The COVID-19 pandemic and physical distancing requirements impacted security installations, as access to homes and businesses was restricted; however, this was partly mitigated as we adapted our processes for keeping our customers connected and protected by offering a range of installation options, including virtually. Wireline growth has also been attributed to the adoption of the TELUS Whole Home bundle and bundling of our mobility and home services to meet the demand of multiple services per home where adoption increases our services per home and possibly impacts churn for most products. Residential voice subscriber losses continue to reflect the ongoing trend of substitution by wireless and internet-based services, but were partly mitigated by the success of our bundled service offerings and lower-priced offerings. The trend of declining legacy wireline voice revenues is due to technological substitution, greater use of inclusive long distance coupled with lower long distance minutes used, and intensification of competition in the small and medium-sized business market; however, our rate of decline has been moderating with our utilization of bundled product offerings and successful retention efforts. The migration of business product and service offerings to IP services and the introduction of new competitors have yielded inherently lower margins compared to some legacy business product and service offerings; however, we are continually refining and diversifying our innovative suite of business offerings, including our Software as a Service (SaaS)-based solutions.

Wireline operating indicators

At December 31 (000s)	**2020**	2019	Change
Subscriber connections:			

Internet	**2,138**	1,981	7.9%
TV	**1,215**	1,160	4.7%
Residential voice	**1,164**	1,204	(3.3)%
Security[1]	**707**	608	16.3%
Total wireline subscriber connections[1]	**5,224**	4,953	5.5%

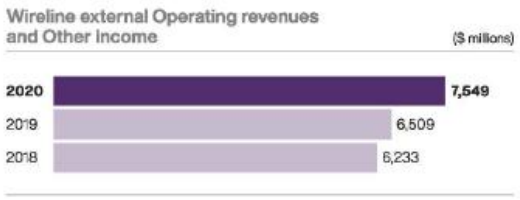
Years ended December 31 (000s)	**2020**	2019	Change
Subscriber connection net additions (losses):			
Internet	**157**	107	46.7%
TV	**55**	67	(17.9)%
Residential voice	**(40)**	(44)	9.1%
Security	**68**	46	47.8%
Total wireline subscriber connection net additions	**240**	176	36.4%

1 December 31, 2019 security subscriber connections have been increased to include approximately 490,000 subscribers related to our acquisition of ADT Canada (acquired on November 5, 2019). During the third quarter of 2020, we adjusted cumulative subscriber connections to add approximately 31,000 subscribers as a result of a business acquisition.

Operating revenues and Other income – Wireline segment

Years ended December 31 ($ in millions)	**2020**	2019	Change
Data services	**6,111**	5,080	20.3%
Voice services	**912**	986	(7.5)%
Other services and equipment	**413**	394	4.8%
Operating revenues (arising from contracts with customers)	**7,436**	6,460	15.1%
Other income	**113**	49	130.6%
External Operating revenues and Other income	**7,549**	6,509	16.0%
Intersegment revenues	**262**	251	4.4%
Wireline Operating revenues and Other income	**7,811**	6,760	15.5%

Wireline Operating revenues and Other income increased by $1,051 million in 2020.



- **Data services** revenues increased by $1,031 million in 2020. The increase was driven by: (i) growth in TI revenues, primarily driven by the acquisition of CCC, growth in business volumes resulting from expanded services for existing customers and customer growth, partly offset by temporary disruptions due to government-mandated site closures in response to the COVID-19 pandemic; (ii) increased internet and third wave data service revenues, reflecting a 7.9% increase in our internet subscribers over the past 12 months and higher revenue per customer resulting from internet speed upgrades, larger data usage internet rate plans and rate changes, partly offset by ongoing initiatives to assist customers during the pandemic; (iii) increased revenues from home and business smart technology (including security), driven by business acquisitions, including ADT Canada, expanded services and customer growth; (iv) higher TV revenues, reflecting subscriber growth of 4.7% over the past 12 months; and (v) increased revenues from our virtual care solutions. This growth was partly offset by other impacts caused by the pandemic, including a decline in health revenue mainly from the temporary closures of our TELUS Health Care Centres for all non-essential services and reduced health benefit claims, in addition to lower revenue from our business customers as they redeploy their resources. Additionally, data services revenue growth was partially offset by the ongoing decline in legacy data service revenues.

- **Voice services** revenues decreased by $74 million in 2020, reflecting the ongoing decline in legacy voice revenues resulting from technological substitution, greater use of inclusive long distance plans and price plan changes. Declines were moderated with our utilization of bundled product offerings, successful retention efforts and the migration from legacy to IP services offerings, as well as a temporary increase in long distance usage, as customers remained connected during the pandemic. We experienced a 3.3% decline in residential voice subscribers over the past 12 months, compared to a 3.5% decline in residential voice subscribers for the 12-month period ended December 31, 2019.

- **Other services and equipment** revenues increased by $19 million in 2020, mainly as a result of smart technology equipment sales primarily attributable to business acquisitions.

- **Wireline subscriber connection net additions** were 240,000 in 2020, an increase of 64,000.

- **Internet net additions** were 157,000 in 2020, an increase of 50,000, reflecting continued net new demand from consumers and businesses for our TELUS PureFibre service as we continued to keep our customers connected through a range of installation options, as well as lower customer churn resulting from our customers first initiatives and retention programs, the success of our bundled product offerings, including the adoption of the TELUS Whole Home bundle and our bundling of mobility and home services, and reduced switching activity between providers due to the COVID-19 pandemic. Our continued focus on connecting more homes and businesses directly to fibre (with TELUS PureFibre available to approximately 81% of our broadband footprint at the end of 2020), expanding and enhancing our addressable high-speed internet and Optik TV footprint, and bundling these services together, contributed to combined internet, TV and security subscriber growth of 212,000 over the past 12 months.

- **TV net additions** were 55,000 in 2020, a decrease of 12,000, mainly due to lower gross additions as a result of the impact of the pandemic and the changing landscape of increased streaming services, partly offset by a lower customer churn rate from strong retention efforts, the success of our bundled product offerings and reduced switching activity due to the pandemic.

- **Residential voice net losses** were limited to 40,000 in 2020, compared to residential voice net losses of 44,000 in 2019. The residential voice subscriber losses continue to reflect the trend of substitution by wireless and internet-based services, partially mitigated by our expanding fibre footprint and bundled product offerings, as well as our strong retention efforts, including lower-priced offerings.

- **Security net additions** were 68,000 in 2020, an increase of 22,000, driven by strong growth as we continued to keep our customers connected and protected by offering a range of installation options, and demand for our bundled product offerings.

Subscriber loading results discussed above were impacted at times throughout 2020 by the COVID-19 pandemic and by the restrictions put in place to protect our customers and our team members, including physical distancing, which had impacted our ability to enter homes and businesses to complete installations. Where possible, we have successfully evolved our processes to permit customers to install their own equipment with the support of our technicians via a smartphone.

Other income increased $64 million in 2020, primarily due to a decrease and subsequent retirement of a provision arising from business acquisition-related written put options within TI and the reversal of a provision arising from a business combination, partly offset by the non-recurrence of 2019 gains on sale of certain assets and other equity losses related to real estate joint ventures.

Intersegment revenues represent services provided to the wireless segment, including those from TI. Such revenue is eliminated upon consolidation, together with the associated expenses in wireless.

Operating expenses – Wireline segment

Years ended December 31 ($ in millions)	**2020**	2019	Change
Goods and services purchased [1]	**2,892**	2,530	14.3%
Employee benefits expense [1]	**3,067**	2,369	29.5%
Wireline operating expenses	**5,959**	4,899	21.6%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures*.

Wireline operating expenses increased by $1,060 million in 2020.

Goods and services purchased increased by $362 million in 2020, mainly due to higher operating and administrative costs associated with business acquisitions, growth in TI revenue, growth in business operations, increases in non-labour related restructuring and other costs related to efficiency initiatives and the COVID-19 pandemic, higher product costs in support of our growing subscriber base, including TV and virtual care health subscribers, increasing rates for TV content and an increase in our bad debt expense resulting from the pandemic. These factors were partly offset by savings achieved from the enhanced cost-savings initiatives in response to the economic impacts of the pandemic and higher capitalized labour costs.

Employee benefits expense increased by $698 million in 2020, primarily due to an increase in compensation and benefits costs resulting from an increase in the number of employees related to business acquisitions and supporting organic TI revenue growth, compensation rate increases and an increase in deferred vacation related to the pandemic. These factors were partly offset by lower labour-related restructuring and other costs, and higher capitalized labour costs.

EBITDA – Wireline segment

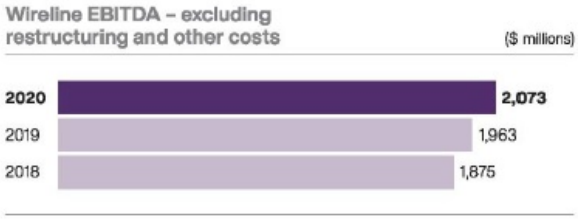
Years ended December 31 ($ in millions, except margins)	**2020**	2019	Change
EBITDA [1]	**1,852**	1,861	(0.5)%
Add restructuring and other costs included in EBITDA	**221**	102	n/m
Add other equity losses related to real estate joint ventures	**10**	2	n/m
Deduct retirement of a provision arising from business acquisition-related written put options within TI	**(71)**	—	n/m
Adjusted EBITDA [1]	**2,012**	1,965	2.3%
EBITDA margin [1] (%)	**23.7**	27.5	(3.8) pts.
Adjusted EBITDA margin [1,2] (%)	**26.0**	29.1	(3.1) pts.

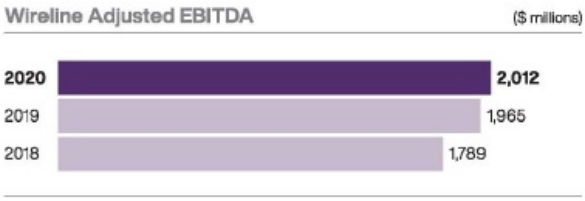
1 See description under *EBITDA* in *Section 11.1 Non-GAAP and other financial measures*.

2 Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues and Other income, where the calculation of Operating revenues and Other income excludes other equity losses related to real estate joint ventures and a retirement of a provision arising from business acquisition-related written put options within TI.

Wireline EBITDA decreased by $9 million or 0.5% in 2020. Excluding the second quarter of 2020 effects of a gain on a retirement of a provision arising from business acquisition-related written put options within TI of $71 million, wireline EBITDA decreased by $184 million or 9.4% in 2020.

Wireline Adjusted EBITDA increased by $47 million or 2.3% in 2020. The increase reflected an increased contribution from TI as a result of the acquisition of CCC and expanded services for existing customers and customer growth; improved internet margins; growth from our home and business smart technology (including security), driven by business acquisitions and expanded services; and savings achieved from the enhanced cost-savings initiatives in response to the economic impacts of the pandemic. These factors were partly offset by COVID-19 pandemic impacts including: (i) the temporary disruption of TI business due to government-mandated site closures, (ii) lower revenue from our business customers as they redeploy their resources, (iii) customers first initiatives including temporary overage waives, (iv) the temporary closures of our TELUS Health Care Centres and reduced health benefit claims from the lingering pandemic impacts on business recovery, which partly offset growth in virtual care solutions, and (v) increased bad debt expense; the continued decline of legacy voice and legacy data services; higher employee benefits expense; and other costs related to business acquisitions and growth in business operations.





6. Changes in financial position

Financial position at: ($ millions)	December 31 2020	2019	Change	Change includes:
Current assets				
Cash and temporary investments, net	**848**	535	313	See *Section 7 Liquidity and capital resources*
Accounts receivable	**2,355**	1,962	393	Increases due to unbilled customer finance receivables from our Bring-It-Back program and TELUS Easy Payment device financing program, as well as an increase driven by the acquisition of Competence Call Center (CCC) and business process optimization receivables, partly offset by the timing of wireless wholesale customer receipts and an increase in our allowance for doubtful accounts
Income and other taxes receivable	**148**	127	21	Instalments to date are greater than the expense
Inventories	**407**	437	(30)	A decrease in the volume of handsets
Contract assets	**439**	737	(298)	Refer to description in non-current contract assets
Prepaid expenses	**484**	547	(63)	A decrease in prepayment of maintenance contracts net of amortization and prepaid rent
Current derivative assets	**2**	8	(6)	A decrease in the notional amount of U.S. currency hedging items.
Current liabilities				
Short-term borrowings	**100**	100	—	See *Section 7.7 Sale of trade receivables*
Accounts payable and accrued liabilities	**2,962**	2,749	213	Increases in accrued liabilities, payroll and other employee-related liabilities, interest payable and commodity taxes, partly offset by decreases in restricted share units liability and the timing of accounts payable. See *Note 23* of the Consolidated financial statements
Income and other taxes payable	**135**	55	80	Increase mainly due to the acquisition activity in the period partially offset by instalments to date being greater than the expense
Dividends payable	**403**	352	51	Effects of increases in the dividend rate as well as the number of shares outstanding
Advance billings and customer deposits	**772**	675	97	An increase in advance billings and customer deposits, reflecting increased wireless subscriber growth during the period. See *Note 24* of the Consolidated financial statements
Provisions	**73**	288	(215)	A retirement of a written put provision and disbursements exceeding new provisions
Current maturities of long-term debt	**1,432**	1,332	100	An increase from reclassification of long-term debt relating to the upcoming 2021 maturity of $175 million of our 10.65% debentures, Series 3, in June 2021, partly offset by a decrease in outstanding commercial paper

Current derivative liabilities	**32**	23	9	An increase in the notional amount of U.S. currency hedging items.
Working capital (Current assets subtracting Current liabilities)	**(1,226)**	(1,221)	(5)	TELUS normally has a negative working capital position. See *Financing and capital structure management plans* in *Section 4.3* and *Note 4(c)* of the Consolidated financial statements.

Financial position at: ($ millions)	December 31 **2020**	2019	Change	Change includes:
Non-current assets				
Property, plant and equipment, net	**15,014**	14,232	782	See *Capital expenditures* in *Section 7.3 Cash used by investing activities* and *Depreciation* in *Section 5.3 Consolidated operations*
Intangible assets, net	**15,026**	12,846	2,180	See *Capital expenditures* in *Section 7.3 Cash used by investing activities* and *Amortization of intangible assets* in *Section 5.3 Consolidated operations*
Goodwill, net	**7,235**	5,307	1,928	An increase primarily driven by the acquisitions of CCC, Lionbridge AI, AFS Technologies Inc., EQ Care and Mobile Klinik. See *Note 18* of the Consolidated financial statements
Contract assets	**268**	328	(60)	Primarily driven by lower subsidized devices from the introduction of our TELUS Easy Payment device financing program. Additionally, there was a higher proportion of customers who brought their own device, as well as fewer contract additions attributable to the pandemic
Other long-term assets	**1,106**	919	187	An increase in unbilled customer finance receivables and portfolio investments partly offset by a decrease in pension assets resulting from financial assumption re-measurements exceeding the effects of pension plan returns greater than the discount rate. *See Note 20* of the Consolidated financial statements.
Non-current liabilities				
Provisions	**924**	590	334	A net increase in asset retirement obligations due to discount rate change and restructuring provisions, combined with increases in business acquisition-related provisions
Long-term debt	**18,856**	17,142	1,714	See *Section 7.4 Cash provided by financing activities*
Other long-term liabilities	**1,265**	806	459	An increase in pension liabilities resulting from losses arising from financial assumption re-measurements exceeding the effects of pension plan returns greater than the discount rate, as well as an increase in the nominal amounts of U.S. currency hedging items and an unfavourable change in the spread between the hedging rate and the actual rate at the balance sheet date. *See Note 27* of the Consolidated financial statements
Deferred income taxes	**3,776**	3,214	562	An overall increase in temporary differences between the accounting and tax basis of assets and liabilities, including those from acquisition activity, partially offset by the decrease in employee benefit plan re-measurements recorded in Other comprehensive income.
Owners' equity				
Common equity	**12,074**	10,548	1,526	See *Consolidated statements of changes in owners' equity* in the Consolidated financial statements
Non-controlling interests	**528**	**111**	417	See *Consolidated statements of changes in owners' equity* in the Consolidated financial statements.

7. Liquidity and capital resources

This section contains forward-looking statements, including those with respect to our TELUS Corporation Common Share (Common Share) dividend payout ratio and net debt to EBITDA – excluding restructuring and other costs ratio. See *Caution regarding forward-looking statements* at the beginning of this MD&A. Refer to *Section 1.2* for further discussion of the COVID-19 pandemic and its impacts on our liquidity and capital resources.

7.1 Overview

Our capital structure financial policies and financing and capital structure management plans are described in *Section 4.3*.

Cash flows

Years ended December 31 ($ millions)	**2020**	2019	Change
Cash provided by operating activities	**4,574**	3,927	647

Cash used by investing activities	**(6,165)**	(5,044)	(1,121)
Cash provided by financing activities	**1,904**	1,238	666
Increase in Cash and temporary investments, net	**313**	121	192
Cash and temporary investments, net, beginning of period	**535**	414	121
Cash and temporary investments, net, end of period	**848**	535	313

7.2 Cash provided by operating activities

Analysis of changes in cash provided by operating activities

Years ended December 31 ($ millions)	**2020**	2019	Change
EBITDA[1] (see *Section 5.4* and *Section 5.5*)	**5,494**	5,554	(60)
Restructuring and other costs, net of disbursements	**35**	(36)	71
Employee defined benefit plans expense, net of employer contributions	**51**	37	14
Share-based compensation expense, net of payments	**27**	(2)	29
Interest paid, net of interest received	**(727)**	(707)	(20)
Income taxes paid, net of recoveries received	**(430)**	(644)	214
Other operating working capital changes	**124**	(275)	399
Cash provided by operating activities	**4,574**	3,927	647

1 See description under *EBITDA* in *Section 11.1 Non-GAAP and other financial measures*.

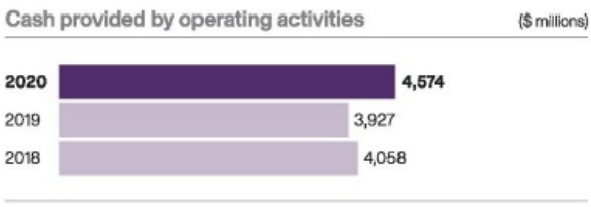
Cash provided by operating activities increased by $647 million in 2020.

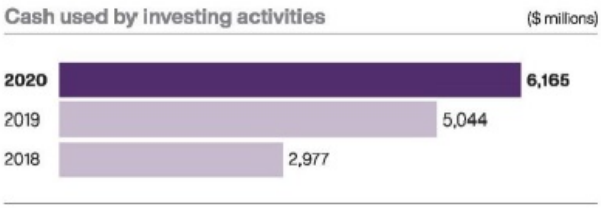
- Restructuring and other costs, net of disbursements, represented a net change of $71 million in 2020. We incurred lower restructuring and other costs disbursements net of expense, related to improving our overall cost structure and operational effectiveness, as well as incurring restructuring and other costs related to the COVID-19 pandemic. Additionally, we incurred restructuring and other costs in connection with our acquisitions of Competence Call Center (CCC) and Lionbridge AI.

- Interest paid, net of interest received, increased by $20 million in 2020, largely due to an increase in the average long-term debt balance, which was partially offset by a lower weighted-average interest rate on long-term debt and a lower long-term debt prepayment premium.

- Income taxes paid, net of recoveries received, decreased by $214 million in 2020, primarily due to a final income tax payment of $270 million in the first quarter of 2019 for the 2018 income tax year, which did not recur in 2020.

- For a discussion of Other operating working capital changes, see *Section 6 Changes in financial position* and *Note 31(a)* of the Consolidated financial statements.





7.3 Cash used by investing activities

Analysis of changes in cash used by investing activities

Years ended December 31 ($ millions)	**2020**	2019	Change
Cash payments for capital assets, excluding spectrum licences	**(2,822)**	(2,952)	130
Cash payments for spectrum licences	**—**	(942)	942
Cash payments for acquisitions, net	**(3,205)**	(1,105)	(2,100)
Advances to, and investment in, real estate joint ventures and associate, net of real estate joint venture receipts	**(95)**	(28)	(67)
Proceeds on disposition	**86**	16	70
Investment in portfolio investments and other	**(129)**	(33)	(96)
Cash used by investing activities	**(6,165)**	(5,044)	(1,121)

Cash used by investing activities increased by $1,121 million in 2020.

- The decrease in Cash payments for capital assets, excluding spectrum licences in 2020 was primarily composed of:

  - A decrease in capital expenditures of $131 million (see *Capital expenditure measures* table and discussion below).

- Higher capital expenditure payments with respect to payment timing differences, as the change in associated Accounts payable and accrued liabilities decreased by $19 million.

- Cash payments for spectrum licences in the second quarter of 2019 relate to the 600 MHz spectrum auction.

- In 2020, we made cash payments for multiple business acquisitions, including CCC, Mobile Klinik, AFS Technologies Inc. (AFS), EQ Care and Lionbridge AI, all as noted in *Section 1.3*, and other individually immaterial acquisitions complementary to our existing lines of business. This is compared to business acquisition activity in 2019 that included the acquisition of a company providing managed network, cloud, security and voice services, a company providing custom data and program management solutions, ADT Security Services Canada, Inc. (ADT Canada) and other individually immaterial acquisitions complementary to our existing lines of business.

- Advances to, and investment in, real estate joint ventures and associate, net of real estate joint venture receipts increased by $67 million in 2020, predominantly related to our acquisition of a 28% basic equity interest in Miovision Technologies Incorporated.

- Proceeds on disposition increased by $70 million in 2020, primarily attributed to the sale of certain assets.

- Investment in portfolio investments and other increased by $96 million in 2020, and was related to strategic portfolio investments that have the potential to drive significant growth, impact and scale in product development and customer service opportunities.



Capital expenditure measures

Years ended December 31 ($ millions, except capital intensity)	**2020**	2019	Change
Capital expenditures[1]			
Wireless segment	**810**	889	(8.9)%
Wireline segment	**1,965**	2,017	(2.6)%
Consolidated	**2,775**	2,906	(4.5)%
Wireless segment capital expenditure intensity (%)	**10**	11	(1) pt.
Wireline segment capital expenditure intensity (%)	**25**	30	(5) pts.
Consolidated capital expenditure intensity[2] (%)	**18**	20	(2) pts.

1 Capital expenditures include assets purchased, excluding right-of-use lease assets, but not yet paid for, and therefore differ from Cash payments for capital assets, excluding spectrum licences, as reported in the Consolidated statements of cash flows. Refer to *Note 31* of the Consolidated financial statements for further information.

2 See *Section 11.1 Non-GAAP and other financial measures*.

Consolidated capital expenditures decreased by $131 million in 2020, due to the timing of our fibre build activities and efficiencies in our 4G network expenditures. These decreases were partially offset by increased investments in our 5G network, higher capital expenditures to support subscriber growth and additional investments to increase system capacity and reliability during the pandemic. With our ongoing investments, we are advancing wireless speeds and coverage that enabled our 5G network launch, continuing to connect additional homes and businesses directly to our fibre-optic technology, and supporting systems reliability and operational efficiency and effectiveness efforts. These investments also support our internet, TV and security subscriber growth, address our customers' demand for faster internet speeds, and extend the reach and functionality of our business, healthcare and agriculture solutions. By December 31, 2020, we had made TELUS PureFibre available to approximately 81% of our broadband footprint. Furthermore, at December 31, 2020, our 5G network covered more than 10.5 million Canadians, representing over 28% of the population in more than 75 communities.

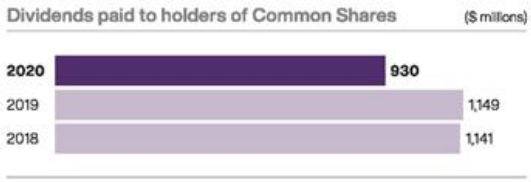
7.4 Cash provided by financing activities

Analysis of changes in cash provided by financing activities

Years ended December 31 ($ millions)	**2020**	2019	Change
Common Shares issued	**1,495**	—	1,495
Dividends paid to holders of Common Shares	**(930)**	(1,149)	219

Issue (repayment) of short-term borrowings, net	**(8)**	(1)	(7)
Long-term debt issued, net of redemptions and repayment	**1,019**	2,444	(1,425)
Shares of subsidiary issued to non-controlling interests	**400**	(9)	409
Other	**(72)**	(47)	(25)
Cash provided by financing activities	**1,904**	1,238	666

Cash provided by financing activities increased by $666 million in 2020.



Common Shares issued

Common Shares issued reflect 57.5 million Common Shares issued in the first quarter of 2020, as described in *Section 1.3 Equity offering*.

Dividends paid to holders of Common Shares

Our dividend reinvestment and share purchase (DRISP) plan trustee acquired shares from Treasury for the DRISP plan, rather than acquiring Common Shares in the stock market. Effective with the dividends paid on October 1, 2019, we offered Common Shares from Treasury at a discount of 2%. Cash payments for dividends decreased by $219 million in 2020, which reflected the DRISP plan trustee acquiring an increased number of Common Shares from Treasury for the DRISP plan. This was partly offset by an increase in the number of shares outstanding and higher dividend rates under our dividend growth program (see *Section 4.3*). During 2020, our DRISP plan trustee acquired Common Shares for $539 million.

In January 2021, we paid dividends of $251 million to the holders of Common Shares and the trustee acquired dividend reinvestment Common Shares from Treasury for $152 million, totalling $403 million.

Issue (repayment) of short-term borrowings, net

In the first quarter of 2020, we drew down and repaid $200 million advanced to us from an arm's-length securitization trust. In the third quarter of 2020, we issued short-term borrowings of $15 million and repaid $8 million in connection with business combination activity. In the fourth quarter of 2020, TELUS International (Cda) Inc. (TELUS International or TI) repaid its swingline draw of US$11 million.

Long-term debt issues, redemptions and repayment

In 2020, long-term debt redemptions and repayment, net of issues, were $1,019 million, a change of $1,425 million compared to long-term debt issues, net of redemptions and repayment, of $2,444 million in 2019, primarily composed of:

- A net decrease in commercial paper outstanding, including foreign exchange effects, of $284 million to a balance of $731 million (US$574 million) at December 31, 2020, from a balance of $1,015 million (US$781 million) at December 31, 2019. Our commercial paper program, when utilized, provides low-cost funds and is fully backstopped by the revolving credit facility (see *Section 7.6 Credit facilities*).

- An increase in net draws on the TELUS International (Cda) Inc. credit facility (TI credit facility), including foreign exchange effects, of $1,373 million. As at December 31, 2020, net draws due to a syndicate of financial institutions (excluding TELUS Corporation) were US$1,428 million, whereas as at December 31, 2019, net draws were US$336 million. The increase in net draws on the TI credit facility was used to fund the acquisitions of CCC and Lionbridge AI. As set out in *Note 28(d)* of the Consolidated financial statements, in February 2021, TELUS International made an initial public offering (IPO) of subordinate voting shares (TI Subordinate Voting Shares); both TELUS Corporation and a TELUS International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6 billion (US$0.5 billion) from the offering were used to reduce the amount of outstanding TI credit facility indebtedness. The TI credit facility is non-recourse to TELUS Corporation.

- The May 29, 2020 issues of $600 million of senior unsecured 2.35% Notes, Series CAC, due January 27, 2028, and $400 million through the re-opening of the 3.95% Notes, Series CAB, due February 16, 2050. The net proceeds of this offering were used for the early full redemption of $400 million 3.60% Notes, Series CM, due January 26, 2021, and the early full redemption of $500 million 3.20% Notes, Series CO, due April 5, 2021, and for general corporate purposes. The long-term debt prepayment premium for the entire $400 million Series CM and $500 million Series CO notes redemptions was $18 million before income taxes.

- The October 5, 2020 issue of $500 million of senior unsecured 2.05% Notes, Series CAD, due October 7, 2030. The net proceeds of this offering were used for general corporate purposes, including investing in our broadband network and other capital investment consistent with our growth strategy, and repayment of commercial paper.

- In connection with our acquisitions of CCC and AFS, we repaid other long-term debt acquired of $185 million and $118 million, respectively.

In comparison, in 2019, long-term debt issues, net of redemptions and repayment, were $2,444 million and were primarily composed of:

- A net increase in commercial paper outstanding, including foreign exchange effects, of $241 million from a balance of $774 million (US$569 million) at December 31, 2018.

- An increase in net draws on the TI credit facility, including foreign exchange effects, of $12 million. As at December 31, 2018, net draws were US$313 million.

- The April 3, 2019 issue of $1.0 billion of senior unsecured 3.30% Notes, Series CY, due May 2, 2029.

- The May 28, 2019 issue of US$500 million of senior unsecured 4.30% Notes, due June 15, 2049.

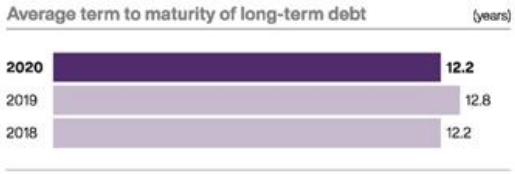
- The July 2, 2019 issue of $800 million of senior unsecured 2.75% Notes, Series CZ, due July 8, 2026.

- The December 16, 2019 issues of $600 million of senior unsecured 3.15% Notes, Series CAA, due February 19, 2030 and $400 million of senior unsecured 3.95% Notes, Series CAB, due February 16, 2050.

- The early full redemption of $1 billion of 5.05% Notes, Series CH, due July 23, 2020. The long-term debt prepayment premium was $28 million before income taxes.

The average term to maturity of our long-term debt (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt) was approximately 12.2 years as at December 31, 2020, decreasing from approximately 12.8 years as at December 31, 2019. Additionally, the weighted average cost of our long-term debt (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt) was 3.80% as at December 31, 2020, a decrease from 3.94% as at December 31, 2019.





Shares of subsidiary issued to non-controlling interests

In 2020, our TI subsidiary issued shares to non-controlling interests related to our acquisitions of CCC and Lionbridge AI.

Other

In 2020, we incurred certain debt issuance costs in connection with our issues of $600 million of Series CAC notes, $400 million of Series CAB notes and $500 million of Series CAD notes. Additionally, in connection with our issue of 57.5 million Common Shares in the first quarter of 2020, we incurred certain equity issuance costs. TI also incurred certain costs for amending and expanding the TI credit facility.

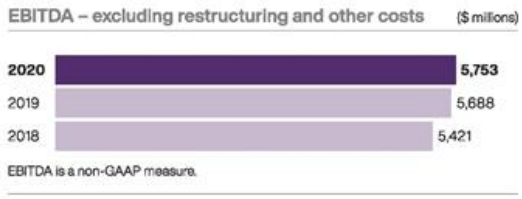
7.5 Liquidity and capital resource measures

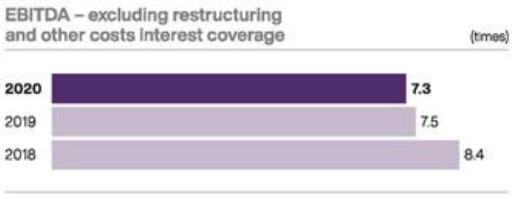
Net debt was $19.8 billion at December 31, 2020, an increase of $1.6 billion compared to one year earlier, resulting mainly from an increase in net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TI credit facility, the May 2020 issuances of $600 million of Series CAC notes and the re-opening of $400 million of Series CAB notes, and the October 2020 issuance of $500 million of Series CAD notes, all as described in *Section 7.4*. These factors were partially offset by the early redemptions of Series CM notes and Series CO notes described in *Section 7.4*, a decrease in commercial paper outstanding and higher Cash and temporary investments.

Fixed-rate debt as a proportion of total indebtedness excludes lease liabilities and other long-term debt, and was 89% as at December 31, 2020, down from 92% one year earlier, mainly due to: (i) an increase in net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TI credit facility, which is non-recourse to TELUS Corporation; and (ii) the early redemptions of Series CM notes and Series CO notes described in *Section 7.4*. These factors were partly offset by: (i) the May 2020 issuances of $600 million of Series CAC notes and the re-opening of $400 million of Series CAB notes, and the October 2020 issuance of $500 million of Series CAD notes, all as described in *Section 7.4*; and (ii) a decrease in commercial paper outstanding, which is classified as floating-rate debt in this calculation.

Net debt to EBITDA – excluding restructuring and other costs ratio was 3.45 times, as measured at December 31, 2020, up from 3.20 times one year earlier. Our long-term objective for this measure is within a range of 2.20 to 2.70 times, which we believe is consistent with maintaining investment grade credit ratings in the range of BBB+, or the equivalent, and providing reasonable access to capital. As at December 31, 2020, this ratio remains outside of the long-term objective range due to prior issuances of incremental debt, primarily due to business acquisitions, partially offset by growth in EBITDA – excluding restructuring and other costs. EBITDA growth was reduced by impacts from the COVID-19 pandemic. As at December 31, 2020, business acquisitions over the past 12 months increased the ratio by approximately 0.45 and the acquisition of spectrum licences increased the ratio by approximately 0.20. Our recent acquisitions of spectrum licences have more than doubled our national spectrum holdings and represent an investment to extend our network capacity to support continuing data consumption growth, as well as growth in our wireless subscriber base. Given the cash demands of the 2019 600 MHz and upcoming spectrum auctions and the inability to predict impacts of the COVID-19 pandemic, the assessment of the guideline and return to the objective range remains to be determined; however, it is our intent to return to a ratio below 2.70 times in the medium term (following upcoming 2021, 2022 and 2023 spectrum auctions), consistent with our long-term strategy. While this ratio exceeds our long-term objective range, we are well in compliance with the leverage ratio covenant in our credit facilities, which states that we may not permit our leverage ratio to exceed 4.25 to 1.00 at December 31, 2020 (see *Section 7.6 Credit facilities*). As set out in *Note 28(d)* of the Consolidated financial statements, in February 2021, TELUS International made an IPO of TI Subordinate Voting Shares; both TELUS Corporation and a TELUS

International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6 billion from the offering were used to reduce the amount of outstanding TI credit facility indebtedness and $0.2 billion (comprised of net proceeds on disposition of TI Subordinate Voting Shares by TELUS Corporation) from the offering was included in Cash and temporary investments, net; had such reduction, and inclusion, respectively, been made at December 31, 2020, the pro forma net debt to EBITDA – excluding restructuring and other costs ratio would have been 3.30 times.





Liquidity and capital resource measures

As at, or years ended, December 31	**2020**	2019	Change
Components of debt and coverage ratios[1] ($ millions)			
Net debt	**19,826**	18,199	1,627
EBITDA – excluding restructuring and other costs	**5,753**	5,688	65
Net interest cost	**792**	755	37
Debt ratios			
Fixed-rate debt as a proportion of total indebtedness (excluding lease liabilities and other long-term debt) (%)	**89**	92	(3)pts.
Average term to maturity of long-term debt (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt) (years)	**12.2**	12.8	(0.6)
Weighted average interest rate on long-term debt (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt) (%)	**3.80**	3.94	(0.14)pts.
Net debt to EBITDA – excluding restructuring and other costs [1] (times)	**3.45**	3.20	0.25
Coverage ratios[1] **(times)**			
Earnings coverage	**3.2**	4.0	(0.8)
EBITDA – excluding restructuring and other costs interest coverage	**7.3**	7.5	(0.2)
Other measures[1] **(%)**			
Determined using management measures			
Common Share dividend payout ratio – net of dividend reinvestment plan effects	**67**	115	(48)pts.
Determined using most comparable IFRS-IASB measures			
Ratio of Common Share dividends declared to cash provided by operating activities less capital expenditures (excluding spectrum licences)	**84**	133	(49)pts.

1 See *Section 11.1 Non-GAAP and other financial measures.*

Earnings coverage ratio for 2020 was 3.2 times, down from 4.0 times one year earlier. A decrease in income before borrowing costs and income taxes reduced the ratio by 0.7, while an increase in borrowing costs reduced the ratio by 0.1.

EBITDA – excluding restructuring and other costs interest coverage ratio for 2020 was 7.3 times, down from 7.5 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.1, while an increase in net interest costs reduced the ratio by 0.3.

Common Share dividend payout ratios: Actual Common Share dividend payout decisions will continue to be subject to our Board's assessment of our financial position and outlook, as well as our long-term Common Share dividend payout objective range of 60 to 75% of prospective free cash flow. Commencing in 2020, so as to be consistent with the way we manage our business, we updated our revised Common Share dividend payout ratio presented to be a historical measure calculated as the sum of the most recent four quarters' dividends declared for Common Shares, as recorded in the financial statements, net of dividend reinvestment plan effects, divided by the sum of the most recent four quarters' free cash flow amounts for interim reporting periods. For fiscal years, the denominator is annual free cash flow (free cash flow is a non-GAAP measure, see *Section 11.1*). The historical measure for the 12-month period ended December 31, 2020 is presented for illustrative purposes in evaluating our target guideline. During the year ended December 31, 2020, the historical measure of our Common Share dividend payout ratio was within the objective range as a result of the discounted DRISP participation level.

TELUS International intends to retain all available funds and any future earnings to support operations and to finance the growth and development of its business. As such, TELUS International does not intend to declare or pay cash dividends on the TI Subordinate Voting Shares in the foreseeable future.

7.6 Credit facilities

At December 31, 2020, we had over $1.5 billion of liquidity available from the TELUS revolving credit facility and $155 million of liquidity available from the TI credit facility with a syndicate of financial institutions (excluding TELUS Corporation). In addition, we had $400 million available under our trade

receivables securitization program (see *Section 7.7 Sale of trade receivables*). We are well within our objective of generally maintaining at least $1.0 billion of available liquidity.

TELUS revolving credit facility

We have a $2.25 billion (or U.S. dollar equivalent) unsecured revolving credit facility with a syndicate of financial institutions, expiring May 31, 2023. The revolving credit facility is used for general corporate purposes, including the backstop of commercial paper, as required.

TELUS revolving credit facility at December 31, 2020

($ millions)	Expiry	Size	Drawn	Outstanding undrawn letters of credit	Backstop for commercial paper program	Available liquidity
Revolving credit facility[1]	May 31, 2023	2,250	—	—	(731)	1,519

1 Canadian dollars or U.S. dollar equivalent.

Our revolving credit facility contains customary covenants, including a requirement that we not permit our consolidated leverage ratio to exceed 4.25 to 1.00 and that we not permit our consolidated coverage ratio to be less than 2.00 to 1.00 at the end of any financial quarter. As at December 31, 2020, our consolidated leverage ratio was 3.45 to 1.00 and our consolidated coverage ratio was 7.26 to 1.00. These ratios are expected to remain well within the covenants. There are certain minor differences in the calculation of the leverage ratio and coverage ratio under the revolving credit facility, as compared with the calculation of Net debt to EBITDA – excluding restructuring and other costs and EBITDA – excluding restructuring and other costs interest coverage. Historically, the calculations have not been materially different. The covenants are not impacted by revaluation, if any, of Property, plant and equipment, Intangible assets or Goodwill for accounting purposes. Continued access to our credit facilities is not contingent on maintaining a specific credit rating.

Commercial paper

TELUS Corporation has an unsecured commercial paper program, which is backstopped by our revolving credit facility, enabling us to issue commercial paper up to a maximum aggregate amount at any one time of $1.4 billion as at December 31, 2020. Foreign currency forward contracts are used to manage currency risk arising from issuing commercial paper denominated in U.S. dollars. The commercial paper program is to be used for general corporate purposes, including, but not limited to, capital expenditures and investments. Our ability to reasonably access the commercial paper market in the U.S. is dependent on our credit ratings (see *Section 7.8 Credit ratings*).

TELUS International credit facility

As at December 31, 2020, TELUS International (Cda) Inc. had a credit facility, secured by its assets, expiring on January 28, 2025, with a syndicate of financial institutions and, joined in 2020, by TELUS Corporation. The TI credit facility is comprised of US$620 million (TELUS Corporation up to a 12.5% lender) and US$230 million revolving components and amortizing US$600 million (TELUS Corporation as 12.5% lender) and US$250 million term loan components. The TI credit facility is non-recourse to TELUS Corporation. The outstanding revolving components and term loan components had a weighted average interest rate of 2.90% as at December 31, 2020.

As set out in *Note 28(d)* of the Consolidated financial statements, in February 2021, TELUS International made an IPO of TI Subordinate Voting Shares; both TELUS Corporation and a TELUS International non-controlling shareholder individually also offered TI Subordinate Voting Shares in conjunction with the IPO. Through February 11, 2021, net proceeds of approximately $0.6 billion (US$0.5 billion) from the offering were used to reduce the amount of outstanding TI credit facility indebtedness.

Other letter of credit facilities

At December 31, 2020, we had $190 million of letters of credit outstanding issued under various uncommitted facilities; such letter of credit facilities are in addition to the ability to provide letters of credit pursuant to our committed bank credit facility. Available liquidity under various uncommitted letters of credit facilities was $131 million at December 31, 2020.

7.7 Sale of trade receivables

TELUS Communications Inc., a wholly owned subsidiary of TELUS, is a party to an agreement with an arm's-length securitization trust associated with a major Schedule I Canadian bank, under which it is able to sell an interest in certain trade receivables for an amount up to a maximum of $500 million. The agreement is in effect until December 31, 2021, and available liquidity was $400 million as at December 31, 2020. (See *Note 22* of the Consolidated financial statements.) Sales of trade receivables in securitization transactions are recognized as collateralized Short-term borrowings and thus do not result in our de-recognition of the trade receivables sold.

TELUS Communications Inc. is required to maintain a credit rating of at least a BB by DBRS Ltd. or the securitization trust may require the sale program to be wound down prior to the end of the term. The minimum credit rating was exceeded as of February 11, 2021.

7.8 Credit ratings

There were no changes to our investment grade credit ratings during 2020 or as of February 11, 2021. We believe adherence to most of our stated financial policies (see *Section 4.3*), coupled with our efforts to maintain a constructive relationship with banks, investors and credit rating agencies, continue to provide reasonable access to capital markets. (See discussion of risks in *Section 10.13 Financing, debt and dividends*.)

7.9 Financial instruments, commitments and contingent liabilities

Financial instruments

Our financial instruments, their accounting classification and the nature of certain risks that they may be subject to are described in *Note 4* of the Consolidated financial statements. Our policies in respect of the recognition and measurement of financial instruments are described in *Note 1(c)* of the Consolidated financial statements.

		Risks				
				Market risks		
Financial instrument	Accounting classification	Credit	Liquidity	Currency	Interest rate	Other price
Measured at amortized cost						
Accounts receivable	AC[1]	X		X		
Contract assets	AC[1]	X				
Construction credit facilities advances to real estate joint venture	AC[1]				X	
Short-term borrowings	AC[1]		X	X	X	
Accounts payable	AC[1]		X	X		
Provisions (including restructuring accounts payable)	AC[1]		X	X		X
Long-term debt	AC[1]		X	X	X	
Measured at fair value						
Cash and temporary investments	FVTPL[2]	X		X	X	
Long-term investments (not subject to significant influence)[3]	FVTPL/FVOCI[3]			X		X
Foreign exchange derivatives[4]	FVTPL[2]	X	X	X		
Share-based compensation derivatives[4]	FVTPL[2]	X	X			X

1 For accounting recognition and measurement purposes, classified as amortized cost (AC).

2 For accounting recognition and measurement purposes, classified as fair value through net income (FVTPL). *Unrealized* changes in the fair values of financial instruments are included in net income unless the instrument is part of a cash flow hedging relationship. The effective portions of *unrealized* changes in the fair values of financial instruments held for hedging are included in other comprehensive income.

3 Long-term investments over which we do not have significant influence are measured at fair value if those fair values can be reliably measured. For accounting recognition and measurement purposes, on an investment-by-investment basis, long-term investments are classified as either fair value through net income or fair value through other comprehensive income (FVOCI).

4 Use of derivative financial instruments is subject to a policy which requires that no derivative transaction is to be entered into for the purpose of establishing a speculative or leveraged position (the corollary being that all derivative transactions are to be entered into for risk management purposes only) and sets criteria for the creditworthiness of the transaction counterparties.

Derivatives that are part of an established and documented cash flow hedging relationship are accounted for as held for hedging. We believe that classification as held for hedging results in a better matching of the change in the fair value of the derivative financial instrument with the risk exposure being hedged.

In respect of hedges of anticipated transactions, hedge gains/losses are included with the related expenditure and are expensed when the transaction is recognized in our results of operations. We have selected this method as we believe that it results in a better matching of the hedge gains/losses with the risk exposure being hedged.

Derivatives that are not part of a documented cash flow hedging relationship are accounted for as held for trading and thus are measured at fair value through net income.

Refer to *Note 4* of the Consolidated financial statements for further information regarding our financial instruments.

Commitments and contingent liabilities

Contractual obligations as at December 31, 2020

($ millions)	2021	2022	2023	2024	2025	2026 - 2030	Thereafter	Total

Short-term borrowings								
Interest obligations	1	—	—	—	—	—	—	1
Principal obligations[1]	100	—	—	—	—	—	—	100
	101	—	—	—	—	—	—	101
Long-term debt								
Interest obligations	677	627	586	558	486	1,763	4,117	8,804
Principal maturities	991	1,577	563	1,148	2,382	6,190	5,760	18,611
	1,658	2,204	1,149	1,706	2,868	7,953	9,877	27,415
Leases								
Interest obligations	71	54	47	40	33	109	91	445
Principal maturities	467	317	183	151	112	308	288	1,826
	538	371	230	191	145	417	379	2,271
Construction credit facilities commitment[2]	—	—	—	—	—	—	—	—
Occupancy costs[2]	124	114	106	92	72	166	80	754
Purchase obligations[3]								
Operating expenditures	1,435	459	153	172	200	969	177	3,565
Property, plant and equipment, and Intangible assets	273	8	6	4	—	—	—	291
	1,708	467	159	176	200	969	177	3,856
Non-interest bearing financial liabilities	2,669	74	8	8	9	12	—	2,780
Other obligations	65	2	8	1	50	62	60	248
Total	6,863	3,232	1,660	2,174	3,344	9,579	10,573	37,425

1 See *Section 7.7 Sale of trade receivables*.

2 Construction credit facilities reflect loan amounts for a real estate joint venture, a related party. Occupancy costs include transactions with real estate joint ventures. See *Section 7.11 Transactions between related parties.*

3 Where applicable, purchase obligations reflect foreign exchange rates at December 31, 2020. Purchase obligations include future operating and capital expenditures that have been contracted for at the current year-end and include the most likely estimates of prices and volumes, where necessary. As purchase obligations reflect market conditions at the time the obligation was incurred for the items being purchased, they may not be representative of future years. Obligations from personnel supply contracts and other such labour agreements have been excluded.

Claims and lawsuits

A number of claims and lawsuits (including class actions and intellectual property infringement claims) seeking damages and other relief are pending against us and, in some cases, other wireless carriers and telecommunications service providers. As well, we have received notice of, or are aware of, certain possible claims (including intellectual property infringement claims) against us and, in some cases, other wireless carriers and telecommunications service providers. (See the related risk discussion in *Section 10.16 Litigation and legal matters*.)

It is not currently possible for us to predict the outcome of such claims, possible claims and lawsuits due to various factors, including: the preliminary nature of some claims; uncertain damage theories and demands; an incomplete factual record; uncertainty concerning legal theories and procedures and their resolution by the courts, at both the trial and the appeal levels; and the unpredictable nature of opposing parties and their demands.

However, subject to the foregoing limitations, management is of the opinion, based upon legal assessments and information presently available, that it is unlikely that any liability, to the extent not provided for through insurance or otherwise, would have a material effect on our financial position and the results of our operations, including cash flows, with the exception of the items disclosed in *Note 29(a)* of the Consolidated financial statements. This is a significant judgment for us (see *Section 8.1 Critical accounting estimates and judgments*).

Indemnification obligations

In the normal course of operations, we provide indemnification in conjunction with certain transactions. The terms of these indemnification obligations range in duration. These indemnifications would require us to compensate the indemnified parties for costs incurred as a result of failure to comply with contractual obligations, or litigation claims or statutory sanctions, or damages that may be suffered by an indemnified party. In some cases, there is no maximum limit on these indemnification obligations. The overall maximum amount of an indemnification obligation will depend on future

events and conditions and therefore cannot be reasonably estimated. Where appropriate, an indemnification obligation is recorded as a liability. Other than obligations recorded as liabilities at the time of the related transactions, historically we have not made significant payments under these indemnifications.

As at December 31, 2020, we had no liability recorded in respect of our indemnification obligations.

7.10 Outstanding share information

Outstanding shares (millions)	December 31, 2020	January 31, 2021
Common Shares	1,291	1,297
Common Share options	3	3
Restricted share units – equity-settled	8	8

7.11 Transactions between related parties

Transactions with key management personnel

Our key management personnel have authority and responsibility for overseeing, planning, directing and controlling our activities and consist of our Board of Directors and our Executive Leadership Team. Total compensation expense for key management personnel was $40 million in 2020, compared to $53 million in 2019. The decrease in compensation expense for key management personnel was due to greater share-based compensation in 2019. See *Note 30(a)* of the Consolidated financial statements for additional details.

Transactions with defined benefit pension plans

We provided management and administrative services to our defined benefit pension plans. Charges for these services were on a cost recovery basis and were immaterial.

Transactions with real estate joint ventures and associates

In 2020, we had transactions with the TELUS Sky real estate joint venture, which is a related party to us, as set out in *Note 21* of the Consolidated financial statements.

For the TELUS Sky real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2021 (approximately $17 million at December 31, 2020) and construction financing ($342 million, with Canadian financial institutions as 66-2/3% lender and TELUS as 33-1/3% lender) under a credit agreement maturing August 31, 2021. We have entered into a lease agreement with the TELUS Sky real estate joint venture; for lease accounting purposes, the lease commenced during the three-month period ended March 31, 2019.

8. Accounting matters

8.1 Critical accounting estimates and judgments

Our significant accounting policies are described in *Note 1* of the Consolidated financial statements for the year ended December 31, 2020. The preparation of financial statements in conformity with generally accepted accounting principles (GAAP) requires management to make estimates, assumptions and judgments that affect: the reported amounts of assets and liabilities at the date of the financial statements; the disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts and classification of income and expense during the reporting period. Actual results could differ from those estimates. Our critical accounting estimates and significant judgments are generally discussed with the Audit Committee each quarter.

Refer to *Note 1* of the Consolidated financial statements for further information on our critical accounting estimates, including examples of the significant estimates and judgments that we make, and their relative significance and degree of difficulty, as illustrated in the graphic included in *Note 1*.

General

- In determining our critical accounting estimates, we consider trends, commitments, events or uncertainties that we reasonably expect to materially affect our methodology or assumptions. Our statements in this MD&A regarding such consideration are made subject to the *Caution regarding forward-looking statements*.
- In the normal course, we make changes to assumptions underlying all critical accounting estimates so that they reflect current economic conditions, updated historical information used to develop the assumptions, and changes in our credit ratings, where applicable. Unless indicated otherwise in the discussion below, we expect that no material changes in overall financial performance and financial statement line items would arise either from reasonably likely

changes in material assumptions underlying the estimate or from selection of a different estimate from within a range of valid estimates.

- Our critical accounting estimates affect the Consolidated statements of income and other comprehensive income, and the Consolidated statements of financial position, as follows:

	Consolidated statements of income and other comprehensive income						
		Operating expenses					
Consolidated statements of financial position	Operating revenues and other income	Goods and services purchased	Employee benefits expense	Depreciation	Amortization of intangible assets	Financing costs	Employee defined benefit plans re-measurements[1]
Intangible assets, net, and Goodwill, net					X[2]		
Employee defined benefit pension plans			X	X[3]	X[3]	X	X
Property, plant and equipment, net				X			
Provisions for asset retirement obligations		X		X		X	

Provisions related to business combinations	X				X
Investments	X				
Accounts receivable		X			
Contract assets	X	X			
Inventories		X			

1 Other comprehensive income – Item never subsequently reclassified to income.
2 Accounting estimate, as applicable to Intangible assets with indefinite lives and Goodwill, primarily relates to spectrum holdings and accordingly affects our wireless cash-generating unit.
3 Accounting estimate impact due to internal labour capitalization rates.

- All critical accounting estimates are uncertain at the time an estimate is made and affect the following Consolidated statements of income and other comprehensive income line items: Income taxes (except for estimates about Goodwill) and Net income. Similarly, all critical accounting estimates affect the following Consolidated statements of financial position line items: Current assets (Income and other taxes receivable), Current liabilities (Income and other taxes payable), Deferred income taxes and Common equity (retained earnings) and Non-controlling interests. The discussion of each critical accounting estimate does not differ between our two segments, wireless and wireline, unless explicitly noted.

Intangible assets, net; Goodwill, net; and Property, plant and equipment, net

General

- The Intangible assets, net, line item represents approximately 35% of Total assets as at December 31, 2020 (34% as at December 31, 2019). Included in Intangible assets are spectrum licences, which represent approximately 23% of Total assets as at December 31, 2020 (26% as at December 31, 2019).

- The Goodwill, net, line item represents approximately 17% of Total assets as at December 31, 2020 and approximately 14% of Total assets as at December 31, 2019.

- The Property, plant and equipment, net, line item on our Consolidated statements of financial position represents approximately 35% of Total assets as at December 31, 2020 and approximately 37% of Total assets as at December 31, 2019.

- If our estimates of the useful lives of assets were incorrect and/or our estimates of the acquisition-date fair value of property, plant, equipment and intangible assets acquired in business combinations were incorrect, we could experience increased or decreased charges for amortization or depreciation in the future. If the future were to differ adversely from our best estimate of key economic assumptions and associated cash flows were to materially decrease, we could potentially experience future material impairment charges in respect of our Property, plant and equipment assets, Intangible assets or Goodwill. If Intangible assets with indefinite lives were determined to have finite lives at some point in the future, we could experience increased charges for amortization of Intangible assets. Such charges in and of themselves do not result in a cash outflow and would not immediately affect our liquidity.

The recoverability of Intangible assets with indefinite lives; *the recoverability of Goodwill*

- The carrying values of Intangible assets with indefinite lives and Goodwill are periodically tested for impairment, and this test represents a significant estimate for us.

- The recoverable amounts of the cash-generating units' assets have been determined based on a fair value less costs of disposal calculation. There is a material degree of uncertainty with respect to the estimates of the recoverable amounts of the cash-generating units' assets, given the necessity of making key economic assumptions about the future. The fair value less costs of disposal calculation uses future cash flows and growth projections (including judgments about the allocation of future capital expenditures to support both wireless and wireline operations); associated economic risk assumptions and estimates of the likelihood of achieving key operating metrics and drivers; estimates of future generational infrastructure capital expenditures; and the future weighted average cost of capital.

- See *Note 18(f)* of the Consolidated financial statements for further discussion of methodology and sensitivity testing.

The estimated useful lives of assets; the recoverability of tangible assets

- The estimated useful lives of assets are determined by a continuing program of asset life studies. The recoverability of assets with finite lives is significantly impacted by the estimated useful lives of assets.

- Assumptions underlying the estimated useful lives of assets include the timing of technological obsolescence, competitive pressures and future infrastructure utilization plans.

Employee defined benefit pension plans

Certain actuarial and economic assumptions used in determining defined benefit pension costs, accrued pension benefit obligations and pension plan assets

- We review industry practices, trends, economic conditions and data provided by actuaries when developing assumptions used in the determination of defined benefit pension costs and accrued pension benefit obligations. Pension plan assets are generally valued using market prices; however, some assets are valued using market estimates when market prices are not readily available. Actuarial support is obtained for interpolations of experience gains and losses that affect the employee defined benefit plan actuarial gains and losses and accrued pension benefit obligations. The discount rate used to determine the accrued benefit obligation is based upon the yield on long-term, high-quality, fixed-term investments. The discount rate is set annually at the end of each calendar year, at a minimum, based upon yields on long-term corporate bond indices in consultation with actuaries. Future increases in compensation are based upon the current benefits policies and economic forecasts. We have examined our respective pension obligation and current service cost durations and observed an approximate 10-year difference in duration. As individual discount rates more accurately reflect the obligation and current service cost, commencing in 2016, we applied a dual discount rate methodology.

- On an annual basis, at a minimum, the defined benefit pension plan assumptions are assessed and revised as appropriate. Assumptions used in determining defined benefit pension costs, accrued pension benefit obligations and pension plan assets include life expectancy, discount rates, market estimates and rates of future compensation increases. Material changes in overall financial performance and financial statement line items would arise from reasonably likely changes in the material assumptions underlying this estimate, since certain assumptions may have been revised to reflect updated historical information and updated economic conditions. See *Note 15* of the Consolidated financial statements for further analysis.

- This accounting estimate related to employee defined benefit pension plans is in respect of components of the Operating expenses line item, Financing costs line item and Other comprehensive income line item on our Consolidated statements of income and other comprehensive income. If the future were to adversely differ from our best estimate of assumptions used in determining defined benefit pension costs, defined benefit obligations accrued and pension plan assets, we could experience future increased (or decreased) defined benefit pension expense, financing costs and charges to Other comprehensive income.

Income tax assets and liabilities

The amount and composition of income tax assets and income tax liabilities, including the amount of unrecognized tax benefits

- Assumptions underlying the composition of income tax assets and liabilities are based upon an assessment of the technical merits of tax positions. Income tax benefits on uncertain tax positions are recognized only when it is more likely than not that the ultimate determination of the tax treatment of a position will result in the related benefit being realizable; however, this does not mean that tax authorities cannot challenge these positions. Income tax assets and liabilities are measured at the amount that is expected to be realized or incurred upon ultimate settlement with taxation authorities. Such assessments are based upon the applicable income tax legislation, regulations, interpretations and jurisprudence, all of which in turn are subject to change and interpretation.

- Current income tax assets and liabilities are estimated based upon the amount of income tax that is calculated as being owed to taxation authorities, net of periodic instalment payments. Deferred income tax liabilities are composed of the tax effect of temporary differences between the carrying amount and tax basis of assets and liabilities, as well as the income tax effect of undeducted income tax losses. The timing of the reversal of temporary differences is estimated and the income tax rate substantively enacted for the periods of reversal is applied to the temporary differences. The carrying amounts of assets and liabilities are based upon the amounts recorded in the financial statements and are, therefore, subject to accounting estimates that are inherent in those balances. The tax basis of assets and liabilities, as well as the amount of undeducted income tax losses, are based upon the assessment and measurement of tax positions, as noted above. Assumptions as to the timing of reversal of temporary differences include expectations about the future results of operations and future cash flows. The composition of income tax liabilities is reasonably likely to change from period to period because of changes in the estimation of these significant uncertainties.

- This accounting estimate is in respect of material asset and liability line items on our Consolidated statements of financial position comprising less than 1% of Total assets as at December 31, 2020 and 2019, and approximately 9% of Total liabilities and owners' equity as at December 31, 2020 and 2019. If the future were to adversely differ from our best estimate of the likelihood of tax positions being sustained, the amount of tax expected to be incurred, the future results of operations, the timing of reversal of deductible temporary differences and taxable temporary differences, and the tax rates applicable to future years, we could experience material current income tax adjustments and deferred income tax adjustments. Such current and deferred income tax adjustments could result in an increase or acceleration of cash outflows at an earlier time than might otherwise be expected.

Provisions for asset retirement obligations

Certain economic assumptions used in provisioning for asset retirement obligations

- Asset retirement obligation provisions are recognized for statutory, contractual or legal obligations, normally when incurred, associated with the retirement of Property, plant and equipment (primarily certain items of outside plant and wireless site equipment) when those obligations result from the acquisition, construction, development and/or normal operation of the assets. The obligations are measured initially at fair value, determined using present value methodology, and the resulting costs are capitalized as a part of the carrying value of the related asset.

- On an annual basis, at a minimum, assumptions underlying the provisions for asset retirement obligations include expectations about inflation, discount rates and any changes in the amount or timing of the underlying future cash flows, which may span numerous decades. Material changes in financial position would arise from reasonably likely changes in the material assumptions underlying this estimate, since certain assumptions may have been revised to reflect updated historical information and updated economic conditions. The capitalized asset retirement cost is depreciated on the same basis as the related asset, and the discount accretion is included in the Consolidated statements of income and other comprehensive income as a component of Financing costs.

- This accounting estimate is in respect of the asset retirement obligations component of the Provisions line item on our Consolidated statements of financial position, and this component comprises approximately 2% of Total liabilities and owners' equity as at December 31, 2020 (1% as at December 31, 2019). If the provisions for asset retirement obligations were to be inadequate, we could experience a charge to Goods and services purchased in the future. A charge for an inadequate asset retirement obligation provision would result in a cash outflow proximate to the time that the asset retirement obligation is satisfied.

Provisions related to business combinations

Provisions for written put options

- In connection with certain business acquisitions, we have established provisions for written put options in respect of non-controlling interests. We provide written put options to the remaining selling shareholders under which they could put the remaining non-controlling interests at, or after, a specified date. The acquisition-date fair values of the puttable shares held by the non-controlling shareholders are recorded as provisions.

- On an annual basis, at a minimum, the provisions for written put options are assessed and revised as appropriate. The provisions for written put options have been determined based on the net present values of estimated future earnings results; there is a material degree of uncertainty with respect to the estimates of future earnings results, given the necessity of making significant economic assumptions about the future. The amounts of provisions for written put options are reasonably likely to change from period to period because of changes in the estimation of future earnings and foreign exchange rate movements.

- This accounting estimate is in respect of the provisions for written put options related to the non-controlling interests component of the Provisions line item on our Consolidated statements of financial position, and this component comprises less than 1% of Total liabilities and owners' equity as at December 31, 2020 (approximately 1% as at December 31, 2019). If the provisions for written put options were to be inadequate, we could experience a charge to

Other income in the future. A charge for an inadequate written put option provision would result in a cash outflow proximate to the time that the written put option is exercised.

Investments

The recoverability of long-term investments

- We assess the recoverability of our long-term investments on a regular, recurring basis. The recoverability of investments is assessed on a specific-identification basis, taking into consideration expectations about future performance of the investments and comparison of historical results to past expectations.

- The most significant assumptions underlying the recoverability of long-term investments are related to the achievement of future cash flow and operating expectations. Our estimate of the recoverability of long-term investments could change from period to period due to the recurring nature of the recoverability assessment and due to the nature of long-term investments (we do not control the investees).

- Investments are included in the Other long-term assets line item on our Consolidated statements of financial position, which itself comprises approximately 3% of Total assets as at December 31, 2020 (2019 – 2%). If the allowance for recoverability of long-term investments were to be inadequate, we could experience an increased charge to Other income or Other comprehensive income depending on the financial asset classification. Such a provision for recoverability of long-term investments does not result in a cash outflow.

Accounts receivable

General

- When determining our allowance for doubtful accounts, we consider the business area that gave rise to the Accounts receivable, conduct a statistical analysis of portfolio delinquency trends and perform specific account identification.

- These accounting estimates are in respect of the Accounts receivable line item and the Unbilled customer finance receivables line within the Other long-term assets line item on our Consolidated statements of financial position, which together comprise approximately 6% of Total assets as at December 31, 2020 and 2019. If the future were to differ adversely from our best estimates of the fair value of the residual cash flows and the allowance for doubtful accounts, we could experience an increase in doubtful accounts expense in the future. Such doubtful accounts expense in and of itself does not result in a cash outflow.

The allowance for doubtful accounts

- The estimate of our allowance for doubtful accounts could materially change from period to period because the allowance is a function of the balance and composition of Accounts receivable, which can vary on a month-to-month basis. The variability of the balance of Accounts receivable arises from the variability of the amount and composition of Operating revenues and Other income and from the variability of Accounts receivable collection performance.

Contract assets

General

- We maintain allowances for lifetime expected credit losses related to contract assets. Current economic conditions, historical information (including credit agency reports, if available), and the line of business from which the contract asset arose are all considered when determining impairment allowances. The same factors are considered when determining whether to write off amounts charged to the impairment allowance for contract assets against contract assets.

The impairment allowance

- These accounting estimates are in respect of the Contract assets line items on our Consolidated statements of financial position, which comprise approximately 2% of Total assets as at December 31, 2020 (2019 – 3%). If the future were to differ adversely from our best estimates of the fair value of the residual cash flows and the impairment allowance for contract assets, we could experience an increase in the impairment allowance for contract assets against contract assets in the future. Such impairment allowance in and of itself does not result in a cash outflow.

Inventories

The allowance for inventory obsolescence

- We determine our allowance for inventory obsolescence based upon expected inventory turnover, inventory aging, and current and future expectations with respect to product offerings.

- Assumptions underlying the allowance for inventory obsolescence include future sales trends and offerings and the expected inventory requirements and inventory composition necessary to support these future offerings. Our estimate of the allowance for inventory obsolescence could change materially from period to period due to changes in product offerings and the level of consumer acceptance of those products.

- This accounting estimate is in respect of the Inventories line item on our Consolidated statements of financial position, which comprises approximately 1% of Total assets as at December 31, 2020 and 2019. If the allowance for inventory obsolescence were to be inadequate, we could experience a charge to Goods and services purchased in the future. Such an inventory obsolescence charge does not result in a cash outflow.

8.2 Accounting policy developments

Refer to *Note 2* of the Consolidated financial statements for a description of current and future changes in accounting policies, including:

- Initial application of standards, interpretations and amendments to standards and interpretations in the reporting period.

- Standards, interpretations and amendments to standards and interpretations in the reporting period not yet effective and not yet applied.

9. General trends, outlook and assumptions, and regulatory developments and proceedings

This section contains forward-looking statements, which should be read together with the *Caution regarding forward-looking statements* at the beginning of this MD&A.

9.1 Telecommunications industry in 2020

We estimate that Canadian telecommunications industry revenues (including TV revenue and excluding media revenue) declined by approximately 2%. Wireless and data services continue to drive ongoing industry growth. Additionally, consumer communications and data consumption behaviours continue to demonstrate a strong preference for data-rich applications and data-intensive devices, including smartphones and tablets. However, this year, revenue growth across the telecommunications industry was limited by the impacts of the global pandemic.

TELUS reported Operating revenues and Other income of $15.5 billion, with wireless products and services representing 51% of our total Operating revenues and Other income. In our wireline business, growth in customer care and business services (CCBS) solutions, internet and third wave data services, home and business security, and TV, all inclusive of acquisitions, more than offset the decline in demand for legacy voice and legacy data services.

Wireless

We estimate that in 2020, the Canadian wireless industry experienced network revenue declines of approximately 4.4% and adjusted EBITDA declines of approximately 3.7% which we believe were attributed to the pandemic. TELUS wireless network revenue reduction was 1.5%, and TELUS wireless Adjusted EBITDA declined by 1.0%.

We estimate that the Canadian wireless industry added approximately 1.1 million new subscribers in 2020, inclusive of TELUS' mobile phone net additions of 280,000, compared to approximately 1.9 million in 2019. This was supported by immigration and population growth; the trend toward multiple devices, including tablets; the expanding functionality of data and related applications; and the adoption of mobile devices and services by both younger and older generations. However, various forms of public health measures during the global health crisis, including the temporary closure of retail stores, hampered the growth of new wireless subscribers. The wireless penetration rate increased to approximately 94% in Canada in 2020, with further increases in penetration expected in 2021. By comparison, the wireless penetration rate in the U.S. is well over 100%, while in Europe and Asia it is even higher, suggesting an opportunity for continued growth in Canada.

The 2020 wireless market in Canada was challenged by the pandemic. Growth in blended average billing per subscriber unit per month (ABPU) had been moderating as carriers migrated their customer bases to unlimited data and device financing plans. However, ABPU moderation was

exacerbated by the pandemic as wireless industry roaming revenue significantly declined from customers' reduced travel activity. Additionally, with large numbers of the workforce working from home during the pandemic, there were associated declines in chargeable usage from workers offloading their mobile device traffic onto Wi-Fi. The Canadian wireless market also experienced increased levels of competition nationally. This high level of competition has led to continued declines in chargeable data usage and larger allotments of data, in addition to other factors, such as: the popularity of data sharing plans; more frequent customer-friendly data usage notifications; and an evolving customer mix shift towards non-traditional wireless devices and tools such as video chats. These factors, combined with increases in overall data usage, which is expected to increase dramatically with the ongoing commercialization of 5G, led to widespread adoption and promotion of unlimited data plans and device financing plans by all national players. Our ongoing multi-year investments in technology and infrastructure have proven

foundational to the robust connectivity supporting more Canadians, as usage patterns evolved due to the pandemic. Our long-standing commitment to network excellence is reflected in multiple independent third-party awards and recognitions in 2020, including U.K.-based Opensignal, and U.S.-based Ookla, each received for four consecutive years, and Canadian-based Tutela, won two years in a row.

We continue to work diligently to better monetize robust growth in data services, while simultaneously delivering a strong value-for-money proposition and leading customer service to our customers. To this end, we are focusing intensely on profitable customer growth and strong ABPU performance through our consistent strategic execution of premium smartphone loading, which includes driving higher-value data and share plan adoption, as well as flexible product offerings including bundling our mobility and home services. Moreover, we are also focusing on the other levers available to us in an environment of moderating ABPU growth to ensure we continue to deliver on our wireless EBITDA growth objectives, including:

- Evolving our approach to wireless plans and device sales, through the simultaneous launch of our Peace of Mind endless data rate plans, TELUS Easy Payment device financing and TELUS Family Discount offerings, which have resulted in simplification for both customers and team members, while supporting growth in digital transactions and more recovery of handset costs
- Continuing to drive volume growth through high-quality loading on the back of strong ongoing industry growth
- Seeking new sources of wireless revenue, such as Internet of Things (IoT) or Internet of Everything, machine-to-machine (M2M) and security applications
- Exploring and securing new channel strategies associated with attractive economic characteristics
- Pursuing smart bundling opportunities across wireless and wireline to achieve better economies of scope and enhance lifetime revenue per customer
- Working persistently to enhance the efficiency of the flow from revenue to EBITDA, or the flow from ABPU to average margin per subscriber unit per month (AMPU), in order to buttress and enhance our operating margins, including ongoing efficiency and effectiveness initiatives.

The Canadian wireless industry continues to be highly competitive and capital-intensive, with carriers continuing to expand and enhance their broadband wireless networks, including material investments in spectrum.

Wireline

Similar to the Canadian wireless industry, wireline markets and operations were significantly affected by the pandemic. Physical distancing requirements impacted traditional wireline installations as installers were not entering customers' premises. Conversely, with large numbers of workers and students working and learning from home, demand for wireline services surged, with traffic levels reaching historic levels during the pandemic. Although the consumer high-speed internet market is maturing, with a penetration rate of approximately 88% in both Western Canada and across Canada at the end of 2020, subscriber growth is expected to continue over the coming years. The four major cable-TV companies had an estimated 7.17 million internet subscribers at the end of 2020 (49% market share), up 2% from approximately 7.0 million at the end of 2019. Telecommunications companies had approximately 7.25 million internet subscribers (50% market share), up 4% from approximately 7.0 million at the end of 2019. We continue to make moderate gains in market share as a result of the expansion of our TELUS PureFibre infrastructure and the pull-through of subscribers from our IP-based TELUS TV service including bundling of our mobility and home services, as well as significant growth in home security and automation. Our ongoing focus on fibre to the premises or home (FTTP/FTTH) has allowed us to connect approximately 2.5 million households and businesses in B.C., Alberta and Eastern Quebec (representing approximately 81% of our total high-speed broadband footprint) at December 31, 2020 to our TELUS PureFibre technology. Additionally, we received recognition from PCMag being the fastest internet service provider (ISP) in Canada among major ISPs.

While Canadians still watch conventional TV, digital platforms are playing an increasingly important role in the broadcasting industry and in respect of content. Popular online video services are providing Canadians with more choice about where, when and how to access video content. In 2020, Canadian IP TV providers increased their subscriber base by an estimated 3% to 3.0 million, or 30% of market share, up from 28% at the end of 2019, as a result of expanded network coverage, enhanced differentiated service offerings, and marketing and promotions focused on IP TV. Despite this IP TV growth, the combined cable-TV and satellite-TV subscriber penetration rate declined. We estimate that the four major cable-TV companies had approximately 5.0 million TV subscribers or a 48% market share at the end of 2020, a decrease from 49% at the end of 2019. The balance of industry subscribers were served by satellite-TV and regional providers.

In recent years, three of the largest Canadian cable-TV companies have launched new TV services based on the Comcast X1 TV platform, including Shaw, Rogers and most recently Quebecor's Videotron brand. Our IP-based Optik TV platform continues to offer numerous service advantages over this cable platform, including: flexible pricing plans and packaging available to all customers; picture clarity and quality; content depth and breadth; and the number of ways

customers can access content, including wireless set-top boxes, Restart TV, higher-capacity PVR and the Optik TV app, which offers more than twice as many live TV channels at home or on the go compared to our largest Western Canadian cable competitor. Notably, we are the only Canadian TV service provider offering both 4K HDR live channels and 4K HDR on-demand movies, including the latest Hollywood blockbusters and the latest movies and series from Netflix, which has named TELUS' PureFibre network the number one network for streaming Netflix for 17 consecutive months prior to the start of the COVID-19 pandemic (based on the Netflix ISP Speed Index rankings for Canadian providers released monthly, as of March 2020) and the only Canadian carrier to achieve the highest ratings for each month from August 2020 to December 2020 for the newly revamped index, as well as 4K sports content, more HD content, more on-demand content and more over-the-top (OTT) content with Netflix, YouTube, Prime Video (included in the Amazon Prime membership), hayu, TED Talks and the National Film Board of Canada. We are the multicultural content leader in Western Canada. We were also the first provider in Canada to offer Amazon Prime as a benefit to customers with select Optik TV theme packs and, for customers who are already Prime members, easy access to Prime Video through the app on their 4K Optik TV digital box.

The national Canadian telecom providers continue to acquire and otherwise develop capabilities in home security and automation. In the fourth quarter of 2019, we acquired ADT Security Services Canada, Inc., one of Canada's leading providers of security and automation solutions for residential and business customers, and in 2020, we continued acquiring other smaller home and business security companies. These acquisitions further our commitment to leverage the power of technology to bring state-of-the-art convenience, control and safety into the lives, homes and businesses of more Canadians. They also provide opportunities to offer attractive bundled solutions and advance our connected home strategy while accelerating our entry into smart home and automation solutions. Our SmartHome Security and TELUS Secure Business service offerings complement our industry-leading customer service and build on our strategy and commitment to leverage our world-leading wireless and PureFibre network, enabling us to enhance connected home, business, security, IoT, cybersecurity, smart buildings, smart cities and health services for customers in Canada.

Canada's four major cable-TV companies had an estimated base of approximately 3.3 million telephony subscribers at the end of 2020. This represents a national consumer market share of approximately 42%, relatively flat compared to 2019. Telecommunications companies had an estimated 3.8 million telephony subscribers at the end of 2020, representing approximately 49% of market share, relatively flat compared to 2019. Other non-facilities-based competitors also offer local and long distance voice over IP (VoIP) services and resell high-speed internet solutions. Technological substitution by wireless services is continuing to erode the number of residential voice subscribers and associated local and long distance revenues, as expected.

9.2 Telecommunications industry general outlook and trends

Wireless

Wireless growth continues to be driven by increasing data usage and adoption, including: higher-value smartphones, unlimited data offerings, shared family data plans and tablets, and growth in IoT and M2M devices. In addition, consumers continue to replace wireline access with wireless access and related data services. These trends are expected to continue to drive a growing demand for wireless data services for the foreseeable future. Industry ABPU is expected to continue growing at a more moderate rate than in recent years.

While LTE and LTE advanced (LTE-A) technologies increase download speeds, encourage data usage and improve the customer experience, growth in data traffic poses challenges to wireless access technology. To better manage this data traffic, Canadian providers continue to evolve their networks and deploy spectrum. Innovation, Science and Economic Development Canada (ISED) held its 600 MHz spectrum auction from March to April 2019. Further auctions for 3500 MHz spectrum are expected to start in June 2021, while we expect millimetre wave (mmWave) and 3800 MHz spectrum auctions in 2022 and 2023, respectively.

M2M and IoT technologies connect communications-enabled remote devices via wireless technologies, allowing them to exchange key information and share processes. Advanced platforms and networks are already in place in industries such as healthcare, utilities, agriculture and fleet management, with deployment ongoing in other industries, including vehicle insurance, retail, food services and consumer utilities. These and other industries are looking to IoT, combined with other applications, to generate value from their connections. IoT represents a meaningful opportunity for growth in mobility products and services, with secure connectivity, customer value and efficiency. While M2M applications generally have lower average revenue per subscriber unit per month (ARPU) when sold as a stand-alone product, they tend to generate high service volumes with low or no subsidy costs, thereby supporting both revenue growth and margins. In 2020, we added 257,000 mobile connected devices, bringing our connected device subscriber base to approximately 1.8 million, up 21% from 2019.

5G has begun to play a mainstream role in technology evolution and innovation globally, and is an important component of meeting Canada's and TELUS' efforts to further bridge the digital divide and connect rural Canadians.

Investing in 5G will drive capital expenditure savings by allowing us to provide high-speed internet services over wireless in less urban areas, as well as improved cost savings and innovative services in industrial automation, transportation and telehealth. Driven by significantly faster speeds, lower latencies, improved reliability and attractive economics, 5G will enable a host of new applications: for industries, 5G will enable remote operations, industrial control and manufacturing automation; for consumers, home automation, autonomous vehicles, and wireless-to-the-home connectivity with speeds comparable to wired access technologies; and for healthcare, converged solutions for hospitals, clinics and remote patient monitoring. 5G is essential to the future of a global digital economy, including that of Canada's, and is expected to generate significant innovation, growth and productivity. Mobile 5G wireless technology is up to 100 times faster than 4G technology.

Enabling a robust and reliable 5G experience for Canadians will require complementary wireless spectrum bands to support the needs of a diverse subscriber base and consist of a portfolio of low, mid and high-band spectrum. Low-band spectrum, such as 600 MHz, covers wide areas and penetrates well into buildings, thus improving coverage in urban and suburban areas. This low-band spectrum will play a vital role in bringing 5G to Canadians and as such, it is an important resource for Canada as wireless operators build out 5G in rural areas. High-band spectrum, such as mmWave, can enable speeds up to 100 times faster than 600 MHz spectrum; however, it does not have the same coverage characteristics to penetrate well into buildings. This high-bandwidth spectrum and the associated faster connection speeds will help unlock new technologies such as

virtual and augmented reality. Mid-band spectrum, such as 3500 MHz, is important to the 5G ecosystem as it is able to support both the coverage characteristics of low-band spectrum and the speed characteristics of mmWave spectrum, albeit at slightly lower speeds. This spectrum will be integral to low-latency communications services, including autonomous monitoring and vehicle-to-everything communication. Current trials show 3500 MHz is key for broader 5G coverage and is increasingly being used globally for 5G coverage. The 3500 MHz and 3800 MHz spectrum bands are globally recognized as key for 5G networks. All of the national carriers in Canada commenced rolling out their initial 5G services in 2020 and are expected to continue in the years ahead. See *Section 9.4 Communications industry regulatory developments and proceedings* for further details on upcoming spectrum auctions.

Wireline

The traditional wireline telecommunications market is expected to remain very competitive in 2021, as technology substitution – such as the broad deployment of higher-speed internet; the use of email, messaging and social media as alternatives to voice services; and the growth of wireless and VoIP services – continues to replace higher-margin legacy voice revenues. In our incumbent operating areas of B.C. and Alberta, it is estimated that, in 2020, 56% of households no longer have a fixed line and 35% of households no longer have a broadcast TV service. We are a key provider of these substitution services and the decline in this legacy business is continuing as expected, although residential voice losses continued to slow in 2020 reflecting our success of bundling our home solutions and services. Our long-standing growth strategy remains focused on wireless, data and IP-centric wireline capabilities.

The popularity of viewing TV and on-demand content anywhere, particularly on handheld devices, is expected to continue to grow as customers adopt services that enable them to view content on multiple screens. Streaming media providers continue to enhance OTT streaming services in order to compete for a share of viewership, as viewing habits and consumer demand evolve. Studies suggest that there were more than 23 million paid OTT video service subscriptions in Canada at the end of 2020, up 11% from 2019. The launch of streaming TV services is expected to continue in Canada, with the most recent launch being Disney+ in the fourth quarter of 2019.

Conventional TV content providers are monitoring OTT developments and evolving their content and market strategy to compete with these non-traditional offerings. Bell Media offers a content streaming service through its expanded Crave offering. We view OTT as an opportunity to add further capabilities to our linear and on-demand assets, providing customers with flexible options to choose the content they want and encourage greater customer use of TELUS high-speed internet and wireless services and to limit customer frustration by needing to have a multitude of subscriptions. We continue to enhance our Optik TV service by adding content and capabilities, including ultra-high-definition 4K content, and by entering into multicultural content and distribution deals with OTT content providers such as Netflix, Bell Media and Amazon Prime. TELUS continues to offer Pik TV, an attractive OTT-friendly basic TV offering that allows customers to access live TV and streaming services like Netflix and YouTube conveniently and affordably through Apple TV, internet browser or our Android and iOS mobile applications.

Consistent with facilities-based competition, telecommunications companies continue to make significant capital investments in broadband networks, with a focus on fibre to the premise (FTTP) to maintain and enhance their ability to support enhanced IP-based services and higher broadband speeds. Cable-TV companies continue to evolve their cable networks with DOCSIS-related bandwidth enhancements and node splitting. Although this platform increases speed in the near term and is cost-efficient, it does not offer the same advanced capabilities as FTTP over the longer term, such as fast symmetrical upload and download speeds. At the end of 2020, our fibre-optic infrastructure was available to approximately 2.5 million homes and businesses, reaching approximately 81% of our broadband footprint. Advances in

LTE wireless technology and our extensive LTE infrastructure also allow us to target otherwise underserved areas with a fixed wireless solution, and 5G is expected to enhance these capabilities.

Combining wireline local and long distance voice services with wireless and high-speed internet access and entertainment services, telecommunications companies can focus on offering bundled products to achieve competitive differentiation and provide customers with more flexibility and choice on networks that can reliably support these services. Our broadband investments, including the build-out of our FTTP broadband network and our premium differentiated IP-based Optik TV service, as well as lower-cost Pik TV service, home security and automation and integrated bundled service offerings which also encompass consumer healthcare and cybersecurity, continue to enhance our competitive position and customer loyalty relative to our main cable-TV competitor.

As the industry evolves to 5G wireless technologies in the coming years, we expect to be operating on, and providing services over, a more converged network. The lines between wireline access and wireless access will continue to blur, as the way we deliver services to customers – and the way our customers use those services – continues to evolve. As our broadband network continues to expand and 5G is further commercialized in the coming years, we expect to benefit from the flexibility of being able to select the most efficient way to deliver services across our footprint. We do not expect to have to build fibre to every home; instead, we believe that there will be opportunities to deliver services to some areas within our broadband footprint wirelessly with 5G.

A significant judgment we make is in respect of distinguishing between our wireless and wireline operations and cash flows (and this extends to allocations of both direct and indirect expenses and capital expenditures). The clarity of this distinction has been increasingly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure technology and operations. It has become increasingly difficult and impractical to objectively and clearly distinguish between our wireless and wireline operations and cash flows, and the assets from which those cash flows arise. Beginning in January 2021, we modified our reporting processes, systems and internal controls to accommodate the technology convergence-driven cessation of the historical distinction between our wireless and wireline operations at the level of regularly reported discrete performance measures that are provided to our chief operating decision-maker. We anticipate transitioning to a new segment reporting structure beginning with the release of our first quarter 2021 results (see *Section 5.1* for further details).

Additional wireline capabilities

In the business market (enterprise and small and medium-sized businesses, or SMB), the convergence of IT and telecommunications, facilitated by the ubiquity of IP, continues to shape the competitive environment, with non-traditional providers increasingly blurring the lines of competition and business models. Cable-TV companies continue to make investments to better compete in the highly contested SMB space. Telecommunications

companies like TELUS are providing network-centric managed applications that leverage their significant FTTP investments, while IT service providers are bundling network connectivity with their proprietary software as service offerings. While our business-to-business (B2B) line of business was dilutive to our EBITDA in 2019, we aggressively pursued opportunities in 2020 to stabilize this business; however, the pandemic negatively impacted our SMB customer base.

The development of IP-based platforms providing combined IP voice, data and video solutions creates potential cost efficiencies that compensate, in part, for the loss of margins resulting from the migration from legacy to IP-based services. New opportunities exist for integrated solutions, as well as business process and IT outsourcing, that could have a greater business impact than traditional telecommunications services. Data security represents both a challenge and an opportunity for TELUS to provide customers with our data security solutions. Increasingly, businesses are looking to partner with their communications service provider to address their business goals and challenges, and to tailor cloud-based solutions for their needs that leverage telecommunications in ways not imagined a decade ago. Cloud computing is changing service delivery to always-on and everything-as-a-service, and strong growth is expected in this area. TELUS offers Network as a Service capabilities for businesses with the option of an IT network as a service over the internet, mirrored across multiple locations, based on a self-serve platform that reduces deployment cycles and reliance on IT specialists. Our home and business security offerings in Western Canada are powered by our broadband network and integrate the latest smart devices to improve the lives of Canadians.

Healthcare is expected to be a continued area of strong growth in future years, based on an aging population in Canada, an increasing emphasis on chronic disease management, and the potential benefits that technology can deliver in terms of efficiency and effectiveness within the sector. Prior to the pandemic, the healthcare industry saw an emerging trend for physicians and other healthcare professionals to use smartphones and connected devices to access patient records from remote locations. Since the lockdown measures were put into place, adoption of healthcare technology has accelerated, as clinicians have adapted to primarily virtual and tele-medicine-based practices, resulting in the overall Canadian healthcare technology market growing at a double-digit pace and beyond what was initially predicted at the beginning of the year. The digitization of everyday functions within the healthcare ecosystem, combined with increased

broadband network connectivity, provides an opportunity to support the development and delivery of even more advanced health applications to benefit Canadians and improve health outcomes.

TELUS is leveraging our position as the leading end-to-end provider of digital healthcare in Canada and our expanding broadband network to increase access, integration and effectiveness of innovative healthcare tools and applications across the primary care ecosystem in order to continue positioning ourselves for anticipated strong continued growth. These tools span personal health records to empower self-management of healthcare data, electronic drug prescriptions with online insurance validation by the physician, and home health monitoring devices and data capture with caregiver oversight. Following the 2018 acquisition of Medisys Health Group Inc. (relaunched as part of TELUS Health Care Centres in 2020), we were able to provide virtual care services, and we further expanded those virtual care capabilities with the 2019 acquisition of Akira and the 2020 acquisition of EQ Care, allowing patients 24/7 bilingual and unlimited access to healthcare practitioners for the mental and physical care they need, from anywhere in the country. In the first quarter of 2019, TELUS Health also launched a future-forward virtual healthcare service called Babylon by TELUS Health, to further expand and revolutionize consumer access to healthcare. With innovative AI-powered preventative health app features (available in English and French) such as the Symptom Checker, Monitor and Health Check, users can get information about their health and, if required, speak directly with a licensed physician from the convenience of a smartphone, in multiple languages across B.C., Alberta, Saskatchewan and Ontario. In 2020, Babylon by TELUS Health also launched two physical clinics in B.C. to augment our digital first approach. Together, these virtual care solutions and capabilities are empowering Canadians to better manage their health and get the care and information they need when it's convenient for them – a huge step forward in the evolution of Canada's healthcare system and the current status quo. In 2020, TELUS Health enabled Canadian practitioners to conduct virtual visits with their patients by integrating patient videoconferencing into its electronic medical records (EMR) across Canada, and by December 31, 2020, more than 226,000 consultations have been conducted through the TELUS EMR Virtual Visit solution. This capability has been augmented by the acquisition of InputHealth Systems Inc. and their Collaborative Health Record (CHR) Virtual Care solution. Since the onset of the pandemic, these virtual care solutions experienced accelerated adoption, easing pressure on the healthcare system. In many ways, market activities and trends throughout the year have validated TELUS Health's long-standing presence in the healthcare market and assumptions about the business' main growth areas and path forward, reinforcing our focus on employee health and virtual care. In 2021 and beyond, TELUS Health will leverage these and other digital health tools to expand access to care for Canadians across the country.

TELUS International (Cda) Inc. (TELUS International or TI), a digital customer experience innovator that designs, builds, and delivers next-generation solutions for clients, continues its expansion through organic growth and strategic acquisitions (see *Section 1.3 Highlights of 2020* for further details). TI's solutions and services are relevant across multiple markets including information technology services for digital transformation of customer experience systems (DX) and digital customer experience management (DCXM). TI is uniquely well-positioned to serve these markets, with a significant opportunity due to the overall industry growth rate, low penetration to date and strong exposure to the comparatively higher-growth DCXM sector of the market. In addition to DCXM, TI serves markets that have experienced high growth in recent years, such as content moderation and data annotation. The necessity of moderating content on digital platforms has prompted enterprises to seek specialized services to accommodate changes in the uncertain, highly regulated environment. Currently, the data annotation market demand is driven by large technology companies; however, demand is growing from other enterprises as AI adoption increases.

TI partners with major global and disruptive brands, fueling all stages of company growth. TELUS Corporation remains TI's largest customer. From TI's successful inception 15 years ago in the Philippines, initially established to support TELUS' growing customer service needs, TI has grown exponentially in size, scope and geographic diversity to deliver exceptional digital customer experience solutions for clients from sites in North and Central America, Europe and Asia. TI added significant scale and diversity through the January 31, 2020 acquisition of Competence Call Center (CCC), a leading provider of higher-value-added business services with a focus on customer relationship management and content moderation. On December 31, 2020, TI further advanced its digital transformation strategy with the acquisition of Lionbridge AI (Lionbridge), a market-leading global provider of crowd-based training data and annotation platform solutions used in the development of AI algorithms to power machine learning. Lionbridge's advanced technology innovation, combined with human ingenuity, improves data functionality to deliver significantly enhanced, customized and high-quality outcomes for customers. These two acquisitions added substantial scale and diversity to TI as its size, scope and reach grew to encompass almost 50,000 team members globally, providing integrated solutions and services that span digital strategy, innovation, consulting and design, digital transformation and IT lifecycle solutions, data annotation and intelligent automation, and omnichannel CX solutions, including content moderation, trust and safety solutions and other managed solutions, with back-office support in almost 50 languages from more than 50

delivery locations across over 20 countries. In February 2021, TI successfully completed its IPO, further positioning the organization for continued growth in the years to come (see *Section 1.3* for additional details).

With the official launch of TELUS Agriculture (TAG) in 2020, a business initially built on eight acquisitions over the course of 2019 and 2020, we positioned ourselves to become a major global player in the promising and rapidly growing agriculture technology market. Producing healthy, safe and sustainable food remains a crucial global priority – both today and for the future. It is estimated that global food supplies will need to increase by as much as 70% over the next 30 years, simply to keep pace with the world's growing population. Increasingly so, farmers and producers across the globe are leveraging digital technologies to efficiently manage their operations and to harness valuable data insights in order to optimize production and output. With an ever-expanding world population, farmers are managing more acres, equipment and suppliers than ever before, and streamlined digital access to data insights and features can translate into significant time and cost savings.

TELUS is establishing meaningful positions in three key segments of the agriculture value chain: (i) agri-Business, which enables the flow of business data between manufacturers, such as farm machinery, seed and chemistry suppliers, distributors, retailers, and farms; (ii) agri-Food, which enables food traceability from the farm and ranch to the fork on behalf of industry stakeholders such as food manufacturers, grocers, restaurants and consumers; and (iii) farm and ranch, which enables precision agriculture, as well as farm and ranch management. We offer leading smart agriculture software solutions across the value chain and address agriculture's complex data management challenges and data silos, to digitally transform, protect and improve the global food system by improving the efficient production, transportation, quality and safety of our food.

As technology continues to change our industry rapidly, customer demand continues to evolve and grow, and Canada shifts to a more digital economy, we are committed to evolving our business and offering innovative and reliable services and thought leadership in core future growth areas that are complementary to our current operations. This, along with our constant focus on leadership in delivering an enhanced customer experience, positions us for continued differentiation and growth.

9.3 TELUS assumptions for 2021

In 2021, we expect the COVID-19 pandemic to continue to have significant impacts on our business, primarily in the first half of the year, attributed to economic factors such as continued travel advisories and border restrictions, decreasing business and consumer travel continuing to impact our roaming revenues and subsequent business lockdowns, and/or reduced scope of operations impacting our TELUS Health Care Centres. We expect that the availability, distribution and effectiveness of COVID-19 vaccinations to the general population will occur by the second half of 2021, which will allow for the re-opening of the global economy and areas where we conduct business. We expect that the COVID-19 pandemic impacts in 2021 will be similar to 2020. However, we still expect growth in EBITDA, driven by continued demand for data in our mobile and fixed products and services, and contribution from new business acquisitions; continued significant ongoing investments in our leading fibre broadband network and growing 5G deployment; our strategic efforts to enhance operational simplicity and efficiency; and our constant focus on an enhanced customer experience across all areas of our operations, with the objective of simplifying our customers' interaction with us while reducing our overall cost structure.

Our assumptions in support of our 2021 outlook are generally based on industry analysis, including our estimates regarding economic and telecom industry growth, as well as our 2020 results and trends discussed in *Section 5*.

Our key assumptions include the following:

- Estimated economic growth rates in Canada, B.C., Alberta, Ontario and Quebec of 4.5%, 4.5%, 4.4%, 4.8% and 4.6%, respectively.
- Estimated annual unemployment rates in Canada, B.C., Alberta, Ontario and Quebec of 7.8%, 6.9%, 9.9%, 8.0% and 6.9%, respectively.
- Estimated annual rates of housing starts on an unadjusted basis in Canada, B.C., Alberta, Ontario and Quebec of 202,000 units, 35,000 units, 24,000 units, 77,000 units and 48,000 units, respectively.
- No material adverse regulatory rulings or government actions.
- Continued intense mobile products and services competition and fixed products and services competition in both consumer and business markets.
- Continued increase in mobile phone industry penetration of the Canadian market.
- Ongoing subscriber adoption of, and upgrades to, data-intensive smartphones, as customers seek more mobile connectivity to the internet at faster speeds. We estimate there will be higher device upgrade volumes closer to pre-pandemic levels in 2021.

- Mobile products and services revenue growth resulting from improvements in subscriber loading, with continued competitive pressure on blended ARPU. Roaming revenue will remain at levels similar to the latter half of 2020 as continued travel advisories and border restrictions, including those in Canada and the U.S., impact business and consumer travel in the first half of 2021, with recovery expected to begin with the re-opening of the economy in the last half of the year, but will not reach a full recovery until 2022 at the earliest.
- Continued pressure on mobile products and services acquisition and retention expenses, arising from gross loading and customer renewal volumes including potential impacts related to deferred device upgrades during the global health pandemic, competitive intensity and customer preferences. Continued mobile connected devices growth, as our IoT offerings diversify and expand.

- Continued growth in fixed products and services data revenue, reflecting an increase in internet, TV and security subscribers, speed upgrades, rate plans with larger data buckets or endless data usage, and expansion of our broadband infrastructure, healthcare solutions, and home and business security offerings.
- Continued erosion of residential voice revenue resulting from technological substitution and greater use of inclusive long distance.
- Continued growth of TI revenue and EBITDA generated by expanded services for existing and new clients and strategic business acquisitions.
- Continued focus on our customers first initiatives and maintaining our customers' likelihood-to-recommend.
- Employee defined benefit pension plans: current service costs of approximately $107 million recorded in Employee benefits expense and interest expense of approximately $25 million recorded in Financing costs; a rate of 2.50% for discounting the obligation and a rate of 2.70% for current service costs for employee defined benefit pension plan accounting purposes; and defined benefit pension plan funding of approximately $51 million.
- Restructuring and other costs of approximately $150 million for continuing operational effectiveness initiatives, with margin enhancement initiatives to mitigate pressures related to intense competition, technological substitution, repricing of our services, increasing subscriber growth and retention costs, and integration costs associated with business acquisitions.
- Net cash Interest paid of approximately $755 million to $805 million.
- Depreciation and Amortization of intangible assets of approximately $3.25 billion to $3.35 billion.
- Income taxes: Income taxes computed at an applicable statutory rate of 25.3 to 25.9% and cash income tax payments of approximately $540 million to $620 million (2020 – $397 million).
- Participation in ISED's wireless spectrum auction for 3500 MHz spectrum band, with auction bidding expected to start on June 15, 2021.
- Continued stabilization in the average Canadian dollar: U.S. dollar exchange rate ($1.28 in 2020).
- Continued deployment of access-agnostic technology in our network.
- SMB will continue to be negatively impacted by lockdown measures primarily during the first half of the year, and that they will continue to feel the effects through the rest of the year, with access to continued government support easing in the latter half of 2021.
- Government funding programs to support consumers' ability to pay bills will ease in the latter half of 2021.
- We expect that we will be able to operate our retail stores as effectively as we had in the second half of 2020, reflecting the additional safety measures in place but still allowing us to serve our customers in-person, in addition to the digital capabilities that have enabled us to continue serving our customers through the pandemic.
- Continued impacts on our TELUS Health Care Centres as a result of lockdown and stay-at-home measures resulting in cancellations of appointments, reduced capacity or closure of clinics. We expect recovery to begin in the second half of 2021 through effective deployment of value-added services and optimizing efficiency within the clinics.
- Our international operations will be impacted by the recoveries in other global economies based on vaccine availability, distribution and effectiveness on their respective populations and regional lockdown measures.

Our 2021 outlook is forward-looking information that is based on these assumptions and is subject to inherent risks and uncertainties. These assumptions may ultimately prove to have been inaccurate. Events or our actual results may differ materially from expectations expressed in or implied by this outlook due to these assumptions having been incorrect or as a result of risks such as those described in detail in Section 10 *Risks and risk management*.

9.4 Communications industry regulatory developments and proceedings

Our telecommunications, broadcasting and radiocommunication services are regulated under federal laws by various authorities, including the Canadian Radio-television and Telecommunications Commission (CRTC), ISED, Canadian Heritage and the Competition Bureau.

The following is a summary of certain significant regulatory developments and proceedings relevant to our business and our industry. This summary is not intended to be a comprehensive legal analysis or description of all of the specific issues described. Although we have indicated those issues for which we do not currently expect the outcome of a development or proceeding to be material to us, there can be no assurance that the expected outcome will occur or that our current assessment of its likely impact on us will be accurate. See *Section 10.3 Regulatory matters*.

Radiocommunication licences and spectrum-related matters

ISED regulates, among other matters, the allocation and use of radio spectrum in Canada and licenses radio apparatus, frequency bands and/or radio channels within various frequency bands to service providers and private users. The department also establishes the terms and conditions that may attach to such radio authorizations, including restrictions on licence transfers, coverage obligations, research and development obligations, annual reporting, and obligations concerning mandated roaming and antenna site sharing with competitors.

3500 MHz spectrum auction to support 5G

On June 5, 2019, ISED released its *Decision on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Preliminary Decisions on Changes to the 3800 MHz Band* followed on March 5, 2020 by its *Policy and Licensing Framework for Spectrum in the 3500 MHz Band* , which defines the auction rules and conditions of licence for the 3500 MHz band. The auction framework provides for a 50 MHz set aside in all markets where 50 MHz or more spectrum is available; in markets with a large population centre and less than 50 MHz of auction supply, all the auction supply will be set aside. This is on top of the competitive imbalance that has already been introduced by ISED's 2019 transition decision for the band. That decision left nearly 90 MHz of the 200 MHz band in the hands of band incumbents. A combination of the transition decision, by way of a clawback and the asymmetric design of the auction framework, which sets aside a significant portion of the spectrum under auction exclusively for certain carriers in any given licence area, raises the risk that we may not be able to acquire all the spectrum we need in the auction process and we may be required to pay more than we might otherwise pay. The deadline for receipt of applications and financial deposits for participation in the 3500 MHz spectrum auction had been postponed to April 6, 2021, due to the COVID-19 pandemic, and auction bidding is expected to start on June 15, 2021.

mmWave and 3800 MHz spectrum auctions to support 5G

On June 5, 2019, ISED released its *Decision on Releasing Millimetre Wave Spectrum to Support 5G* , repurposing several tranches of mmWave spectrum for mobile use. ISED will consult on a licensing framework (i.e. auction rules and conditions of licence) for these mmWave bands in the future. ISED stated that the auction is expected to commence in 2021, but we believe it may not take place until 2022 or later. There is a risk that the auction rules may favour certain carriers over us and impact our ability to acquire an adequate quantity of mmWave spectrum.

The 3800 MHz spectrum band is seen as an extension to the 3500 MHz band. ISED released the first of two consultations on August 27, 2020. This first consultation featured proposals from ISED and from Telesat, the Canadian satellite spectrum licensee of 3700-4200 MHz spectrum, on how to repurpose existing spectrum. Following a decision on the first consultation, we expect a second consultation on an auction framework for the 3800 MHz band. ISED has forecasted a delay to the 3800 MHz auction process, now expected to take place in 2023 (formerly projected for late 2022). There is a risk that the auction rules will favour certain carriers over us and impact our ability to acquire an adequate quantity of 3800 MHz band spectrum on a cost-effective basis.

Regulatory and federal government reviews

The CRTC and the federal government have initiated public proceedings to review various matters. A number of key proceedings are discussed below.

Review of mobile wireless services

On February 28, 2019, the CRTC released its consultation to review the regulatory framework for mobile wireless services. The proceeding is now closed and we await a decision. The review examined three major issues – the level of competition in the retail market, the current wholesale mobile wireless service regulatory framework, with a focus on wholesale mobile virtual network operator (MVNO) access, and the future of mobile wireless services in Canada, with a focus on reducing barriers to infrastructure deployment. We participated throughout this proceeding and filed evidence to demonstrate the high performance of Canadian wireless services on dimensions including network coverage, network quality, availability of service and pricing. The impact of this proceeding on us will not be known until a decision is issued by the CRTC. That decision is not expected until early 2021.

Wireline wholesale services and interconnection follow-up

On July 22, 2015, the CRTC released *Review of wholesale wireline services and associated policies,* Telecom Regulatory Policy CRTC 2015-326 (TRP 2015-326). The major component of this decision was that the CRTC ordered the introduction of a disaggregated wholesale high-speed access (HSA) service for internet service provider (ISP) competitors. This includes access to FTTP facilities.

On June 11, 2020, the CRTC released *Call for comments – Appropriate network configuration for disaggregated wholesale high-speed access services*, Telecom Notice of Consultation CRTC 2020-187 (TNC 2020-187), where it is addressing the appropriate network and service configurations for the disaggregated wholesale HSA service regime for all wholesale HSA service providers across the country. This new process takes the place of the previous follow-up proceedings and now features a common process for incumbent local exchange carriers (ILECs) and cable companies across Canada. Until the CRTC issues its decision, it is too early to determine the impact of this proceeding on us.

Final rates for aggregated wholesale internet access services

On August 15, 2019, the CRTC released Telecom Order CRTC 2019-288, which finalized rates for the aggregated wholesale internet services of the ILEC and incumbent cable companies. The final rates were considerably lower than the interim rates, and the CRTC ordered the rates to apply retroactively to October 6, 2016. The financial impact of this decision was not material to us, given the volume of wholesale internet customers we currently serve.

On September 13, 2019, Bell Canada and affiliated companies and a group of cable companies filed separate applications with the Federal Court of Appeal to seek leave to appeal Telecom Order CRTC 2019-288. Bell Canada and the cable companies also sought a stay of the order. On November 22, 2019, the Federal Court of Appeal allowed both leave applications and granted a stay pending the disposition of the appeal. On September 10, 2020, the Federal Court of Appeal dismissed the appeals on merit, thereby upholding the CRTC's decision. Bell Canada and the group of cable companies have sought leave to appeal this dismissal to the Supreme Court of Canada. The application remains under reserve.

Separately, on November 13, 2019, we filed an application to the CRTC to review and vary Telecom Order CRTC 2019-288, primarily on the basis that the CRTC made errors in calculating the carriers' costs. On December 13, 2019, Bell Canada and a group of cable companies also brought applications to the CRTC to review and vary Telecom Order CRTC 2019-288. Bell Canada and the cable companies also sought a stay of the order pending the disposition of the review and variance applications. The CRTC granted the stay on September 28, 2020 and has yet to issue its decisions

on any of these applications.

Also on November 13, 2019, we filed a petition to the Governor in Council seeking to refer back to Telecom Order CRTC 2019-288 for redetermination of the rates and seeking to vary Telecom Order CRTC 2019-288 to remove its retroactive effect, all on the basis that the rates and retroactive component of the order will threaten future investment. Bell Canada and a group of cable companies filed similar petitions on the same day. On August 15, 2020, the Governor in Council issued an Order in Council dismissing the petitions as premature in light of the applications to review and vary the order set out above, which remain under reserve. However, the Order in Council, as well as an accompanying statement from the Minister of Innovation, Science and Industry, recognized that the rates set out in Telecom Order CRTC 2019-288 will, in some instances, undermine investment in high-quality networks. We expect the CRTC to take this Order in Council into account in its decisions on the review and variance applications presently under reserve. Until the CRTC renders its decisions on these review and variance applications or otherwise lifts the stay, the rates will not be in effect.

5G security review – Public Safety Canada

In September 2018, the federal government announced a review of national cybersecurity requirements for Canada's 5G networks. The stated objective of the reviews was to provide policy clarity on what security controls or restrictions the government intends to impose on 5G networks in Canada and to which foreign vendors such controls and restrictions would apply. The timelines for the conclusion of this review were never released by the federal government, which has also not announced its intentions regarding 5G cybersecurity requirements. Given the range of potential government or regulatory action that may result from this review, the impact on us, and on Canadian wireless service providers in general, cannot be reliably predicted.

International security developments

On May 16, 2019, an executive order entered into force permitting the Secretary of Commerce to block certain technology transactions deemed to constitute national security risks. Additionally, the Bureau of Industry and Security of the United States Department of Commerce (BIS) subsequently amended Export Administration Regulations such that Huawei Technologies Co., Ltd. (Huawei) and 68 of its non-U.S. affiliates were added to the Entity List effective May 16, 2019. Effective August 19, 2019, an additional 46 non-U.S. affiliates were placed on the Entity List. Their addition to the Entity List imposed a licensing requirement under the Export Administration Regulations (EAR) regarding the export, re-export or transfer (in-country) of most items subject to the EAR to any of these 115 listed Huawei entities. A further final

rule effective August 17, 2020 provided for additional non-U.S. affiliates of Huawei to be added to the Entity List and revisions to current entries on the Entity List; removal of the Temporary General License (TGL) and conforming changes to Entity List for TGL Removal; and changes to General Prohibition Three — the Foreign-Produced Direct Product Rule.

Reversing an earlier position that would allow limited Huawei 5G in the U.K., on July 14, 2020, the U.K. government announced plans to legislate a ban on the purchase of all new 5G infrastructure from Huawei by December 31, 2020, and to require the removal of Huawei 5G networks deployed in the U.K. by 2027. The U.K. government is also currently considering legislation that would further restrict the installation of any Huawei equipment in U.K. 5G networks after September 30, 2021.

Given the range of potential government or regulatory actions by foreign governments with respect to Huawei, the impact on us, and on Canadian wireless service providers generally, cannot currently be predicted.

CRTC proceeding regarding device financing

On August 30, 2019, the CRTC commenced a proceeding to inquire into device financing plans for wireless handsets and asked certain parties, including us, to show cause why their device financing plans are permitted under the Wireless Code. This proceeding followed the introduction of device financing plans by us, Rogers and Bell in July 2019, including, for Rogers and us, plans with terms longer than 24 months. Under these plans, customers who cancel wireless services contracts are required to repay immediately the outstanding financing balance in full. On August 2, 2019, the CRTC issued a letter stating that wireless service providers were to stop offering device financing plans beyond 24 months so it could review the practice. In the proceeding, the CRTC sought comment on the effects on consumers of financing plans beyond 24 months and how the provisions of the Wireless Code apply to device financing. We intervened to inform the CRTC that: device financing is desired by customers; customers benefit from longer financing periods because upfront device costs are lower and the cost of devices can be spread over a longer period, thereby reducing the monthly cost; the objective of the Wireless Code should be to benefit customers; and longer device financing periods further the federal government's affordability agenda for wireless services. Until the CRTC issues a decision on its intended treatment of financing plans, it is too early to determine the impact of this proceeding on us.

CRTC proceeding regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada

On December 10, 2019, the CRTC issued *Call for comments regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada*, Telecom Notice of Consultation CRTC 2019-406. In this proceeding, the CRTC is seeking comment on barriers that service providers and communities face in building new facilities, or interconnecting to or accessing existing facilities, and in extending networks into underserved areas in order to offer universal service objective-level services. The CRTC has specifically identified access to affordable transport services and efficient use of support structures as potential barriers. We are participating fully in the proceeding. It is too early to determine the impact of the proceeding on us.

CRTC proceeding regarding access to poles owned by Canadian carriers

On October 30, 2020, the CRTC issued *Call for comments regarding potential regulatory measures to make access to poles owned by Canadian carriers more efficient*, Telecom Notice of Consultation CRTC 2020-366. The CRTC commenced the proceeding further to comments in the proceeding initiated by Telecom Notice of Consultation CRTC 2019-406 that untimely and costly access to poles owned by Canadian carriers has

negative impacts on broadband deployment, particularly in areas with limited or no access to broadband-capable networks. In the most recent proceeding, the CRTC will consider, among other issues, authorization delays, make-ready costs, spare capacity reservations, joint use agreements, and the potential for improved dispute resolution. We are participating fully in the proceeding. It is too early to determine the impact of the proceeding on us.

Government mobile wireless pricing election commitment

Ahead of the 2019 federal election, the Liberal Party of Canada made a commitment to reduce wireless prices by 25%. On March 5, 2020, the Liberal government clarified its expectation that we, Bell, and Rogers (including flanker brands) lower mobile wireless prices for postpaid, bring-your-own-device plans in the 2 to 6 GB range by 25% by January 2022. The government reiterated this statement on June 5, 2020. To track progress, the government is reporting quarterly on wireless pricing. We are unable to determine the full impact of this commitment at this time. The announcement or implementation of specific regulations or other actions intended to reduce cell phone plan prices could precipitate a material reduction in operating expenditures and capital expenditures to ameliorate this impact.

CRTC review of rate setting for wholesale telecommunications services

On April 24, 2020, the CRTC issued *Call for comments – Review of the approach to rate setting for wholesale telecommunications services* , Telecom Notice of Consultation CRTC 2020-131. In this proceeding, the CRTC is seeking comment on whether to change its methodology of setting wholesale rates and, if so, how. The CRTC has stated its intent to use the proceeding to establish a more transparent and efficient rate-setting process. We are participating fully in all stages of the proceeding. It is too early to determine the impact of the proceeding on us.

CRTC review of availability of mobile wireless plans for Canadians with disabilities

On June 1, 2020, the CRTC issued *Call for comments – Accessibility – mobile wireless service plans that meet the needs of Canadians with various disabilities*, Telecom Notice of Consultation 2020-178. In this proceeding, the CRTC is examining whether retail wireless service providers are meeting their requirements to offer mobile wireless plans that meet the needs of Canadians with disabilities; to promote those plans in ways that are accessible (including through stores, websites and customer service representatives); and whether new regulatory measures are required. We are participating fully in this proceeding to demonstrate how we are complying with existing requirements. The impact of this proceeding is not expected to be material.

CRTC review of deadlines for transition to next-generation 9-1-1 service

On September 4, 2020, the CRTC issued *Call for comments – Establishment of new deadlines for Canada's transition to next-generation 9-1-1* , Telecom Notice of Consultation CRTC 2020-326. As a result of the COVID-19 pandemic, the CRTC had previously suspended the deadlines associated with the implementation of next-generation 9-1-1 service. The CRTC is now examining what the new deadlines for next-generation 9-1-1 service should be, including for the filing of cost studies and tariffs for next-generation 9-1-1 network providers (including us), and when providers should have their networks ready to support next-generation 9-1-1 voice services. The impact of this proceeding is not expected to be material.

Proposed changes to Personal Information Protection and Electronic Documents Act

On November 17, 2020, the federal government introduced Bill C-11, the *Digital Charter Implementation Act, 2020*, which, if passed, would make significant changes to the *Personal Information Protection and Electronic Documents Act* (PIPEDA) and create a new Consumer Privacy Protection Act (CPPA). This bill aims to give consumers new rights and imposes new monetary penalties for non-compliance. The bill is currently at second reading stage in the House of Commons and is expected to go to Committee for further review in 2021. The full extent of the impact on us is not yet known.

Broadcasting-related issues

Broadcasting licences held by TELUS

Our regional licences to operate broadcasting distribution undertakings in B.C. and Alberta were granted renewals in Broadcasting Decision CRTC 2018-267, which extends the licence terms to August 31, 2023. Our licence to operate a regional broadcasting distribution undertaking in areas of Quebec was renewed on June 28, 2019 in Broadcasting Decision CRTC 2019-230, extending the licence term to August 31, 2024. Our licence to operate a national video-on-demand service was renewed to August 31, 2023, as part of Broadcasting Decision CRTC 2018-20. We received CRTC authorization to launch a pay-per-view service on June 28, 2020, as part of Broadcasting Decision CRTC 2020-235.

Review of the Telecommunications Act, the Radiocommunication Act and the Broadcasting Act

On January 29, 2020, the Broadcasting and Telecommunications Legislative Review Panel released its final report entitled *Canada's Communications Future: Time to Act*. The report contains 97 recommendations to update legislation governing broadcasting, telecommunications and radiocommunication for the Government of Canada to consider. Further to the report, on November 3, 2020, the government introduced legislation to amend the *Broadcasting Act*. The bill would bring streaming services that operate over the internet expressly within the scope of the *Broadcasting Act*, and would provide the CRTC with new and expanded regulatory powers to implement a modernized regulatory framework that addresses declining levels of support for Canadian content over the past several years, and provide a more sustainable source of support going forward. The Minister of Canadian Heritage has indicated that further reforms will be needed to fully modernize the regulation of the broadcasting system, but that these proposed reforms are an important first step. It is too early to determine if these proposed amendments, as well as any other potential legislative changes arising as a result of the report, will have a material impact on us.

Review of the Copyright Act and Copyright Board reforms

The *Copyright Act*'s statutorily mandated five-year review was due in 2017, and a process for conducting the review via parliamentary committee was announced in December 2017. The House of Commons Standing Committee on Industry, Science and Technology (INDU Committee), with the assistance of the Standing Committee on Canadian Heritage, completed the review early in 2019, and both committees presented reports to the House of Commons in May and June of 2019. Although the INDU Committee had requested that a comprehensive government response be tabled by September 1, 2019, the government did not respond. Following the October 2019 federal election, the timeline for potential changes to the *Copyright Act* is uncertain. The policy approach for copyright has traditionally been based on a balance of interests of creators and consumers, and as a result, any changes to the *Copyright Act* are not expected to have a negative material impact on us .

Legal challenge to the CRTC's ability to regulate affiliation agreements

The CRTC's ability to regulate affiliation agreements between broadcasting distributors and programming services is currently being challenged by vertically integrated broadcasting entities before the Federal Court of Appeal. We were

granted leave to intervene in the case and will defend the CRTC's regulatory powers as a cornerstone of its vertical integration framework, which aims to ensure the fair treatment by vertically integrated firms of rival broadcasting distributors and programming services. The Federal Court of Appeal has yet to set a hearing date and a decision is not expected before mid to late 2021. While an adverse decision could weaken our negotiating position vis-a-vis vertically integrated firms that supply "must-have" channels to our broadcasting distribution business, it is too early to determine the impact it would have on our broadcasting distribution activities.

10. Risks and risk management

10.1 Overview

Risk is the effect of uncertainty that arises due to events, actions and our business activities that may have a negative impact on the achievement of our objectives and goals, but may also create positive opportunities. Risk oversight and management processes are integral elements of our risk governance and strategic planning practices.

Risk governance, oversight and culture

We maintain strong risk governance and oversight practices, with risk oversight responsibilities outlined in the policy manual for our Board of Directors. Our Board is responsible for ensuring that material risks to our business are identified, and overseeing the implementation of systems and processes that effectively identify, monitor and manage material risks.

Our risk governance culture starts with clear risk management leadership and transparent communications, supported by our Board and Executive Team. In our approach to risk governance, accountability for the management of risks and reporting of risk information is clearly defined. Training and awareness programs, appropriate resources and risk champions help to ensure that we have the risk management competencies necessary to support effective decision-making across the organization. Ethics are integral to our risk governance culture, and our code of ethics and conduct directs team members to meet the highest standards of integrity in all business decisions and actions.

Responsibilities for risk management

We take a multi-step approach to managing risks, sharing responsibility across the organization and recognizing that effective risk management is dynamic and integral to the achievement of our strategic and operational objectives. The first line of assurance is executive and operating management, and these team members are expected to integrate risk management into core decision-making processes (including strategic planning processes) and day-to-day operations. We have risk management and compliance functions across the organization, in areas that include Finance, Legal, Data and Trust (which includes Privacy), Security and other business operational areas, and these form the second line of assurance. These teams establish policies, provide guidance and expertise, and work collaboratively with management to monitor the design and operation of controls. Internal Audit is the third line of assurance, providing independent assessments of the effectiveness and efficiency of risk management and controls across all areas of our business.

Risk and control assessment process

Events within and outside of TELUS present us with both risks and opportunities. We strive to avoid taking on undue risk and we work to ensure alignment of risks with business strategies, objectives, values and risk tolerances; in turn, we also seek to take advantage of opportunities that may emerge. We strive to proactively mitigate our risk exposures through performance planning, business operational management and risk response

strategies, which can include mitigating, transferring, retaining and/or avoiding risks.

We have in place multi-level enterprise risk and control assessment processes that solicit and incorporate insights from leaders across all areas of TELUS and enable us to track multi-year trends in key risks and the control environment. A comprehensive annual risk and control assessment is conducted with leaders and an annual assessment is completed by Board members to provide perspective on key enterprise risks. Results of the assessments are shared with senior management, our Board of Directors and Audit Committee, and inform the development of our risk-focused internal audit program. This risk information is incorporated into our strategic planning, operational risk management and performance management processes. In addition, key enterprise risks are reviewed on a quarterly basis in order to capture and communicate any changes, and detailed risk assessments are conducted for various risk management, strategic and operational initiatives throughout the year.

10.2 Principal risks and uncertainties

This section describes our principal risks and uncertainties. The significance of these risks is such that they, alone or in combination, may have material impacts on our business operations, results, reputation and brand, as well as the approaches taken by investment analysts when evaluating or valuing TELUS. These risks and the associated risk mitigation activities are addressed further in the following sections.

On March 11, 2020, the World Health Organization declared the outbreak of the novel coronavirus identified as COVID-19 to be a pandemic. Due to the wide range of possible COVID-19 pandemic outcomes and the uncertainty with regard to the duration and impact of the pandemic, government policies implemented to limit its spread and the ongoing evolution of the development and distribution of effective vaccines, we cannot accurately forecast the impact of the COVID-19 pandemic on our future operations, financial performance, financial position or cash flows.

However, the COVID-19 pandemic may, directly or indirectly, materially and adversely affect our operations, condition and financial results. For example, the ability of our TI subsidiary to continue operations effectively during the COVID-19 pandemic is dependent on a number of factors, such as the continued availability of high-quality internet bandwidth, an uninterrupted supply of electricity, the sustainability of social infrastructure to enable our team members who are working remotely to continue delivering services, and on otherwise adequate conditions for remote working, all of which are outside of our control. Some of the geographies in which TI team members work remotely may not be well-suited to work-from-home approaches to providing client services due to connectivity or other issues with the local infrastructure. The effects of the pandemic have caused our TI subsidiary's clients to defer decision-making, delay planned work, reduce volumes or seek to terminate current agreements with TI. Additionally, a number of our TI subsidiary's clients in the Travel and Hospitality vertical have been, and may in the future be, negatively impacted by the pandemic, and the corresponding reduction in demand for their services may negatively affect the revenue from those clients. As a result of the COVID-19 pandemic, TI has had to temporarily close a number of sites in accordance with government ordinances applicable in the various jurisdictions in which it operates. Closures of sites for such extended periods of time may impact the ability to retain and attract talent, which may have negative impacts on human resource costs and profitability. Risks and uncertainties that could affect our business results, as well as the price of our securities, and that could be accentuated by the COVID-19 pandemic or by any future pandemic or similar event include, but are not limited to, the risks described here in *Section 10*. See *Section 1.2* for a description of the operational measures currently undertaken or planned to address risks to our business relating to the COVID-19 pandemic.

Although we believe the measures we take to identify and mitigate risks are reasonable, there can be no expectation or assurance that they will effectively mitigate or fully address the risks described, or that new developments and risks will not materially affect our operations or financial results. Despite our efforts to implement controls in our domestic and international operations, there can be no assurance that these controls will prove to be effective in all instances. Forward-looking statements in this section and elsewhere in this MD&A are based on the assumption that our risk mitigation measures and controls will be effective. See *Caution regarding forward-looking statements*.

Strategic risks

These strategic risks arise from uncertainties that may shape the nature and focus of our strategic direction as an organization and our ability to sustain profitable revenue growth.

Risk	Potential impact	Mitigations
Regulatory matters (see 10.3)	Constraining of domestic telecom practices by elected officials and regulatory decisions, reviews and government activity, domestically and internationally, may have strategic, financial (including revenue and free cash flow) or operational impacts.	• Advocacy • Spectrum acquisition strategies • Non-regulated, diversified revenue streams • Prudent investment and cost efficiency planning decisions commensurate with our regulatory environment
Competitive environment (see 10.4)	Competitor expansion, activity and intensity (pricing, bundling), as well as non-traditional competitors, disruptive technology and disintermediation, may alter the nature of the market and impact our market share and financial results (including revenue and free cash flow).	• Customers first strategy • Bundling of services • Competitive monitoring • Product portfolio innovation and acquisition • Product life cycle management
Technology (see 10.5)	Consumer adoption of alternative technologies and changing customer expectations have the potential to impact our revenue streams and customer churn.	• Technology road map • Fibre deployment • Spectrum acquisition strategies

Suppliers (see 10.6)	We may be impacted by supply chain practices, disruptions and lack of resiliency in relation to global or localized events. Dependence on a single supplier for products, components, service delivery or support may impact our ability to efficiently meet constantly changing and rising customer expectations while maintaining our quality of service.	• Supplier risk profiling and multi-vendor strategy • Vendor partnerships, contracts and agreements • Supplier code of conduct • Business continuity management plans Information on supply chain sustainability can be found in our sustainability report[1] at **telus.com/sustainability**.
Organizational change (see 10.7)	Investment and acquisition activities present opportunities to expand our scope but may expose us to new risks. We may be unsuccessful in gaining market traction/share and realizing benefits and integration efforts may distract from other priorities.	• Investment and acquisition strategy • Pre- and post-acquisition due diligence • TELUS Ventures investments • Innovation partnerships

Operational risks and uncertainties

Operational risks arise from uncertainties we face in our day-to-day operations. Our approach is guided by our code of ethics and conduct, while our operations are supported by policies, procedures and internal controls.

Risk	Potential impact	Mitigations
Customer service excellence (see 10.8)	Customer interactions and our service delivery directly impact customer experience, customer churn, and likelihood to recommend outcomes.	• Process simplification and digitization • Customer experience management
Our systems and processes (see 10.9)	Systems and technology innovation, maintenance and management may impact our IT systems and network reliability, as well as our operating costs.	• Life cycle management and adoption of emerging solutions • Project management • Change management • Continuous monitoring and response programs • Disaster recovery program and plans
Security and data protection (see 10.10)	Our awareness of security issues and the effectiveness of our security controls influence our ability to identify potential threats and vulnerabilities, protect our environment, detect breaches, respond to attacks and restore normal operations. A successful disruption may impact the operations of our network or allow the unauthorized interception, destruction, use or dissemination of customer, team member or business information.	• Security policies, standards and methodologies • Privacy and security impact assessments • Vulnerability assessments • Continuous monitoring and response programs
Our team (see 10.11)	The rapidly evolving and highly competitive nature of our business and changing workforce demographics, as well as the sufficiency of internal training, development and succession programs, may impact our ability to attract, develop and retain team members with the skills required to meet the changing needs of our customers and our business.	• Performance development program • Health and well-being strategy • Compensation and benefits program • Retention and succession planning • Work Styles program Additional information on our programs can be found in our sustainability report at **telus.com/sustainability**.
Our environment (see 10.12)	Natural disasters, pandemics, climate change impacts and disruptive events may impact our operations, customer satisfaction and team member experience.	• Business continuity and disaster recovery program and plans • Emergency Management Operating

1 Not incorporated by reference

		Committee (EMOC) • Medical Advisory Council to ensure our response and mitigation measures related to the COVID-19 pandemic are informed and supported by qualified medical advice • Commitment to sustainable and responsible business practices and decisions that balance economic growth with positive social and environmental outcomes See *Section 5.2* of our 2020 Annual Information Form for a description of Task Force on Climate-related Financial Disclosures. Additionally, a detailed report of our environmental risk mitigation activities can be found in our sustainability report at **telus.com/sustainability**.

Financial risks and uncertainties

Financial risks arise from uncertainties involved in maintaining appropriate levels of liquidity, financing and debt to sustain operations and support future growth.

Risk	Potential impact	Mitigations
Financing, debt and dividends (see 10.13)	Our access to capital markets may be impacted by general market conditions and investors' assessments of our cash generation capability. Our current intention to return capital to shareholders could constrain our ability to invest in our operations to support future growth.	• Shelf prospectus in effect until June 2022 • Investment grade credit ratings • Credit facilities, AR securitization and commercial paper program • Foreign currency forward contracts
Tax matters (see 10.14)	Complexity of domestic and foreign tax laws, regulations and reporting requirements related to TELUS and our international operating subsidiaries may impact financial results, effective governance of tax considerations and compliance. International acquisitions and expansion of operations increase our exposure to multiple forms of taxation.	• Tax strategy • Internal taxation professionals • External advisors
The economy (see 10.15)	Changing global economic conditions, as well as our effectiveness in monitoring and revising growth assumptions and contingency plans, may impact the achievement of our corporate objectives and our financial results (including free cash flow).	• Pension investment governance and monitoring • Foreign currency forward contracts • Diverse product sets • Efficient business operations

Compliance risks and uncertainties

Compliance risks arise from uncertainties related to compliance with laws and regulations across the many jurisdictions in which we operate. We have policies, controls, processes and contractual arrangements in place, as well as insurance coverage, that are designed to support compliance and limit our exposure to compliance risks.

Risk	Potential impact	Mitigations
Litigation and legal matters (see 10.16)	Complexity of, and compliance with, laws, regulations and commitments may have a financial and reputational impact.	• Customer contracts and agreements • Supplier contracts and agreements • Insurance policies • Compliance programs

TELUS International risks

On December 4, 2019, we announced that we were targeting an initial public offering (IPO) of TELUS International (Cda) Inc. (TELUS International or TI) in the subsequent 12-24 months. On February 3, 2021, we and TI announced the pricing of the upsized TI IPO of 37 million subordinate voting shares (TI Subordinate Voting Shares) at a price to the public of US$25.00 per share. The TI Subordinate Voting Shares began trading on the New York Stock Exchange and the Toronto Stock Exchange on February 3, 2021 under the ticker "TIXT". The offering of the TI Subordinate Voting Shares was made by a registration statement on Form F-1 filed with the Securities and Exchange Commission (SEC) and a preliminary base PREP Prospectus with the securities regulatory authorities in each of the provinces and territories of Canada. The risks associated with investing in TI are described in the registration statement and in subsequent filings

with the SEC and the Canadian Securities Administrators made by TI. The significance of these risks is such that they, alone or in combination, may have material impacts on our business operations, results, reputation and brand, as well as the assessment made by investment analysts when evaluating or valuing TELUS or TI.

Following this transaction, we retained approximately 67% of the combined voting interest attached to all issued and outstanding shares in TI, and we consolidate TI's financial results into our results of operations. Our financial performance is impacted by the financial performance of TI. TI's financial performance may be affected by a number of factors, including, but not limited to, those described in this *Section 10*.

The price of the TI Subordinate Voting Shares may be volatile and is likely to fluctuate due to a number of factors, including actual or anticipated changes in profitability; general economic, social or political developments; changes in industry conditions; changes in governance regulation; inflation; the general state of the securities markets; and other material events. TI may choose to publicize targets or provide other guidance regarding its business and it may not achieve such targets. Failure to do so could also result in a reduction in the trading price of the TI Subordinate Voting Shares. A reduction in the trading price of the TI Subordinate Voting Shares due to these or other factors could result in a reduction in the fair value of TI multiple voting shares held by TELUS.

10.3 Regulatory matters

Risk category: Strategic

The regulatory regime under which we operate, including the laws, regulations, and decisions in regulatory proceedings and court cases, reviews, appeals, policy announcements and other developments, such as those described in *Section 9.4 Communications industry regulatory developments and proceedings*, imposes conditions on the products and services that we provide and the ways in which we provide them. The regulatory regime sets forth, among other matters, rates, terms and conditions for the provision of telecommunications services, licensing of broadcast services, licensing of spectrum and radio apparatus, and restrictions on ownership and control by non-Canadians.

The allocation and use of spectrum in Canada are governed by Innovation, Science and Economic Development Canada (ISED), which establishes spectrum policies, determines spectrum auction frameworks, issues licences and sets radio authorization conditions.

Canadian ownership and control requirements, including restrictions on the ownership of the common shares of TELUS Corporation (Common Shares) by non-Canadians, are imposed by the *Canadian Telecommunications Common Carrier Ownership and Control Regulations* under the

Telecommunications Act (collectively, the Telecommunications Regulations) and the *Direction to the CRTC (Ineligibility of Non-Canadians)*, as ordered by the Governor in Council pursuant to the *Broadcasting Act* (the Broadcasting Direction).

With our Internet of Things (IoT), business, health, agriculture and global international footprint, our operations must also comply with the laws, regulations and decisions in effect in all of the jurisdictions in which we operate. These jurisdictions, as well as the contracts that we enter into (particularly those of our TI subsidiary), require us to comply with or facilitate our customers' and clients' compliance with numerous, complex and sometimes conflicting legal regimes, both domestically and internationally. These laws and regulations relate to a number of aspects of our business, including anti-corruption, internal and disclosure control obligations, data privacy and protection, wage-and-hour standards, employment and labour relations, trade protections and restrictions, import and export control, tariffs, taxation, sanctions, data and transaction processing security, payment card industry data security standards, records management, user-generated content hosted on websites we operate, privacy practices, data residency, corporate governance, anti-trust and competition, team member and third-party complaints, telemarketing regulations, telephone consumer regulations, government affairs and other regulatory requirements affecting trade and investment. Our customers and clients are also located around the world, and the laws and regulations that apply include, among others, U.S. federal laws and regulations, state laws on third-party administration services, utilization review services, data privacy and protection telemarketing services or state laws on debt collection in the U.S., collectively enforced by numerous federal and state government agencies and attorneys general, as well as similar consumer protection laws in other countries in which our TI subsidiary's clients' customers are based. Failure to perform services in a manner that complies with any such requirements could result in breaches of contracts with our TI subsidiary's clients. The application of these laws and regulations to our TI subsidiary's clients is often unclear and may at times conflict. The global nature of our operations, in particular our TI operations, increases the difficulty of compliance. For example, in many foreign countries, particularly in those with developing economies, it is common to engage in business practices that are prohibited by regulations applicable to us or our TI subsidiary's clients, including Canada's Corruption of Foreign Public Officials Act and the United States Foreign Corrupt Practices Act. We cannot provide assurance that our TI subsidiary's clients will not take actions in violation of our internal policies or Canadian or United States laws. Compliance with these laws and regulations may further be challenged by the remote working environment caused by the COVID-19 pandemic. For example, payment card industry and HIPAA guidance is evolving in light of the increase in remote

working conditions globally, and thus there exists uncertainty over the additional cost and ability to comply with such evolving standards.

Potential impact

Changes to the regulatory regime under which we operate, including changes to laws and regulations and ownership rules or the enactment of laws or regulations by provinces or municipalities that threaten unitary federal regulatory authority over telecommunications in Canada, could materially and adversely affect our business. These changes may increase our costs, restrict or impede the way we provide our services, limit the range of services we provide, and otherwise cause us to reduce our capital and operational expenditures, including investment in our network, and alter customer perceptions of our operations. The further regulation of our broadband, wireless and other activities and any related regulatory decisions could also restrict our ability to compete in the marketplace and limit the return we can expect to achieve on past and future investments in our network. Such changes may not be anticipated or, when they are anticipated, our assessment of their impact on us and our business may not be accurate.

Our ability to provide competitive services, including our ability to enhance our current services and offer new services on a timely basis, is also dependent on our ability to obtain access to new spectrum licences at a reasonable cost as they are made available. The revocation of, or a material limitation on obtaining, spectrum licences could have a material adverse effect on our business and our operations, including the quality and reliability of our network and service offerings, as well as our financial condition.

Government or regulatory actions with respect to certain countries or suppliers may also impact us, and other Canadian telecommunications carriers generally, and may have material, non-recurring, incremental cost consequences for us.

Overall, compliance with laws and regulations in multiple jurisdictions globally may involve significant costs, consume significant time and resources or require changes in our business practices that result in reduced revenue and profitability. We may also face burdensome and expensive governmental investigations or enforcement actions regarding our compliance, including being subject to significant fines. Non-compliance could also result in fines, damages, criminal sanctions against us, our officers or our team members, prohibitions on the conduct of our business, damage to our reputation, restrictions on our ability to process information, allegations by our clients that we have not performed our contractual obligations, or other unintended consequences. In addition, we are required under various laws to obtain and maintain accreditations, permits and/or licences for the conduct of our business in all jurisdictions in which we have operations and, in some cases, where our clients receive our services, including the United States, Canada and Europe. If we do not maintain our accreditations, licences or other qualifications to provide our services or if we do not adapt to changes in legislation or regulation, we may have to cease operations in the relevant jurisdictions and may not be able to provide services to existing clients or be able to attract new clients. Our failure to comply with applicable legal and regulatory requirements could have a material adverse effect on our business, financial performance, financial condition and cash flows.

Changes over the past 12 months

Significant regulatory developments and proceedings by the Government of Canada, and its various authorities, continued through 2020. A summary of certain significant regulatory developments and proceedings relevant to our business and industry are highlighted in *Section 9.4*. This includes, but is not limited to, the following:

- Conclusion of all hearings and submissions by the CRTC for its review of the regulatory framework for mobile wireless services
- Continued cybersecurity review of international suppliers of 5G network equipment and technologies, with a focus on Huawei Technologies, to evaluate potential risks involved in the development of 5G networks in Canada
- Decision to significantly reduce wholesale internet service rates charged by incumbent local exchange carriers for wholesale digital subscriber line and cable companies' third-party internet access services to competitor internet service providers, and subsequent appeals

- Expectation set out by the federal government that we, Bell and Rogers (including respective flanker brands) lower mobile wireless prices for postpaid, bring-your-own-device plans in the 2, 4 and 6 GB range by 25% by January 2022

- TI completed the acquisition of Lionbridge AI on December 31, 2020. In connection with the acquisition, TI submitted a declaration filing with CFIUS and, at CFIUS' request, a joint voluntary notice that triggered an additional 45-day review period. While we believe that CFIUS will clear the acquisition of Lionbridge AI, CFIUS approval may be subject to conditions imposed on TI or on TELUS. See *Section 10.3 Regulatory* and *Section 10.6 Suppliers*.

Mitigation

We advocate at all levels of government, including: our participation in CRTC and federal government proceedings, studies, reviews and other consultations; representations before provincial and municipal governments pertaining to telecommunications issues; legal proceedings impacting our operations at all levels of the courts; and other relevant inquiries (such as those relating to the exclusive federal jurisdiction over telecommunications), as described in *Section 9.4 Communications industry regulatory developments and proceedings* .

We will continue to monitor regulatory developments and may need to reconsider our investment decisions with a view to generating a necessary return on capital. Our risk mitigating strategies for investment decisions may include, but are not limited to, reducing capital and operational expenditures and reducing employment.

We continue to strive to comply with all radio authorization and spectrum licence and renewal conditions, and we plan to participate in future spectrum auctions. We continue to advocate with the federal government for fair spectrum auction rules, so that companies like TELUS can bid on an equal footing with other competitors for spectrum blocks available at auction and can purchase spectrum licences available for sale from competitors. We also continue to strongly advocate that preferential treatment is not required and is not in the best interests of all Canadians, specifically rural Canadians, for regional carriers, including for 5G services, most notably for carriers that are currently part of established, sophisticated and well-financed cable companies.

As a holding corporation of Canadian carriers, the Telecommunications Regulations give us certain powers to monitor and control the level of non-Canadian ownership of our Common Shares. These powers have been incorporated into our Articles and extended to ensure compliance under the *Broadcasting Act*.

10.4 Competitive environment

Risk category: Strategic

As the telecommunications industry continues to evolve, we have expanded our offerings beyond the delivery of traditional voice and data services for consumer and business customers to focus on security, customer care and business services, healthcare and agriculture, both inside and outside Canada (see *Competition overview* in *Section 4.1*). We face intense competition in our traditional voice and data services, as well as in new areas of business.

Wireless markets are characterized by aggressive competition from established players and regional carriers, with competitors using various promotional offers to attract and retain customers.

In the consumer market, cable companies and other competitors continue to offer a mix of residential local voice over IP (VoIP), long distance, internet access and, in some cases, wireless services under one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services. Some of our competitors own and continue to acquire broadcast content assets, which could result in content being withheld from us or being made available to us at inflated prices or on unattractive terms.

In the business market, traditional facilities-based competitors continue to compete based on network footprint and reliability, while hyperscalers such as Microsoft (Teams, Skype) and other IP voice/collaborative providers such as Zoom only emphasize price, flexibility and convenience. These service providers do not invest in, or own, networks or other infrastructure but compete directly with video, voice and messaging services across both the consumer and business market segments.

TI is a leading digital customer experience innovator with a focus on customer experience and transformation innovation that designs, builds and delivers next-generation digital solutions and content moderation. It competes with

professional services companies that offer consulting services, information technology companies with digital capabilities, and traditional contact centre and business process outsourcing companies that are expanding their capabilities to offer higher-margin and higher-growth digital services. In addition, the continued digital expansion of the services offered by TI and the markets in which it operates will result in new and different competitors, many of which may have significantly greater market recognition than TI in the markets it is entering, as well as increased competition with existing competitors that are also expanding their services to cover digital capabilities. From time to time, our TI subsidiary's clients who currently use TI services may determine that they can provide these services in-house. As a result, TI faces competitive pressure to continually offer services in a manner that will be viewed by its clients as better and more cost-effective than what they could provide themselves.

TELUS Health competes with other providers of electronic medical records and pharmacy management products, claims adjudicators, systems

integrators and health service providers, including those that own a vertically integrated mix of health services delivery, IT solutions and related services, and global providers. With consumer-facing health products, we compete in the provision of virtual healthcare services (with access to general practitioners, nurse practitioners, mental health therapists and dieticians provided through virtual consultations), preventative health services, and personal emergency response services.

TELUS Agriculture is a global data management and application solutions provider to a wide variety of agriculture and agri-food customers. While we maintain a broad solution set as compared to other agriculture technology providers, we compete with focused software and IoT competitors.

Potential impact

Our customers' loyalty and their likelihood to recommend TELUS are both dependent upon our ability to provide a service experience that meets or exceeds their expectations, a range of relevant products and services, and reliable state-of-the-art networks.

Intense competition from wireless competitors, traditional telephony, data, IP and IT service providers and VoIP-focused competitors in both the consumer and business markets, along with various promotional offers, inclusive bundles and rate plans, places pressures on average revenue per subscriber per month (ARPU), churn and costs of acquisition and retention. In addition, technological substitution and technological advances across all key business lines and market segments have blurred the boundaries between broadcasting, internet and telecommunications sectors (see *Section 10.5 Technology*).

The inability of TI to compete successfully against companies that offer similar services and to offer our TI subsidiary's clients a compelling alternative to taking the services TI provides in-house could result in increased client churn, revenue loss, pressures on recruitment and retention of team members, service price reductions and increased marketing and promotional expenses, or reduced operating margins, which could have a material adverse effect on our TI subsidiary's business, financial performance, financial condition and cash flows.

We also face intense competition in agriculture, health and digital technologies from companies that offer similar services. If we are unable to differentiate effectively in these businesses, our business, financial performance, financial condition and cash flows could be materially adversely impacted and we may not achieve the benefits of the significant investments that we have made in acquiring, integrating and growing these businesses.

Changes over the past 12 months

On July 30, 2020, Shaw Communications launched Shaw Mobile for customers in B.C. and Alberta. Continued wireless promotional activities, along with device financing, unlimited data plans and substitution by increasingly available Wi-Fi networks, are impacting chargeable usage, ARPU and customer churn (see *Wireless trends and seasonality* in *Section 5.4*), while the use of unlicensed spectrum and high-throughput satellites to deliver higher-speed data services is intensifying competition (see *Communications industry regulatory developments and proceedings* in *Section 9.4*).

In October 2020, the CRTC approved the application from Space Exploration Technologies Corp. (SpaceX Starlink) to provide low earth orbit satellite internet to rural Canadians. By December 31, 2020, the service had already been made available to select users for beta testing, with the promise of wider availability in 2021. Additionally, in November 2020, the Government of Canada announced it has entered into an agreement with Telesat to secure high-speed internet capacity over Canada through Telesat's low earth orbit satellite constellation and has secured up to $600 million to secure capacity to improve connectivity in rural and remote Canada, including the far north. Other competitors in the market include Amazon (Kuiper), Boeing, OneWeb and the European company Thales Alenia. However, these companies do not yet have approval to provide services in Canada.

Canadian cable competitors are licensing next-generation TV platforms while continuing to increase the speed of their internet offerings and their roll-out of Wi-Fi services in metropolitan areas. OTT services, such as Netflix, Amazon Prime Video, Disney+ and YouTube, are also competing for share of viewership, which may accelerate the disconnection of TV services or affect subscriber and revenue growth in our TV and entertainment services.

Erosion of our residential voice lines and the decline of legacy voice revenues are expected to continue, due to competition and ongoing technological substitution by wireless and VoIP. This has been only partially offset by growth in demand and/or migration of customers to IP-based platforms, as IP-based solutions are also experiencing lower margins.

The COVID-19 pandemic has driven an accelerated adoption of cloud-based solutions (IP voice, collaboration and NaaS) and expedited the shift from legacy business solutions to third wave technologies.

Non-traditional competitors such as Amazon, Google and Microsoft are entering the business market and are able to leverage their global scale to offer low-cost data storage and cloud computing services. In addition, rapidly advancing technologies, such as software-defined networks and virtualized network functions, enable the layering of new services in cloud-centric solutions.

Digital health adoption, including virtual care, is accelerating along with the rapid expansion of competitor offerings and the emergence of new players in the market, capitalizing on increased demand and available government funding. Early in the COVID-19 pandemic, non-traditional healthcare companies, such as Google, Amazon Web Services and Apple, made moves into the healthcare space.

Within the Canadian digital health market specifically, several of TELUS Health's long-standing competitors announced significant investments or acquisitions that mirror the activities of U.S.-based or international companies. The overall trend appears to be for competitors to quickly expand product offerings through partnerships or acquisitions. In several cases, some of our competitors are now working together, such as Loblaw Companies Ltd. and Maple Corporation or Sun Life Financial and Dialogue Technologies Inc. However, we believe no other digital health provider spans the Canadian healthcare ecosystem with comparable breadth or depth.

Mitigation

Our top corporate priority is putting customers first and earning industry leadership in the likelihood to recommend. In fact, 60% of our internal corporate scorecard is weighted to team member engagement and customer experience. To enhance customer experience, we continue to invest in our products and services, system and network reliability, team members, and system and process improvements. Additionally, with our product life cycle management processes, we endeavour to introduce innovative products and services through both research and development and acquisition, enhance our current services with integrated bundled offers, and invest in customer-focused initiatives to bring greater transparency and simplicity to our customers, all to help differentiate ourselves from our competition.

Our 4G technology covers approximately 99% of Canada's population, which has enabled us to establish and maintain a strong position in smartphone and data device selection and expand roaming capability to more than 225 destinations. To compete effectively across customer segments, we offer a wide range of services across our TELUS, Koodo and Public Mobile brands. Each brand has a unique value proposition and web-based channel (see *Our capabilities* in *Section 4.1* and *Our major brands and distribution channels* in *Section 4.2*). In addition, we have deployed 5G networks within Vancouver, Toronto, Montreal, Calgary, Edmonton and other areas, providing superior coverage in urban centres with future plans to cover rural Canada. At the end of 2020, our 5G network covered over 28% of Canada's population. As we expand our 5G coverage, we will continue to deliver a network that is reliable, fast and built in full compliance with all of the Health Canada safety guidelines in order to provide our customers with faster speeds, increased capacity and near instantaneous responsiveness, while also enabling applications such as remote surgery and autonomous cars and the creation of truly smart cities (see *Our technology, systems and properties* in *Section 4.2*).

We are making significant investments in our broadband infrastructure, including connecting more homes and businesses directly to our fibre-optic network. At December 31, 2020, approximately 2.5 million households and businesses in B.C., Alberta and Eastern Quebec were connected with fibre-optic cable (representing approximately 81% of our total high-speed broadband footprint), which provides these premises with immediate access to our fibre-optic infrastructure. This is up from approximately 2.2 million households and businesses at December 31, 2019. Our broadband investments extend the reach and functionality of our IP TV services and business and healthcare solutions, and are also enabling a more efficient and timely evolution to a converged 5G network (see *Our technology, systems and properties* in *Section 4.2*).

Our IP TV and OTT multimedia initiatives support the next generation of IP TV and, importantly, tie our OTT environment to one platform, which allows us to be agile in the delivery of OTT services, such as Netflix, Amazon Prime and YouTube, while also strengthening our leadership position in Western Canada in the provision of high-definition linear channels, video-on-demand services and ultra-high definition 4K HDR content. Our strategy is to aggregate, integrate and make content and applications accessible for our customers' enjoyment, on a timely basis across multiple devices. We have demonstrated that it is not necessary to own content in order to make it accessible to customers on an economically attractive basis, provided there is timely and strict enforcement of the CRTC's regulatory safeguards. In addition, as more OTT service providers launch services and offer higher-resolution video over the internet, we continue

to make investments in our network. Throughout 2020, TELUS PureFibre was the leader in Canada in the Netflix Internet Service Provider Speed Index, a measure of prime-time Netflix performance delivered by a specific group of internet service providers around the world, and was ranked first in network coverage, speed, reliability or experience by Opensignal, J.D. Power, Ookla and Tutela.

Our SmartHome Security and Secure Business solutions offerings further leverage our infrastructure investments and our strong customer experience capabilities to enhance our suite of services with video surveillance and analytics, home and business automation and related safety and security monitoring. These services are provided over smartphone applications and leverage our leading PureFibre and wireless networks, while also generating multi-service bundling and retention profiles.

We continue to add to our capabilities in the business market through product development, acquisitions and partnerships and investments in software-defined networks, unified communications and IoT. In September 2020, TELUS launched GoCo, bringing together diverse, experienced technology entrepreneurs and combining the strengths and expertise of bluArc, BroadConnect Canada, Infra-Solutions, Netrium, Radiant and Ubity to provide businesses across Canada with simple and scalable solutions for unified communications, managed connectivity and network security.

Through TELUS Health, we have leveraged our systems, proprietary solutions and third-party solutions to extend our footprint in healthcare and benefit from the investments in eHealth being made by governments and employers. With the introduction of healthcare products and services for Canadians, we are seeing evidence of a positive shift in perception, driving overall interest and sales of TELUS services, and differentiating TELUS from our traditional competitors.

Over the course of 2019 and 2020, TELUS completed several key acquisitions to assemble a suite of agriculture industry assets and in November 2020, TELUS Agriculture was formally launched to help companies improve their continuity of supply, protect their brands, and drive efficiency and profitability. As one of the few businesses with a perspective that covers the full value chain, we expect to be able to differentiate ourselves from more narrowly focused competitors.

We are continuing our disciplined long-term strategy of investing in our growth areas and delivering on our customers first priority. We intend to continue to market and distribute innovative and differentiated services; offer bundled services across our product portfolio; invest in our extensive network and systems to support customer service; evolve technologies; invest in our distribution channels, including our digital capabilities; and acquire the use of spectrum to facilitate service development and the expansion of our subscriber base, as well as to address the accelerating growth in demand for data usage.

10.5 Technology

Risk category: Strategic

We are a technology-enabled company and we maintain short-term and long-term strategies to optimize our selection, costs and use of technology, minimize risks and uncertainties and diversify our product and service offerings. Our 5G technology, 4G LTE network, LTE advanced (LTE-A) and TELUS PureFibre infrastructure are foundational to our future growth (see *Our technology, systems and properties* in *Section 4.2*).

A paradigm shift involving customer adoption of alternative technologies, such as video and voice OTT offerings (e.g. Netflix and FaceTime), IP voice and collaboration services, NaaS, and increasingly available Wi-Fi networks, could negatively affect our revenue streams. For example, Wi-Fi networks are being used to deliver entertainment services to customers outside the home, while OTT content providers are competing for a share of entertainment viewership. OTT technology may also impact the business by enabling capabilities that in the past were associated with telecommunications service providers (e.g. cloud-based services and roaming). The proliferation of low-power wide-area (LPWA) IoT networks and services also presents challenges arising from low bandwidth usage, which may put additional pressure on our revenue streams. In addition, we are constantly focused on advances in cybersecurity, in order to identify any opportunities they may offer.

Potential impact

Our business depends on deploying technology and maintaining sufficient access to spectrum to deliver services. Rising data traffic levels and the fast pace of data device innovation present challenges to providing adequate capacity and maintaining high service levels at competitive cost structures.

Our growth, profitability and the diversity of our revenue sources will depend on our ability to develop and adopt new technologies to expand our existing offerings, proactively identify new revenue streams and improve cost efficiencies in our operations, all while meeting rapidly evolving customer expectations. We may not always be successful in

anticipating or responding to our customers' expectations and interests in adopting evolving technology solutions and the integration of these technology solutions into our offerings, and may not achieve the intended enhancements or cost reductions in our operations. New services and technologies offered by our competitors may make our service offerings uncompetitive. Our failure to innovate, maintain technological advantages or respond effectively and timely to changes in technology could have a material adverse effect on our business, financial performance, financial condition and cash flows.

Changes over the past 12 months

The demand for wireless data services continues to grow rapidly. According to the CRTC Communications Monitoring Report 2020, the average data usage per subscriber increased by 23.6% in 2019 over the 2018 average, while wireless data revenue increased by 3.2% over the same period.

5G technology is evolving rapidly, with the world's first standards-based commercial launches having occurred in 2019. Most early 5G ecosystems operate on three distinct spectrum bands: 3500 MHz, millimetre wave (mmWave) spectrum (2800 MHz and 3700 to 4000 MHz) and 600 MHz. Globally, 3500 MHz spectrum is becoming the primary band for 5G mobile coverage. In Canada, 3500 MHz spectrum was auctioned for fixed wireless access between 2004 and 2009; it is currently not licensed for mobile applications and is largely held by Bell and Rogers in most urban markets. In 2019, ISED issued a decision to claw back a portion of the 3500 MHz band and re-auction it for flexible use (permitting its deployment for mobile applications, such as 5G). In March 2020, ISED released its framework for the 3500 MHz spectrum licence auction, which is now scheduled to take place in June 2021. The auction rules create a material risk that we could end up with less 3500 MHz spectrum than certain other carriers, and thus not be able to compete equally in the provision of higher network speeds and 5G capacity.

Spectrum in the mmWave band is expected to be used for very high data demand locations in which customers are very close to the antenna and have an unobstructed view of the transmitting site. Services using this particular spectrum are expected to be an alternative to fibre-to-the-premises deployments.

Mitigation

At December 31, 2020, our 4G LTE access technology covered 99.6% of Canada's population, and our LTE-A access technology covered 97.6%, while our 5G access technology covered 28.3%. Our ongoing investments in 4G LTE technology, including LTE-A technology and 5G capabilities, allow us to manage data capacity demands by more effectively utilizing our spectrum holdings. The evolution to LTE-A technologies is supported by our investments in our IP network, IP/fibre back-haul to cell sites, including our small-cell infrastructure, and a software-upgradeable radio infrastructure. The LTE-A expansion is expected to further increase network capacity and speed, reduce delivery costs per megabyte, enable richer multimedia applications and services, and deliver a superior subscriber experience.

Mobile network infrastructure investments will increasingly be directed to systems based on network function virtualization (NFV), which offer greater capacity for computing and storage, higher levels of resiliency and more flexible software design. Our large-scale move to national, geographically distributed data centres that use commercial off-the-shelf computing and storage solutions enables the utilization of broad-scale NFV and software-defined network technologies, which will allow us to virtualize much of our infrastructure and will also facilitate a common control plane for coordination of our virtualized and non-virtualized network assets. The architecture of our intelligence and content capabilities is located at the edge of our network, close to our customers. The distributed smaller-scale computing power and storage deliver services faster while managing the ongoing need to continually scale the IP/fibre core network infrastructure.

Rapid growth of data volumes requires efficient utilization of our spectrum holdings of 700 MHz, AWS-3 and 2500 MHz spectrum licences. We are now deploying those licences as required to provide additional capacity in order to mitigate risks from growing data traffic. We also plan to combine our licensed spectrum with unlicensed supplementary spectrum, as network and device ecosystems evolve to support licensed assisted access (LAA) technology. The spectrum licences previously used for our CDMA access technology have been repurposed for use with LTE technology. Our public Wi-Fi service increasingly integrates seamlessly with our 4G access technology, automatically shifting our smartphone customers to Wi-Fi, offloading data traffic from our spectrum and extending service and channel opportunities. Our deployment of small-cell technology, coupled with both licensed and licence-exempt spectrum technologies, is helping us achieve a more efficient utilization of our spectrum holdings.

With ISED scheduling its 3500 MHz spectrum auction for June 2021, and assuming our successful participation in the auction, we expect to begin operationalizing the spectrum in the later part of 2021.

In order to prepare for the future deployment of mmWave spectrum, we continue to conduct 5G trials in the mmWave spectrum bands. Our trials have established a platform that will form the basis for evaluating our future 5G use cases and help us prepare for network planning in the mmWave bands. Additionally, we continue to collaborate with ISED, sharing trial results in discussions to help guide the regulator as it finalizes its decisions on

establishing the policy

and timing for the release of mmWave spectrum for 5G. The auction for mmWave spectrum is expected to occur in 2021. Furthermore, our investment in small-cell technology will help us densify our network and mitigate any potential speed and capacity disadvantages created by 3500 MHz availability, as well as improve future mmWave deployment feasibility, cost and time to market.

Since early 2014, we have worked with numerous businesses and many major sports and entertainment venues as we continue to expand our public Wi-Fi infrastructure. This public Wi-Fi service is a part of our network strategy of deploying small cells that integrate seamlessly with our 4G wireless access technology, automatically shifting our smartphone customers to Wi-Fi and offloading data traffic from our wireless spectrum. Integrated public Wi-Fi infrastructure build-out activity also extends service and channel opportunities with small and medium-sized enterprises and improves customers' likelihood to recommend. Integration of home Wi-Fi increases the propensity for higher data usage on smartphones within and outside the home, helping to drive the uptake of our internet service. In addition to the availability of our Wi-Fi service, our IoT portfolio is also growing, with the addition of services such as GEOTrac and TELUS Alert and Assist, as well as a wide variety of IoT solutions combined with seamless global IoT connectivity across more than 200 countries and networks. We are also capitalizing on advanced self-learning technologies and automation (e.g. artificial intelligence and robotic process automation), which will change the way we manage our operations and support customer experience innovation, as well as present new revenue opportunities. In addition, we are maintaining a constant focus on cybersecurity solutions recognizing that cybersecurity, as an ecosystem of technologies and processes working together, may provide greater visibility to risks and guide better security decisions for organizations across Canada.

Ongoing investments in fibre-to-the-premises should support the further evolution of IP-based telephony, and as those services evolve, we will continue to assess opportunities to further consolidate separate technologies within a single voice service environment. The overall convergence of wireless and wireline services provides opportunities for cost savings and for the rapid development and deployment of new and advanced services; to support this convergence within a common IP-based application environment, we are leveraging modular architectures, lab investments and employee trials. We are partnering with system integrators where appropriate, purchasing hardware that is common to most other North American IP-based technology deployments and introducing virtualization technologies, where feasible. We are also active in a number of standards bodies, such as the Metro Ethernet Forum, in order to influence a new IP infrastructure strategy that leverages standards-based functionality, which could allow us to further simplify our network.

10.6 Suppliers

Risk category: Strategic

We rely on, and have relationships with, multiple vendors, including large suppliers such as Amazon, Apple, Cisco, Google, Microsoft, Ericsson, Nokia, Samsung and Huawei, which are important in supporting our network and service evolution plans and our delivery of services to our customers. Our suppliers and vendors may experience business difficulties, privacy and/or security incidents, and external events such as epidemics or pandemics, as well as government or regulatory pressures. They may restructure their operations, be consolidated with other suppliers, discontinue or cease to provide support or updates for certain products or sell their operations or products to other vendors. In addition, various suppliers may sell products or services directly to our customers.

In certain cases, the number of suppliers of a product, service or technology that we use is limited. In addition, government or regulatory actions with respect to certain countries or suppliers may affect our relationship with certain vendors and our future use of their products and services.

Potential impact

Our agility in the delivery of products and services is directly linked to our ability to engage or replace a supplier or vendor on a timely basis and without incurring additional cost. Reliance on certain manufacturers may increase their market power and adversely affect our ability to purchase certain products at an affordable cost. Consequently, the success of upgrades and the evolution of technology that we offer our customers, including our IP TV solutions and the roll-out and evolution of our broadband technologies and systems, may be impacted, as well as the cost of acquisition or the time required to deploy certain technologies and systems.

There is no guarantee that our vendor strategies and agreements will not be impacted by vendor operational difficulties or government/regulatory pressures, or that we will not incur additional costs or delays in continuing to provide services or in deploying our technologies and systems.

Changes over the past 12 months

The COVID-19 pandemic had a significant impact on many of our suppliers and on the global supply chain overall throughout 2020, with workforce restrictions, material quarantines and logistics difficulties. While many suppliers have re-established a large portion of their production capacity, significant challenges in particular segments still remain. For

example, most of the subscriber equipment used in our home services portfolio, such as routers and set-top boxes, has seen lead times lengthen from approximately 20 weeks to over 40 weeks. These lead time increases are a function of challenges obtaining the supply of chip-sets, which is in turn challenged by the silicon wafer supply.

Huawei, a leading global telecom supplier and phone manufacturer, continued to come under further international scrutiny in 2020, with the U.K. government announcing that the purchase of new Huawei equipment for high-speed 5G networks would be banned as of the end of 2020 and that all

Huawei equipment must be removed from U.K. 5G networks by 2027, following a review by the government's National Cyber Security Centre (see *Section 9.4*). This is in addition to similar bans by the United States and Australia and could result in a general shortage of chip sets and other equipment.

Mitigation

We value our relationships with our suppliers because they help us achieve our business objectives and contribute to our success. We work closely with key strategic suppliers to ensure appropriate timing in the manufacturing, delivery and warehousing of their products so that our needs will be met regardless of changing conditions. We strive to award business to suppliers that have demonstrated a strong commitment to sustainable development by adopting ethical, labour, health and safety, and environmental principles and compliance practices that align with our expectations and support the well-being of their employees, contractors and communities.

In response to the impact of the pandemic on global supply chains, our supply operations in collaboration with our product development and marketing teams, have extended future forecasts and increased purchase order quantities to help maintain our fulfilment capabilities in the context of longer lead times. In addition, we continue to seek alternative devices or sources of supply and refurbish equipment where possible to support sustainability.

As a leading network aggregator, we partner with several network equipment suppliers and work with numerous international and domestic vendors to deliver the best possible experience for our customers. We consider possible vendor strategies and/or restructuring outcomes when planning for our future growth, as well as the maintenance and support of existing equipment and services. We have reasonable contingency plans for different scenarios, including working with multiple vendors, maintaining ongoing strong vendor relationships with periodic reviews of vendor performance, and working closely with other product and service users to influence vendors' product or service development plans. With continued international focus on telecom suppliers, business continuity plans have been formalized to ensure availability of supply in compliance with U.S. Bureau of Industry and Security (BIS) Entity List restrictions. For our 5G network build, we have announced partnerships with Ericsson, Nokia and Samsung, consistent with our multi-vendor strategy.

In addition, we regularly monitor the risk profile of our key vendors and review the applicable terms and conditions of our agreements to determine whether additional contractual safeguards are required. We also promote our supplier code of conduct, which is based on generally accepted standards of ethical business conduct.

In respect of supplier market power, we offer and promote alternative devices to provide greater choice for consumers and to help limit our reliance on a few key suppliers.

Additional information on supply chain sustainability can be found in our sustainability report at **telus.com/sustainability**.

10.7 Organizational change

Risk category: Strategic

We will partner, acquire and divest as necessary to accelerate the implementation of our strategy. Through the partnerships and acquisitions we pursue, we may seek opportunities to expand the scope of our existing services, add new customers or enter new geographic markets. There can be no assurance that we will successfully identify suitable candidates in the future for partnering or strategic transactions at acceptable prices or at all or be able to consummate any desired transactions.

As we have implemented this strategy, we have experienced rapid growth and significantly expanded our operations into new business areas and countries, and the number of our team members has increased significantly over the past several years. We expect to develop and improve our internal systems in the locations where we operate in order to address the anticipated continued growth of our business. Our TI subsidiary is also continuing to look for delivery locations outside of its current operating geographies to decrease the risks of operating from a limited number of countries. We may not, however, be able to effectively manage our infrastructure and team member expansion, open additional delivery locations or hire additional skilled team members as and when they are required to meet the ongoing needs of our customers and clients and to meet our current growth trajectory, and we may not be able to develop and improve our internal systems. We also need to manage cultural differences between our team member populations and that may increase the risk for employment law claims. Our inability to execute our growth strategy, to ensure the

continued adequacy of our current systems or to manage our expansion, capital and other resources effectively could have a material adverse effect on our business, financial performance, financial condition and cash flows.

A substantial majority of the assets and operations of our TI subsidiary are located outside Canada and the United States. In addition, TI's business strategies may involve expanding or developing its business in emerging market regions, including Europe and Asia-Pacific. Due to the international nature of our business, we are exposed to various economic, political and other risks of doing business globally.

Potential impact

Business combination transactions add complexity to our corporate structure, product and service offerings, and operational systems and processes. If pre-acquisition due diligence is insufficient or ineffective, our investments may not realize potential synergies or generate strategic growth. Our failure to complete potential acquisitions in which we have invested or may invest significant time and resources could have an adverse effect on our business, financial performance, financial condition and cash flows.

We may be unable to successfully identify, complete, integrate and realize the benefits of acquisitions or manage the associated risks. Consequently, any acquisition we complete may not result in anticipated or long-term benefits or synergies to us or we may not be able to further develop the acquired business in the manner we anticipated.

Acquisitions, including completed acquisitions, involve a number of risks, including diversion of management's attention from operating our business, developing our relationships with customers and seeking new revenue opportunities, failure to retain key personnel of acquired companies, legal risks and liabilities relating to the acquisition or the acquired entity's historic operations that may be unknown or undisclosed and for which we may not be indemnified fully or at all, failure to integrate the acquisition in a timely manner, and, in the case of our potential acquisitions, our ability to finance the acquisitions on attractive terms or at all, any of which could have an adverse effect on our business, financial performance, financial condition and cash flows. Future acquisitions may also result in the incurrence of indebtedness or the issuance of additional equity securities.

We could also experience financial or other setbacks if transactions encounter unanticipated problems, including problems related to execution, integration or underperformance relative to prior expectations. Post-acquisition activities include the review and alignment of team member cultures, accounting policies, treasury policies, corporate policies such as ethics and privacy policies, team member transfers and moves, information systems integration, optimization of service offerings and the establishment of control over new operations. Such activities may not be conducted efficiently and effectively. Our management may not be able to successfully integrate any future acquired business into our operations and culture on our anticipated timeline or at all, or maintain our standards, controls and policies, which could negatively impact the experience of our customers and clients, optimization of our service offerings and control over operations and otherwise have a material adverse effect on our business, financial performance, financial condition and cash flows. Consequently, any acquisition we complete may not result in anticipated or long-term benefits or synergies to us or we may not be able to further develop the acquired business in the manner we anticipated.

The risks to which we are exposed by doing business globally and in emerging markets may impede our strategy by limiting the countries and regions in which we are able to expand. The impacts of these risks may also only materialize after we have begun preparations and made investments to provide services in this new country or region. The exposure to these risks may require us to incur additional costs to mitigate the impact of these risks on our business. As we continue to operate our business globally, our success will depend, in part, on the nature and extent of any such changes and how well we are able to anticipate, respond to and effectively manage any such changes. Finally, international trade and political disputes can adversely affect the operations of multinational corporations like ours by limiting or disrupting trade and business activity between countries or regions. For example, we may be required to limit or halt operations, terminate customer or client relationships or forgo profitable opportunities in countries which may, in the future, be subject to sanctions or other restrictions on business activity by corporations such as ours, by U.S. or Canadian legislation, executive order or otherwise. Some of our TI subsidiary's clients have been targeted by and may, in the future, be subject to such sanctions. Additionally, failure to resolve the trade dispute between the countries may also lead to unexpected operating difficulties in certain countries, including enhanced regulatory scrutiny, greater difficulty transferring funds or negative currency impacts. All the foregoing could have a material adverse effect on our business, financial performance, financial condition and prospects.

Given the rapid rate of technological change, we may also look to partner and invest in emerging opportunities that may not yet be fully viable and established. These investments may require high levels of initial funding and experience low levels of initial adoption, growth and returns, all of which could impact our financial position in the short term.

Changes over the past 12 months

Over the course of 2020, we made a number of acquisitions.

In July 2020, TELUS acquired Mobile Klinik, Canada's largest same-day smartphone repair company, expanding our wireless value chain to include repair services. With approximately half of our customers now retaining their devices for three or more years, wireless device repair has become an essential service.

In the third quarter of 2020, TELUS acquired AFS, a global leader in sales and distribution solutions for the consumer goods market; and Agrian, a unified management platform supporting greater precision in agronomy, sustainability, analytics and compliance. These acquisitions were part of the formal launch of TELUS Agriculture in November 2020.

In December 2020, TELUS acquired EQ Care, a virtual healthcare provider supporting 24/7 national and bilingual virtual care. The acquisition further enables access to digital healthcare services and better health outcomes for Canadians, improving the overall patient experience supported by TELUS Health.

In January 2020, TI completed the acquisition of Competence Call Center, a leading provider of higher-value-added business services with a focus on customer relationship management and content moderation and in December 2020, TI acquired Lionbridge AI, a market-leading global provider of crowd-based training data and annotation platform solutions used in the development of artificial intelligence algorithms to power machine learning. Through these acquisitions, TI has an expanded portfolio of customer experience, digital transformation, content moderation, IT lifecycle, advisory and digital consulting, risk management, and back-office support that will enable new go-to-market opportunities and drive growth.

Mitigation

To support ongoing investment in leading-edge and innovative technology, we have diversified our approach to allow for varied levels of commitment, which we determine based on the relative maturity of that technology in its life cycle, its alignment with our strategy and its linkage with our value proposition. Our TELUS Ventures investments include more than 20 active companies, and we continue to build on our commitment to help develop exciting new technologies with the potential to deliver benefits for our customers, stakeholders and shareholders. In addition, we continue to engage in partnerships that can research and develop leading-edge innovative technology and services in sectors such as entertainment, healthcare and agriculture.

Over the course of time, we have built a disciplined corporate development and ventures expertise, with due diligence and post-acquisition integration planning rigour, reinforced by a well-defined process and governance approach to evaluating investments and acquisitions. Where a larger-scale business combination is contemplated, our teams follow a well-established and collaborative due-diligence review process, with oversight by our senior leadership and Board. In addition, formal post-acquisition processes are in place to support onboarding, engagement and operational integration with our risk monitoring and management practices.

10.8 Customer service excellence

Risk category: Operational

Our customers' loyalty, their likelihood to expand the services they use with us and the likelihood to recommend us, are dependent upon our ability to provide a service experience that meets or exceeds their expectations and is differentiated from our competitors. Our service delivery teams focus on driving excellence and efficiencies in our operations, implementing radical simplification and becoming best-in-class solution advisors, with the goal of safely minimizing the effort involved for our customers when they interact with us. Having our TI team members assist with performing customer-serving activities further strengthens our ability to continue delivering exceptional customer service.

Our TI business has derived and we believe that, in the near term, will continue to derive, a significant portion of its revenue from a limited number of large clients. Google, Inc. (Google) was TI's largest external client in the fiscal years ended December 31, 2019 and 2018 and accounted for approximately 12% and 14% of its revenue in such periods, respectively. In addition, Google is the largest client of Lionbridge AI, the data annotation business TI acquired on December 31, 2020. Google accounted for 65% of Lionbridge AI's revenue in the year ended December 31, 2019. As a result of the acquisition of Lionbridge AI, an even greater percentage of TI's revenue will be dependent on Google. TI's largest external client for the nine-month period ended September 30, 2020, which is a leading social media company, represented approximately 16% of TI's revenue for such period. We do not have a comparative figure for this client for the same period in the previous year. Additionally, the volume of work performed for specific clients of TI or the revenue it generates can vary from year to year. For example, a client may demand price reductions, change its customer engagement strategy or move work in-house, and continued consolidation in many of the verticals in which TI offers services could result in the loss of a client. As a result of the foregoing, a major client in one year may not provide the same level of revenue in any subsequent year.

Potential impact

Delivering sub-optimal experiences when our customers engage with us for the provision of services or support may negatively impact customer satisfaction, our portfolio of brands and our ability to grow our customer base, including customers of our non-traditional telecom businesses, such as TELUS International, TELUS Health and TELUS Agriculture. Inadequate or inefficient customer interactions (e.g. order taking, support contact, service delivery, billing accuracy, network and services reliability) may increase customer dissatisfaction and churn. Failure to continue to execute effectively on organizational initiatives, such as our customers first priority, solutions advisor support, digitization and simplification, may lead to a deterioration in the customer experience we provide. As well, any significant or prolonged systems and service disruptions or outages may negatively impact customer satisfaction and our brands. Regulatory decisions may also limit our ability to invest in our customer experience.

In addition, our corporate sustainability and social purpose activities are an important part of our organizational culture and are becoming a key factor in attracting and retaining customers and differentiating us from our competitors. If we are unable to meet or exceed the evolving expectations of our customers in these areas or implement high-quality corporate sustainability and social purpose activities on a timely basis, and effectively communicate them to our customers, our reputation may suffer, which may negatively impact our ability to attract new and retain existing customers.

Any significant reduction in or elimination of the use of the services TI provides as a result of client consolidation or our removal from a key client's provider network would result in reduced revenue to TI and could harm our business. In addition, such consolidation may encourage our TI subsidiary's clients to apply increasing pressure on TI to lower the prices it charges for its solutions. All the foregoing could have a material adverse effect on our business, financial condition, financial performance and prospects.

Changes over the past 12 months

The global pandemic has had widespread effects on many areas of service delivery. These include significant constraints on when, where and how we can interact with our customers; a major acceleration to a digital first organization and the proliferation of self-serve capabilities to help our customers. These impacts have affected our team around the world, requiring us to be agile in enabling our team members to work efficiently from home or from alternative locations, as well as virtually with customers through our virtual technician model (VTM) and do-it-yourself (DIY) capabilities.

Statistics Canada research on the impact of the COVID-19 pandemic on Canadian families and children released on July 9, 2020 identified that 40% of respondents were very or extremely concerned about school year and academic success and 43% were very or extremely concerned about staying connected with family and friends. Initial measures to prevent the spread of COVID-19 transitioned students to online learning across Canada and established restrictions on social gatherings. While students were able to return to classrooms during the fall, measures requiring online learning and restricting social gatherings continued to be enacted in communities based on transmission and outbreak levels.

Mitigation

Continued simplification and digitization, including our ongoing work on conversational interactive voice response and enhanced call-back capabilities, has improved first-time interaction experiences by reducing the number of call transfers and shortening customer wait times. We continue to enhance the reliability and functionality of our websites and applications, while promoting digital engagement to minimize effort for our customers and reduce the volume of calls related to basic transactions, interactions and other activities.

To ensure minimal disruption to our ability to deliver on our service promise during any further lockdown scenarios, we quickly developed a robust capacity to ramp our virtual repair and installation program up or down at a community level in response to outbreak data, maximizing value and safety. This is in conjunction with our focus on further developing our DIY installation and repair program and our VTM, which will deliver further internal cost savings and greater choice for our customers. We have also invested in our work-from-home capabilities, including increased virtual private network (VPN) capacity, around the world that allows over 90% of our global workforce to work from home or from alternative locations for the foreseeable future and serve our customers safely. The work of our EMOC also helps us track outbreaks and coordinate responses to keep our customers and team members safe.

Our TI subsidiary was created with an intense focus on customer service excellence, continuous improvement and a values-driven culture with a goal of better serving its growing portfolio of global clients. Through TI, our customer care and business services (CCBS) are delivered with a TELUS-wide unified culture via a flexible team of almost 50,000 team members in over 20 countries, minimizing business disruptions. CCC and Lionbridge AI

were acquired during 2020; these acquisitions help extend the reach of our TI subsidiary's customer service capabilities by diversifying its service offerings. CCC provides higher-value-added business services with a focus on trust and safety, including content

moderation, while Lionbridge AI's solutions help improve data functionality and deliver secure, compliant, scalable and high-quality solutions for our TI subsidiary's clients.

Within TELUS Health, we have designed virtual care delivery options, including the capability to perform virtual health assessments from our local care centres. We have also introduced a "virtual first" approach to implementation of our software solutions. Virtual training and onboarding is being delivered to new physician and pharmacist clients, incorporating rigorous practices that ensure the safety of our customers and team members when on-site visits are required. In April 2020, we launched virtual-visit functionality into our electronic medical records (EMR) across Canada. This feature allows clinicians to virtually support their own roster of patients while maintaining continuity of care and fully up-to-date health records. As of December 31, 2020, more than 226,000 consultations have been conducted through the TELUS EMR Virtual Visit solution.

We continue to be ranked favourably in third-party reports based on customer and network experience. In 2020, we were ranked first in network coverage, speed, reliability or experience by Opensignal, J.D. Power, Ookla and Tutela. This successful performance was the result of continuing to evolve our coverage across Canada, increasing accessibility to our network, and working to better understand the emerging network methodologies that can enhance coverage and LTE availability, all of which won us recognition for providing the best network coverage among our competitors.

As a social capitalism company, we are also committed to making a difference by building stronger, healthier communities and ensuring that the most vulnerable among us are not left behind. Our Internet for Good program is focused on connecting Canadians in need by providing low-cost high-speed internet access for low-income families, youth aging out of care and people with disabilities. During 2020, we expanded this program by empowering schools across Alberta and B.C. to extend the offer directly to families in need. In addition, our Mobility for Good program provides subsidized smartphones and plans for youth leaving foster care and low-income seniors, helping them stay in touch with loved ones, maintain vital support networks and build new lives. Additional information on our sustainability and environmental governance practices and related disclosure is detailed in Our environment (see *Section 10.12*).

10.9 Our systems and processes

Risk category: Operational

We are a key provider of essential telecommunications services, as well as security and health services in Canada. Through TELUS International, we provide digital customer experience services to global brands and through TELUS Agriculture we leverage technology and data to improve the flow of information across the agriculture and food industry in Canada and internationally. Our success depends on our ability to deliver reliable and continuous services to all our customers.

We have a large number of interconnected operational and business support systems. Acquisitions, business combinations and the development and launch of new services typically require significant systems development and integration efforts. As next-generation services are introduced, they must work with next-generation systems, frameworks and IT infrastructures, while also being compatible with legacy services and support systems. In addition, our large enterprise deals and TI client contracts may involve complex and multi-faceted customer-specific enterprise requirements, including customized systems and reporting requirements in support of service delivery.

Potential impact

Our network, technology, infrastructure, supply chain, team members and operations may be materially impacted by natural hazards (see *Section 10.12 Our environment*), disruptions of critical infrastructure due to intentional threats (see *Section 10.10 Security and data protection*), health threats (such as epidemics or pandemics), labour disruptions (see *Section 10.11 Our team*) or unintentional threats. Any of these events may lead to the disruption of our ability to deliver services to our customers and may also make it difficult or impossible for team members to reach or work in our business locations. Damage or destruction that interrupts our provision of services could adversely affect our reputation, our relationships with our customers and our leadership team's ability to administer and supervise our business, or may cause us to incur substantial additional expenditures to repair or replace damaged equipment or sites. We may also be liable to our customers for disruption in service resulting from such damage or destruction. Our resiliency and disaster recovery plans may not be adequate to provide continuity and reliability of service during disruptions or reduce the duration and impact of service outages sufficiently or at all. While we currently have commercial liability insurance, our insurance coverage may be insufficient or may not provide coverage at all for certain events. Furthermore, we may be unable to secure such insurance coverage at premiums acceptable to us in the future, or such insurance may become unavailable. Any of the above factors may adversely affect our business.

As the complexity of our systems increases, our system stability and availability may be affected. There can be no assurance that any of our proposed IT systems or process change initiatives will be implemented successfully, that they will be implemented in accordance with anticipated timelines, or that sufficiently skilled team members will be available to

complete such initiatives. If we fail to implement and maintain appropriate IT systems on a timely basis, fail to create and maintain an effective governance and operating framework to support the management of our teams, or fail to understand and streamline our significant number of legacy systems and proactively meet constantly evolving business requirements, we could experience an adverse effect on our business and financial performance.

Changes over the past 12 months

During 2020, expansion of our work-from-home programs due to the COVID-19 pandemic increased requirements on our VPN systems.

IT services remain increasingly delivered by cloud-based vendors as either Software as a Service (SaaS) or Infrastructure as a Service (IaaS) and our reliance upon these third-party cloud-computing services is growing. While this can result in benefits of speed to market, reliability, performance and agility, it requires adjustments to our operations and may increase the potential for service disruptions. Operational support processes and vendor negotiations must now take into account that the delivery of hardware and software services is occurring outside of our own infrastructure, and therefore controls need to be incorporated into our operational support processes and tools.

In addition, we routinely have numerous integration activities, complex system and process change initiatives, and development projects underway.

Mitigation

During the COVID-19 pandemic, we expanded our VPN capacity in order to ensure stability, productivity and security for team members working from home and from alternative locations, and we accelerated the purchase and deployment of a new VPN system, improving connection capacity and reliability while enhancing our security measures. For our TI subsidiary clients, to the extent possible, we were able to redistribute customer volumes from facilities impacted by local government-mandated temporary site closures to sites that were less impacted. We have also enabled 95% of our customer-serving TI team members to provide remote support to our clients. In addition, the recently acquired Lionbridge AI utilizes the services of a crowd-sourced provider base that is geographically dispersed across the globe.

In line with industry best practice, our approach is to separate business support systems (BSS) from operational support systems (OSS) and underlying network technology. Our aim is to decouple the introduction of new network technologies from the services we sell to customers so that both can evolve independently. This allows us to optimize network investments while limiting the impact on customer services, and also facilitates the introduction of new services. In addition, due to the maturing nature of telecommunications vendor software, we adopt industry-standard software for BSS/OSS functions, leverage SaaS and IaaS capacities, and avoid custom development where possible. This enables us to leverage vendor knowledge and industry practices acquired through the installation of those platforms at numerous global telecommunications companies. We have established a next-generation BSS/OSS framework to ensure that, as new services and technologies are developed, they are part of the next-generation framework that will ease the retirement of legacy systems in accordance with TeleManagement Forum's next-generation operations systems and software program. As part of our ongoing fibre roll-out, we have invested in new operational support systems that are consolidating our legacy systems and simplifying our current environment. This will improve our ability to support and maintain our systems with newer, more resilient technology. We also continue to make significant investments in system resiliency and reliability in support of our ongoing customer first initiatives.

For each new large enterprise deal, we look to leverage systems and processes developed in previous contract wins while incorporating others as required, using a controlled methodology to draft a new custom solution and following standard industry practices for project management and systems support. We have release and change management policies, processes and controls in place that are based on industry best practices. In general, we strive to ensure that system development and process changes are prioritized, and we apply a project management approach to such initiatives that includes appropriate risk identification and contingency planning, scope and change control, and resource and quality management. We conduct reasonable functional, performance and revenue assurance testing, as well as capturing and applying any lessons learned. Where a change involves major system and process conversions, we often shift our business continuity planning and emergency management operations centre to a heightened state of readiness in advance of the change.

We conduct ongoing monitoring of our systems and critical applications. Risk-based disaster recovery capabilities are leveraged to help prevent outages and limit impacts on customers and our operations. In addition, enterprise-wide business continuity programs are in place to support monitoring, preparedness, mitigation, response and recovery. However, there can be no assurance that specific events, or a combination of events, will not disrupt our operations.

10.10 Security and data protection

Risk category: Operational

As a national provider of information and communications services, we have a perspective beyond that of individual organizations. We leverage this insight and understanding to monitor and identify security trends as they evolve in the wider threat landscape. The risks outlined below reflect both our experience and the trends we have observed in the wider ecosystem.

We have a number of assets that may be exposed to intentional threats. These include physical assets that may be exposed to security risks such as terrorist attacks, vandalism and/or theft, including (but not limited to) cellular towers, distributive copper cable, corporate stores, network and telephone switch centres, and elements of corporate infrastructure.

Additionally, we operate data centres and collect and manage data in our business and on behalf of our customers (including, in the case of TELUS Health, sensitive health information) that may move across our interconnected operational and business support systems and networks. Depending on the nature of the data, it may be restricted for use within Canada or leveraged by our teams or outsourcing partners in Canada or abroad. Our systems and networks may also be subject to cyberattacks.

A number of TI's service contracts provide for high or unlimited liability for the benefit of its clients related to damages resulting from breaches of privacy or data security in connection with provision of its services.

Although our network security and the authentication of our customer credentials are designed to protect against unauthorized disclosure, alteration and destruction of, and access to, data on our networks, it is impossible for such security measures to be perfectly effective. There can be no assurance that such measures will function as expected or will be sufficient to protect our network infrastructure against certain attacks, and there can be no assurance that such measures will successfully prevent or mitigate service interruptions or further security incidents. All network infrastructure is vulnerable to rapidly evolving cyberattacks, and our user data and corporate systems and security measures may be breached due to

the actions of outside parties (including malicious cyberattacks), team member error, malfeasance, internal bad actors, a combination of these, or otherwise. A breach may allow an unauthorized party to obtain access to or exfiltrate our data or our users', customers' or clients' data. Additionally, outside parties may attempt to fraudulently induce team members, users, customers or clients to install malicious software, disclose sensitive information or access credentials, or take other actions that may provide access to our data or our users', customers' or clients' data. Because modern networking and computing environments are increasing in complexity and techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently, increase in sophistication over time or may be designed to remain dormant until a predetermined event and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. If an actual or perceived breach of our security occurs (or a breach of a customer's or client's security that can be attributed to our fault or is perceived to be our fault), the market perception of the effectiveness of our security measures could be harmed and we could lose users, customers and clients. Security breaches also expose us to a risk of loss of this information, class action or other litigation brought both by customers and clients and by individuals whose information was compromised, remediation costs, increased costs for security measures, loss of revenue, damage to our reputation, and potential liability.

Potential impact

Physical security threats can place both our team members and our infrastructure, systems and networks at risk of incurring significant harm, including personal injury, destruction of property, and loss of service and/or data. The risk and consequences of cyberattacks on our assets could surpass physical security risks and consequences due to the rapidly evolving nature and sophistication of these threats.

We and our partners may also be subject to software, equipment or other system malfunctions that could result in unauthorized access to, or change, loss or destruction of, our data. These malfunctions could compromise the privacy of individuals, including our customers, team members and suppliers, and could expose other sensitive information.

A successful disruption of our systems, network and infrastructure, or those of third parties, our suppliers, vendors and partners, may prevent us from providing reliable service, impact the operations of our network or allow for the unauthorized interception, destruction, use or dissemination of our information or our customers' information. Such disruption, whether physical or digital, or unauthorized access to our data could cause us to lose customers or revenue, incur expenses, or experience reputational and goodwill damages. Additionally, such damages could result in TELUS incurring costs associated with investigation efforts, replacement or restoration of assets and potential civil lawsuits or fines imposed by regulatory bodies.

While we believe our team members undergo appropriate training, if any person, including any of our team members, negligently disregards or intentionally breaches controls or procedures with which we are responsible for complying with respect to such data or otherwise mismanages or misappropriates that data, or if unauthorized access to or disclosure of data in our possession or control occurs, we could be subject to significant liability to customers, our TI

subsidiary's clients or its clients' customers for breaching contractual confidentiality and security provisions or for permitting access to personal information subject to privacy laws, as well as liability and penalties in connection with any violation of applicable privacy laws or criminal prosecution. Unauthorized disclosure of sensitive or confidential customer, client or team member data, whether through breach of computer systems, systems failure, team member negligence, fraud or misappropriation, or otherwise, could damage our reputation and cause us to lose customers and clients and result in liability to individuals whose information was compromised. Similarly, unauthorized access to or through our information systems and networks or those we develop or manage for our customers and clients, whether by our team members or third parties, could result in negative publicity, damage to our reputation, loss of customers, clients or business, class action or other litigation, costly regulatory investigations and other potential liability.

Changes over the past 12 months

In August 2020, INTERPOL reported that its assessment of the impact of COVID-19 on cybercrime revealed a significant shift in targets from individuals and small businesses to major corporations, governments and critical infrastructure. With organizations and businesses rapidly deploying remote systems and networks to support their team members working from home, criminals are also taking advantage of new and greater security vulnerabilities to steal data, generate profits and cause disruption.

With our perspective and our monitoring capabilities, we have observed that the frequency and sophistication of cyberattacks continue to increase with adversaries evolving in parallel with trends in technology. These attacks may involve a variety of techniques that include the targeting of individuals and the use of sophisticated malicious software and hardware, or a combination of both, to evade the technical and administrative safeguards that are in place (including firewalls, intrusion prevention systems, active monitoring and other measures). Cyberattacks penetrating the network security of our data centres or any unauthorized disclosure or access to confidential information and data of our customers, clients or their end customers could also have a negative impact on our reputation and client confidence, which could have a material adverse effect on our business, financial performance, financial condition and cash flows.

Mitigation

Our security program addresses risk through a number of mechanisms, including:

- Security awareness programs
- Controls based on policies, standards and methodologies that are aligned with recognized industry frameworks and practices
- Monitoring of external activities by potential attackers
- Incident response
- Regular security evaluations of our most important assets
- Identification and regular re-evaluation of our known security risks
- Regular reviews of our standards and policies to ensure they address current needs and threats
- Regular reviews of our business continuity and recovery planning processes that would be invoked in the event of a disruption
- A privacy and security impact assessment process

- A secure-by-design process that incorporates security provisions into new initiatives across the Company.

Incident response is a critical control within our organization. Our technical capabilities help us identify security-related events, respond to possible threats and adjust our security posture appropriately. Additionally, our approach to cyber-hygiene includes regular vulnerability assessments and the prioritization and remediation of any identified exposure through patching or other mechanisms. Our security office also works with law enforcement and other agencies to address ongoing threats and disruptions, and provides awareness training to our team members to help them better recognize and report threats.

10.11 Our team

Risk category: Operational

Our success depends on the abilities, experience, well-being and engagement of our team members, as well as our ability to attract and retain the talent upon which our service offerings depend. Each year, we carry out a number of unique initiatives that are intended to improve our productivity and competitiveness. These include acquisitions, operational business integrations, efficiency programs, business process automation and/or outsourcing, offshoring and reorganizations.

We believe that our unique customer first and caring culture has led to our ability to attract and retain a highly skilled, engaged and motivated workforce. This has driven our strong customer and client retention. It may become more difficult for us and, in particular for our TI subsidiary, to maintain a culture that supports our success if we continue to evolve our products and services, grow into new geographies, open new delivery locations, increase the number of team members

and acquire new companies. If our unique culture is not maintained, our ability to attract and retain highly skilled team members and clients across our core verticals may be adversely impacted, and our operational and financial results may be negatively affected.

Our business would be adversely affected if individuals providing their data annotation services through Lionbridge AI's crowdsourcing solutions were classified as employees. The classification of certain individuals who provide their services through third-party digital platforms as independent contractors is currently being challenged in courts, by legislators and by government agencies in the United States and many other countries where our Lionbridge AI business uses the services of independent contractors. We generally believe that most individuals who provide their data annotation services through Lionbridge AI's crowdsourcing solution are independent contractors because, among other things, they can choose whether, when, and where to provide services, are free to provide services on competitors' platforms, and use their own equipment. We may not be successful in defending the independent contractor classification in the jurisdictions where we operate or where such classification is challenged. The costs associated with defending, settling, or resolving any future lawsuits (including demands for arbitration) relating to the independent contractor classification could be material to our business.

Potential impact

Lost work time resulting from team member illness or injury can negatively affect organizational productivity and employee benefit costs. The loss of key team members through attrition and retirement, the inability to attract and retain team members with essential or evolving skills, including familiarity with legacy systems, or, in the case of team members leading recent acquisitions in emerging areas of our business, specialized knowledge of such businesses, or any deterioration in overall team member morale and engagement resulting from organizational changes, unresolved collective agreements or ongoing cost reduction initiatives, could have an adverse impact on our growth, business and profitability and our efforts to enhance the customer experience. In addition, changes in technology are shifting the set of skills needed by our team and driving competition for resources among global players.

Our corporate sustainability and social purpose activities are also important to our team members, and our failure to meet or exceed the evolving expectations of our team members in these areas could have adverse impacts on our ability to attract and retain team members.

Changes over the past 12 months

The COVID-19 pandemic has led to heightened uncertainty in many of our lives, resulting in increased stress and anxiety around the world and among our team members. Long before March 2020, when we began adopting stricter measures to prevent the spread of COVID-19, 500,000 Canadians per week were citing mental health symptoms or illnesses as the reason they were unable to work. Many Canadian workers – our team members included – are still working at home, isolated from peers and extended family members and friends, and juggling multiple competing priorities. At December 31, 2020, over 95% of our domestic team members (excluding field technicians and retail store representatives) and over 90% of our TI team members were working from home or alternate work locations.

Global events and ongoing efforts from marginalized communities to achieve equality and social justice focused attention on the discrimination and racial injustice that continue to affect many communities.

Mitigation

Our People and Culture team works to provide an environment for our team members that is safe, empowering and engaging. Our culture is anchored in our TELUS leadership values, which were set out by our team nearly two decades ago. These values affirm that:

- We embrace change and seize opportunity
- We have a passion for growth
- We believe in spirited teamwork
- We have the courage to innovate.

Our objective is to attract, develop and retain talented employees in Canada and internationally. We achieve this objective by investing in our people

throughout their careers, and by offering diverse and inclusive employment prospects and development opportunities.

To support team members' overall well-being and to achieve a positive effect on absenteeism in the workplace, we take a holistic and proactive approach to their health that involves risk prevention, early intervention, team member and family assistance, assessment and support services, disability management, and accommodation and return to work services. Our health and well-being strategy encourages our team members to develop optimal personal health through five dimensions of well-being: physical, psychological, financial, social and environmental. To promote safe work practices, we offer training and orientation programs for team members and contractors who have access to our facilities.

In May 2020, we launched a team member survey to assess our team's health and wellness and gather their insights about our new work environment in light of changes due to COVID-19. Key highlights included team members confirming their belief that their safety is a priority for their leaders; communication is timely, transparent and informative; and they have the support they need during this extraordinary time.

In 2020, we continued to reach out to our team members to share TELUS' stance against all forms of systemic bias, including racism; reaffirming our commitment to standing united in our pursuit of equity, fairness, social justice and systemic change. Consistent with TELUS' culture and use of our fair process engagement model, our Diversity and Inclusiveness team invited all team members to participate in open and meaningful dialogue on how to best combat racial inequity, and to use these "Share, listen, learn and reflect" sessions to apply a wider lens and increase inclusiveness and help remediate social injustice for all of our team members and the communities where we live, work and serve. At TELUS, our commitment to diversity and inclusiveness is central to the passionate social purpose collectively embraced by our team members, reflected in our brand promise of a friendlier future, and continues to define us as an organization.

We aim to attract and retain key team members through both monetary and non-monetary approaches. Our compensation and benefits program is designed to support our high-performance culture and is both market-driven and performance-based. Where required, we implement targeted retention solutions for employees with critical skills or talents that are scarce in the marketplace, and we have a succession planning process to identify top talent for senior-level positions.

We focus on and manage organizational change through a formal business transformation function that leverages the expertise, key learnings and effective practices developed in recent years during the implementation of mergers, business integrations and efficiency-related reorganizations.

We have a post-merger integration team that works with our business units and the operations they acquire, applying an integration model based on learnings from previous integrations, while also focusing on the unique attributes and employee cultures of the acquired companies, which advances the standardization of our business processes and is intended to preserve the unique qualities of each acquired operation.

Additionally, we continuously strive to raise the level of our team members' engagement. We believe that our strong team member engagement continues to be supported by our focus on the customer and team member experience, our success in the marketplace and our social purpose. We plan to continue our focus on other non-monetary factors that are supportive of team member engagement, including performance development, career opportunities, learning and development, recognition, diversity and inclusiveness, health and wellness programs, our Work Styles program (e.g. enabling team members to work where and how they will be most effective and equipping them with robust digital collaboration tools to stay connected), and our community volunteerism, including TELUS Days of Giving. The level of our team member engagement continues to place our organization within the top 10% of all employers surveyed.

Additional information on our programs can be found in our sustainability report at **telus.com/sustainability**.

10.12 Our environment

Risk category: Operational

Our operations, infrastructure and team members may be exposed to climate-related physical risks, which include extreme weather events and other natural hazards. We may also be exposed to transition risks related to climate change, such as the impact of changes in policy or the deployment of lower-emission technology.

Our TI delivery locations and our data and voice communications, including in Central America, India, Ireland and the Philippines, in particular, may be damaged or disrupted as a result of natural disasters or extreme weather events, including those resulting from or exacerbated by climate change, such as earthquakes, floods, volcano eruptions, heavy rains, winter storms, tsunamis and cyclones; epidemics or pandemics, including the COVID-19 pandemic; technical disruptions and infrastructure breakdowns including damage to, or interruption of, electrical grids, transportation systems, communication systems or telecommunication cables; issues with information technology systems and networks, including computer glitches, software vulnerabilities and electronic viruses or other malicious code; accidents and other events such as fires, floods, failures of fire suppression and detection, heating, ventilation or air conditioning systems or other events, such as protests, riots, labour unrest, security threats and terrorist attacks. Any of these events may lead to the disruption of information systems and telecommunication services for sustained periods and may create delays and inefficiencies in providing services to clients and potentially result in closure of our TI sites. They also may make it difficult or impossible for TI team members to reach or work in our TI business locations. Some locations may not be well-suited to work-from-home approaches to providing client services due to connectivity, infrastructure or other issues.

Certain areas of our operations are subject to environmental considerations, such as the construction of telecommunications infrastructure, handling and disposing of waste, electronic waste or other residual materials, managing our water use, and responding to spills and releases. Some areas of our operations are also subject to evolving and increasingly stringent federal, provincial and local environmental and health and safety laws and regulations. Such laws and regulations impose requirements with respect to matters such as the release of certain substances into the environment, corrective and remedial action concerning such releases, protection of sensitive

ecosystems and associated wildlife habitat, and the proper handling and management of certain substances, including wastes.

Potential impact

Evolving public expectations and increasingly stringent laws and regulations could result in increased costs of compliance, while failure to recognize and adequately respond to the same could result in penalties, regulatory scrutiny or damage to our reputation and brand.

Damage or destruction that interrupts our provision of services could adversely affect our reputation, our relationships with our customers and clients, our leadership team's ability to administer and supervise our business or may cause us to incur substantial additional expenditures to repair or replace damaged equipment or sites. We also may be liable to our customers and clients for disruption in service resulting from such damage or destruction. Our resiliency and disaster recovery plans may not be adequate to provide continuity and reliability of service during disruptions or reduce the duration and impact of service outages sufficiently or at all. While we currently have commercial liability insurance, our insurance coverage may be insufficient or may not provide coverage at all for certain events. Furthermore, we may be unable to secure such insurance coverage at premiums acceptable to us in the future, or such insurance may become unavailable. Prolonged disruption of our services could also entitle our customers and clients to terminate their contracts with us or require us to pay penalties or damages. Any of the above factors may materially adversely affect our business, financial performance, financial condition and cash flows.

Changes over the past 12 months

The COVID-19 pandemic has had a significant impact on our operations and team members throughout 2020.

Along with the continued and widely shared concerns about climate-related changes and the environmental impacts of business operations, there is an increasing focus on the disclosure of environmental and sustainability governance strategies, targets and risk management practices, including climate-related scenario analysis. In its 2020 Status Report, the Task Force on Climate-related Financial Disclosures (TCFD) identified that the number of organizations expressing support for TCFD had grown to reach over 1,500 organizations globally, with many companies having begun to implement TCFD recommendations.

Potential impacts associated with low levels of non-ionizing radio frequency (RF) emissions from mobile phones and cell towers continue to be a matter of public concern, and will remain a public concern as we move toward a 5G environment, in which the number of small cells in our infrastructure is expected to increase as we continue to upgrade our network.

Mitigation

Business continuity and disaster recovery programs are in place that encompass provisions for monitoring and preparedness, mitigation, response and recovery. These programs enhance the safety of our team members, minimize the potential impact of threats to our facilities, infrastructure and business operations, support the maintenance of service to our customers and help keep our communities connected.

In response to the COVID-19 pandemic, the Corporate Business Continuity Office convened a cross-functional working group on January 22, 2020, and on March 4, 2020, our EMOC was activated. The EMOC meets regularly to coordinate strategic management of the COVID-19 pandemic and advise on tactical issues such as door-to-door activities, retail safety measures, and technician safety in the field. Outbreaks are closely monitored to align operations with public health measures within individual public health agency jurisdictions.

TELUS assembled a Medical Advisory Committee (MAC), composed of leading medical professionals from across the country and key leadership roles from within TELUS. The MAC meets regularly, advises on the Company's COVID-19 pandemic policy, and makes recommendations for specific health and safety measures, which are incorporated into our corporate infectious disease playbook. The playbook is continuously updated and provides foundational governance for all other business function specific pandemic-related playbooks.

We are committed to following sustainable and responsible business practices and making decisions that balance economic growth with social and environmental benefits. We have implemented award-winning sustainability and environmental governance practices and related disclosure. The Corporate Governance Committee of our Board is responsible for oversight of corporate social responsibility and climate-related risks. Our Chief Executive Officer and Executive Team exercise oversight of climate-related risks and opportunities and provide approval of the overall strategic direction of our sustainability programs. Our Sustainability and Environmental Compliance team prepares quarterly reports for the Corporate Governance Committee, as well as other updates for the Board as required, on climate and environment-related risks, targets and key performance metrics.

Disclosure in our sustainability report and other financial filings contains information pertaining to the governance and management of climate-related risks and opportunities. Included are strategies for assessing impacts of these risks

using scenario analysis, as well as strategies for addressing impacts of these risks, risk management practices pertaining to these risks, and the metrics and targets used to manage them. Scenario analysis in 2020 included a consideration of risks and opportunities under a low-carbon adoption scenario and an extreme global warming scenario.

Our corporate targets include, but are not limited to:

- Meeting 100% of our electricity requirements with energy from renewable sources by 2025 and becoming net carbon neutral across our operations by 2030. We have signed purchase agreements for renewable energy that will help us reach these targets
- Diverting 90% of waste from landfills by the end of 2025
- Improving our energy efficiency (MWh per terabyte of data) by 50% from 2020 levels by 2030.

In addition to these targets, we also plan to set further science-based targets, which are to be achieved by 2030.

An ISO 14001:2015 certified environmental management system is in place to identify and control environmental impacts associated with our operations and to support compliance with regulatory requirements. We continue to identify new ways to reduce our environmental impact.

In both 2019 and 2020, we were named to the Corporate Knights Global 100 Most Sustainable Corporations in the World.

See our climate-related financial disclosure in *Section 5.2* of our 2020 Annual Information Form. Additionally, a detailed report of our environmental risk mitigation activities can be found in our sustainability report at **telus.com/sustainability**.

Canada's federal government is responsible for establishing safe limits for signal levels of radio devices. We are confident that the mobile handsets and devices we sell, and our cell towers and other associated devices, comply, in all material respects, with all applicable Canadian and U.S. government safety standards. We continue to monitor new published studies, government regulations and public concerns about the health impacts of RF exposure. Stakeholder engagement also continues to be undertaken as part of the regulatory process concerning the installation of new cell towers.

10.13 Financing, debt and dividends

Risk category: Financial

Risk factors, such as fluctuations in capital markets, the economic environment or regulatory requirements pertaining to bank capitalization, lending activity or changes in the number of Canadian chartered banks, may impact the availability of capital and the cost of such capital for investment grade corporate issuers, including us.

The trading price of our common stock may be affected by various factors, such as TELUS Corporation's continued access to banks, AR securitization, and public debt markets.

The trading price may also be affected by TI factors, such as:

- The trading price for TI subordinate voting stock
- TI's access to banks and public markets
- Actions taken or statements made by TELUS, TI, or others concerning our relationship with TI
- Factors impacting the performance of TI, that may impact TI's financial performance and subsequently our financial performance.

Our financial instruments, and the nature of the credit risks, liquidity risks and market risks to which they may be subject, are described in *Section 7.9 Financial instruments, commitments and contingent liabilities*.

Potential impact

Our business plans and growth could be negatively affected if existing financing is not sufficient to cover funding requirements. External capital market conditions could potentially affect our ability to make strategic investments or meet ongoing capital funding requirements, and may prohibit the roll-over of commercial paper at low rates.

There can be no assurance that we will maintain or improve our current credit ratings. Given the cash demands of the 2019 600 MHz and upcoming spectrum auctions and the inability to predict impacts of the COVID-19 pandemic, we may be unable to lower our net debt to EBITDA ratio to our objective range in the medium term, which could eventually have a negative impact on our credit ratings. Our cost of capital could increase and our access to capital could be affected by a reduction in the credit ratings of TELUS and/or TELUS Communications Inc. (TCI). A reduction in our ratings from the current BBB+ or equivalent could result in an increase in our cost of capital.

While future free cash flow and sources of capital are expected to be sufficient to meet current requirements, our intention to return capital to shareholders could constrain our ability to invest in our operations for future growth.

Changes over the past 12 months

On February 26, 2020, we issued 57.5 million Common Shares at a price of $26.00 for total gross proceeds of $1.5 billion.

At December 31, 2020, our senior unsecured debt was approximately $16.2 billion (see the *Senior unsecured debt principal maturities* chart in *Section 4.3*). We operate a commercial paper program (maximum of $1.4 billion) that currently provides access to low-cost funding. At December 31, 2020, we had $731 million of commercial paper outstanding, all of which was denominated in U.S. dollars (US$574 million). When we issue commercial paper, it must be refinanced on an ongoing basis in order to realize the cost savings relative to borrowing on the $2.25 billion credit facility.

Mitigation

We may finance future capital funding requirements with internally generated funds, including possible monetization of non-core assets and cash-generating working capital initiatives, borrowings under the unutilized portion of our bank credit facilities, use of securitized trade receivables, use of commercial paper and/or the issuance of debt or equity securities. We have a shelf prospectus in effect until June 2022, under which we can offer up to $2.0 billion of debt or equity securities as of the date of this MD&A. We believe that our investment grade credit ratings, coupled with our efforts to maintain a constructive relationship with banks, investors and credit rating agencies, continue to provide reasonable access to capital markets.

To enable us to meet our financial objective of generally maintaining $1.0 billion of available liquidity, we have a $2.25 billion credit facility that expires on May 31, 2023 ($1.5 billion available at December 31, 2020), as well as availability under other bank credit facilities (see *Section 7.6 Credit*

facilities). In addition, our TCI subsidiary has an agreement with an arm's-length securitization trust, ending December 31, 2021, under which it is able to sell an interest in certain of its trade receivables up to a maximum of $500 million, of which $400 million was available at December 31, 2020 (see *Section 7.7 Sale of trade receivables*).

We successfully completed a number of debt transactions in 2019 and 2020 (see *Section 7.4*). As a result, the average term to maturity of our long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility (TI credit facility), lease liabilities and other long-term debt) was 12.2 years at December 31, 2020 (as compared to 12.8 years at December 31, 2019) and the average cost of our long-term debt was 3.80% (excluding commercial paper, the revolving component of the TI credit facility, lease liabilities and other long-term debt). Foreign currency forward contracts are used to manage currency risk arising from the issuance of commercial paper and long-term debt denominated in U.S. dollars (excluding the TI credit facility). Our commercial paper program is fully backstopped by our $2.25 billion credit facility.

At December 31, 2020, TELUS International (Cda) Inc. had a credit facility consisting of US$850 million of revolving components and US$850 million of term loan components. For further details on the TI credit facility, see *Section 7.6 Credit facilities*.

We manage our capital structure and adjust it in light of changes in economic conditions and the risk characteristics of our business and telecommunications infrastructure. We have financial policies in place that are reviewed annually and are intended to help maintain our existing investment grade credit ratings in the range of BBB+ or the equivalent. Four credit rating agencies currently have ratings that are in line with this target. Access to our $2.25 billion credit facility would be maintained, even if our ratings were reduced to below BBB+.

Funding for future spectrum licence purchases, defined benefit pension plan obligations and any increases in corporate income tax rates will reduce the after-tax cash flow otherwise available to return to our shareholders. Should actual results differ from our expectations, there can be no assurance that we will not change our financing plans, including our intention to pay dividends according to our payout policy guidelines and to maintain our multi-year dividend growth program. No shares were purchased in 2020 under the normal course issuer bid (NCIB) program. We may seek TSX approval to implement a NCIB which would allow us to purchase our Common Shares if and when we consider it advantageous, based on our financial position and outlook, and the market price of our Common Shares. There is no assurance that such approval, if requested, would be granted or that any NCIB will be implemented. For further details on our multi-year dividend growth program and NCIB program, see *Section 4.3 Liquidity and capital resources*.

Our Board of Directors reviews and approves the declaration of a dividend each quarter, and the amount of the dividend, based on a number of factors, including our financial position and outlook. This assessment is subject to various assumptions and the impact of various risks and uncertainties, including those described here in *Section 10*.

10.14 Tax matters

Risk category: Financial

We collect and pay significant amounts of indirect taxes, such as goods and services taxes, harmonized sales taxes, provincial sales taxes, sales and use taxes and value-added taxes, to various tax authorities. As our operations are complex and the related tax interpretations, regulations, legislation and jurisprudence that pertain to our activities are subject to continual change and evolving interpretation, the final determination of the taxation of many transactions is uncertain. Moreover, the implementation of new legislation in itself has its own complexities, including those of execution where multiple systems are involved and the interpretation of new rules as they apply to specific transactions, products and services.

TELUS, along with TI, operates in a number of foreign jurisdictions, including Armenia, Australia, Austria, Bosnia and Herzegovina, Brazil, Bulgaria, China, Costa Rica, the Czech Republic, Denmark, El Salvador, Finland, France, Germany, Guatemala, India, Ireland, Japan, Korea, Latvia, Mexico, Philippines, Poland, Romania, Slovakia, Spain, Switzerland, Turkey, the United Kingdom and the United States, which increases our exposure to multiple forms of taxation. Generally, each jurisdiction has taxation peculiarities in the forms of taxation imposed (e.g. value-added tax, gross receipts tax, stamp and transfer tax, and income tax), and differences in the applicable tax base and tax rates, legislation and tax treaties, where applicable, as well as currency and language differences. In addition, the telecommunications industry faces unique issues that lead to uncertainty in the application of tax laws and the division of tax between domestic and foreign jurisdictions.

Potential impact

We are subject to the risk that income and indirect tax amounts, including tax expense, may be materially different than anticipated, and that a general tendency by domestic and foreign tax collection authorities to adopt more interpretations and aggressive auditing practices could adversely affect our financial condition and operating results.

We have significant current and deferred income tax assets and liabilities, income tax expenses and cash tax payments. Income tax amounts are based on our estimates, applying accounting principles that recognize the benefit of income tax positions only when it is more likely than not that the ultimate determination of the tax treatment of a position will result in the related benefit being realized. The assessment of the likelihood and amount of income tax benefits, as well as the timing of realization of such amounts, can materially affect the determination of Net income or cash flows. We expect the income taxes calculated at applicable statutory rates to range between 25.3% to 25.9% in 2021 (as compared to 26.1% in 2020). These expectations can change as a result of changes in interpretations, regulations, legislation or jurisprudence.

The timing of the monetization of deferred income tax accounts is uncertain, as it is dependent upon our future earnings and other events. The amounts of deferred income tax liabilities are also uncertain, as the amounts are based on substantively enacted future income tax rates that were in effect at the time of deferral, which can be changed by tax authorities. As well, the amounts of cash tax payments and current and deferred income tax liabilities are also based on our anticipated mix of revenues among the jurisdictions in which we operate, which is also subject to change.

The audit and review activities of tax authorities affect the ultimate determination of the actual amounts of indirect taxes payable or receivable, income taxes payable or receivable, deferred income tax liabilities, taxes on certain items included within capital and income tax expense. Therefore, there can be no assurance that taxes will be payable as anticipated and/or that the amount and timing of receipt or use of the tax-related assets will

be as currently expected.

Changes over the past 12 months

Our geographical footprint and breadth of products have increased significantly during the past 12 months, which increases our exposure to multiple forms of taxation.

Mitigation

We follow a comprehensive tax strategy that has been adopted by our Board. This strategy outlines the principles underlying and guiding the roles of team members, their responsibilities and personal conduct, the method of conducting business in relation to tax law and the approaches to working relationships with external tax authorities and external advisors. This strategy recognizes the requirement to comply with all relevant tax laws. The components necessary to manage tax risk are outlined in the strategy.

In giving effect to this strategy, we maintain an internal Taxation department composed of professionals who stay current on domestic and foreign tax obligations, supplemented where appropriate with external advisors. This team reviews systems and process changes for compliance with applicable domestic and international taxation laws and regulations. Its members are also responsible for the specialized accounting required for income taxes.

Material transactions are reviewed by our Taxation department so that transactions of an unusual or non-recurring nature are assessed from multiple risk-based perspectives. As a matter of regular practice, large transactions are

reviewed by external tax advisors, while other third-party advisors may also be engaged to express their views as to the potential for tax liability. We continue to review and monitor our activities, so that we can take action to comply with any related regulatory, legal and tax obligations. In some cases, we also engage external advisors to review our systems and processes for tax-related compliance. The advice provided and tax returns prepared by such advisors and counsel are reviewed for reasonableness by our internal Taxation department.

10.15 The economy

Risk category: Financial

Risks to the Canadian economy include fluctuations in oil prices, interest rates and levels of consumer and mortgage debt, fluctuations in the housing market, timing and rate of economic recovery from the effects of the COVID-19 pandemic and uncertainty related to trade issues, including the ongoing imposition of tariffs. In addition, as we expand international operations as a result of acquisitions, such as those within agriculture, and continued acquisitions by TI, we become more susceptible to global market conditions. Meanwhile, trade conflicts between countries, as well as other economic and political uncertainties and developments outside of Canada, may have global implications, as supply chains become increasingly integrated.

Potential impact

Economic uncertainty may cause consumers and business customers to reduce or delay discretionary spending, impacting new service purchases, volumes of use and substitution by lower-priced alternatives.

Globally, countries may require additional financial support, sovereign credit ratings may continue to decline and there may be default on sovereign debt obligations of certain countries. Any of these global economic conditions may increase the cost of borrowing and cause credit to become more limited, which could have a material adverse effect on our business, financial condition, financial performance and cash flows. Economic and political uncertainty, including for example the withdrawal of the United Kingdom from the European Union in 2020, commonly referred to as "Brexit", could undermine business confidence and cause potential new clients of TI to delay engaging TI and cause existing clients to reduce or defer their spending on TI's services or reduce or eliminate spending under existing contracts with TI.

Fluctuations in the Canadian economy could adversely impact our customer growth, revenue, profitability and free cash flow, and could potentially require us to record impairments in the carrying values of our assets, including, but not limited to, our intangible assets with indefinite lives (spectrum licences and goodwill). Impairments in the carrying values of our assets would result in a charge to earnings and a reduction in owners' equity, but would not affect cash flow.

Fluctuations in the global economy could affect different industry verticals in different ways. Counter-cyclical industries such as agriculture and logistics should remain reasonably unaffected, as food producers, distributors and retailers continue to operate. Healthcare, particularly products and services related to logistics or vaccines, should do well as vaccines are rolled out, and hospitals and healthcare providers in certain countries could perform well. Cyclical industries such as retail, travel and hospitality, and others will continue to be negatively affected until a broad roll-out of vaccines takes effect during 2021.

With certain revenues, capital acquisitions and operating costs denominated in U.S. dollars, fluctuations in the Canadian dollar exchange rate may impact our financial and operating results.

Economic and capital market fluctuations could also adversely affect the investment performance, funding and expense associated with our defined benefit pension plans, as obligations are based on certain actuarial assumptions related to expected plan asset returns, salary escalation, retirement ages, life expectancy, the performance of the financial markets and future interest rates.

Changes over the past 12 months

In 2020, both the Canadian and global economy slowed dramatically as a result of the COVID-19 pandemic. There were indications of a recovery in the summer and through the third quarter with a reduction in measures and, in Canada, government assistance programs, but macroeconomic

conditions worsened toward the end of the year as it became clear that a second wave of the pandemic was starting. We anticipate that the pandemic will continue to present challenges to both the Canadian and global economy for at least the first two quarters of 2021, notwithstanding that vaccines have been developed and are being administered, but based on the current pace of vaccine production and immunization capacity.

Interest rates are expected to remain low for some time, with several central banks making specific mention of this, but low rates will not be enough to stimulate a consumer-driven downturn. Interest rates should have a net positive effect on corporate borrowing and investment, but this will be offset by slowing overall demand.

In 2020, the Canadian dollar exchange rate with the U.S. dollar was volatile, with the Canadian dollar generally strengthening over the year, from $1.30 at the end of 2019 to $1.27 at the end of 2020.

The employee defined benefit pension plans, in aggregate with the application of the asset ceiling, were in a $913 million deficit position at December 31, 2020 (compared to a $425 million deficit position at the end of 2019). The solvency position, as determined under the *Pension Benefits Standards Act, 1985*, was estimated to be a surplus of $375 million at the end of 2020 (compared to a $372 million surplus position at the end of 2019).

Mitigation

While economic risks cannot be completely mitigated, our top priority of putting customers first and pursuing global leadership in the likelihood of our clients to recommend our products, services and people also supports our efforts to acquire and retain customers through the economic fluctuations that affect them and us. We also continue to pursue cost reduction and efficiency initiatives in our own business (see discussion in *Section 3 Corporate priorities*). See *Section 4.3 Liquidity and capital resources* for our capital structure financial policies and plans.

An increase in our revenue denominated in U.S. dollars may help to mitigate currency risk, as our revenue base has been primarily in Canadian dollars.

Foreign currency forward contracts and currency options are leveraged to fix the exchange rates on U.S. dollar-denominated transactions, commitments, commercial paper and U.S. Dollar Notes in order to help mitigate risks related to exchange rate fluctuations, and we seek to mitigate pension risk through the application of policies and procedures for managing exposure to investment risk and through ongoing monitoring of our funding position. Our best estimate of cash contributions to our defined benefit pension plans in 2021 is $50.6 million ($50.4 million in 2020).

10.16 Litigation and legal matters

Risk category: Compliance

Given the size of our organization, investigations, claims and lawsuits seeking damages and other relief are regularly threatened or pending against us. The expansion of our product and service offerings into areas such as managed services, security, healthcare and agriculture technology, and the TI IPO have also added to our compliance requirements, the risk of litigation and the possibility of damages, sanctions and fines. We may also be the target of class actions due to our millions of consumer customer relationships. In addition, like other public companies, we may be subject to civil liability for misrepresentations in written disclosure and oral statements, and liability for fraud and market manipulation.

The intellectual property and proprietary rights of owners and developers of hardware, software, business processes and other technologies may be protected under statute, such as patent, copyright and industrial design legislation, or under common law, such as trade secrets. Significant damages may be awarded in intellectual property infringement claims and defendants may incur significant costs to defend or settle such claims.

Potentially material certified and uncertified class actions, intellectual property litigation and other claims against us are detailed in *Note 29(a)* of the Consolidated financial statements.

With operations in foreign jurisdictions, we are required to comply not only with Canadian laws and regulations, but also with local laws and regulations, which may differ substantially from Canadian laws and add to our regulatory, legal and tax exposures. As we continue to expand our business into additional jurisdictions, and expand our product and service offerings in such jurisdictions, this may further add to our regulatory, legal and tax exposure. In certain cases, foreign laws with extra-territorial application may also impose obligations on us. See *Section 10.3 Regulatory matters*.

Potential impact

It is not currently possible to predict the outcome of such legal matters due to various factors, including: the preliminary nature of some claims; uncertain damage theories and demands; incomplete factual records; the uncertain nature of legal theories and procedures and their resolution by the courts, at both the trial and appellate levels; and the unpredictable nature of opposing parties and their demands.

We are typically required to process, and sometimes collect and/or store sensitive data, including, but not limited to, personal data regulated by the *General Data Protection Regulation*, the *Personal Information Protection and Electronic Documents Act*, *California Consumer Privacy Act*, the *California Invasion of Privacy Act*, *Personal Data Protection Bill of 2018*, and the *Data Privacy Act of 2012*. The adoption and enforcement by governments of increasingly stringent privacy legislation may increase our risk. A successful class action lawsuit or intellectual property infringement claim, by its nature, could result in a sizeable damage award that could negatively affect a defendant's financial or operating results.

There can be no assurance that our financial or operating results will not be negatively impacted by any of these factors.

Changes over the past 12 months

As our TELUS Health team and medical clinics offer new services (such as virtual care and electronic prescription), including in some cases to consumers and in other cases through third-party partnerships, new risks arise across parameters such as dependence on third-party suppliers for legal compliance and/or compliance with medical professional standards, as well as a heightened possibility of political intervention.

As we increase the number of offerings in agriculture technology (such as animal health and management) and the jurisdictions in which we offer them, we face increased risks with respect to regulatory compliance and data security and privacy.

With the growth and development of technology-based industries, the value of intellectual property and proprietary rights has increased. Due to trends in awarding of damages, costs to defend and the likeliness of settlements, property rights holders may be encouraged to aggressively pursue infringement claims. Given the vast array of technologies and systems that we use to deliver products and services, and the rapid change and complexity of such technologies, the number of disputes over intellectual property and proprietary rights can reasonably be expected to increase.

Mitigation

We believe that we have in place reasonable policies, controls, processes and contractual arrangements, as well as insurance coverage, designed to enable compliance and reduce our exposure. We have a designated Chief Data and Trust Officer, whose role is to work across the enterprise to ensure that the business has appropriate processes and controls in place in order to facilitate legal compliance and to report on compliance to the Audit Committee.

Our team of legal professionals advise on and manage risks related to claims and possible claims, vigorously defend class actions and other claims, pursue settlements in appropriate cases, regularly assess our business practices and monitor legal developments that may impact risk. They seek and obtain contractual protections consistent with standard industry practices to help mitigate the risks of intellectual property infringements and work to protect our intellectual property rights through litigation and other means.

We have a corporate disclosure policy that restricts the role of Company spokesperson, provides a protocol for communicating with investment analysts, investors and others, and outlines our communication approach.

We rely on our team members, officers, Board of Directors, key suppliers and other business partners to demonstrate behaviour consistent with applicable legal and ethical standards in all jurisdictions within which we operate. We have an anti-bribery and corruption policy, a comprehensive code of ethics and conduct for our team members and Board of Directors, and mandatory annual integrity training for all team members and identified contractors.

Subject to the foregoing limitations, management is of the opinion, based upon legal assessments and the information presently available, that it is unlikely that any liability relating to existing investigations, claims and lawsuits, to the extent not provided for through insurance or otherwise, would have a material effect on our financial position and the results of our operations, excepting the items disclosed herein and in *Note 29(a)* of the Consolidated financial statements.

11. Definitions and reconciliations

11.1 Non-GAAP and other financial measures

We have issued guidance on and report certain non-GAAP measures that are used to evaluate the performance of TELUS, as well as to determine compliance with debt covenants and to manage our capital structure. As non-GAAP measures generally do not have a standardized meaning, they may not be comparable to similar measures presented by other issuers. Securities regulations require such measures to be clearly defined, qualified and reconciled with their nearest GAAP measure. Certain of the metrics do not have generally accepted industry definitions.

Adjusted Net income and adjusted basic earnings per share: These measures are used to evaluate performance at a consolidated level and exclude items that, in management's view, may obscure underlying trends in business performance or items of an unusual nature that do not reflect our ongoing operations. These measures should not be considered alternatives to Net income and basic earnings per share in measuring TELUS' performance. (See *Reconciliation of adjusted Net income* and *Reconciliation of adjusted basic EPS* in *Section 1.3*.)

Capital expenditure intensity: This measure is calculated as capital expenditures (excluding spectrum licences) divided by total Operating revenues and Other income. This measure provides a basis for comparing the level of capital expenditures to those of other companies of varying size within the same industry.

TELUS Corporation Common Share (Common Share) dividend payout ratio: Commencing in 2020, this is a historical measure calculated as the sum of the most recent four quarterly dividends declared, as recorded in the

financial statements, net of dividend reinvestment plan effects, divided by the sum of free cash flow amounts for the most recent four quarters for interim reporting periods. For fiscal years, the denominator is annual free cash flow. Our objective range for the annual TELUS Corporation Common Share dividend payout ratio is on a prospective basis, rather than on a trailing basis. (See *Section 7.5 Liquidity and capital resource measures.*)

Calculation of Common Share dividend payout ratio, net of dividend reinvestment plan effects

Determined using management measures

12-month periods ended December 31 ($ millions, except ratio)	2020	2019
Sum of the last four quarterly dividends declared	**1,520**	1,358
Sum of the last four quarterly amount of dividends declared reinvested in Common Shares	**(561)**	(290)
Numerator – Sum of the last four quarterly dividends declared, net of dividend reinvestment plan effects	**959**	1,068
Denominator – Free cash flow	**1,435**	932
Ratio (%)	**67**	115

Calculation of ratio of Common Share dividends declared to cash provided by operating activities less capital expenditures (excluding spectrum licences)

Determined using most comparable IFRS-IASB measures

12-month periods ended December 31 ($ millions, except ratio)	2020	2019
Numerator – Sum of the last four quarterly dividends declared	**1,520**	1,358
Cash provided by operating activities	**4,574**	3,927
Less:		
Capital expenditures (excluding spectrum licences)	**(2,775)**	(2,906)
Denominator – Cash provided by operating activities less capital expenditures (excluding spectrum licences)	**1,799**	1,021
Ratio (%)	**84**	133

Earnings coverage: This measure is defined in the Canadian Securities Administrators' National Instrument 41-101 and related instruments, and is calculated as follows:

Calculation of Earnings coverage

Years ended December 31 ($ millions, except ratio)	2020	2019
Net income attributable to Common Shares	**1,207**	1,746
Income taxes (attributable to Common Shares)	**428**	455
Borrowing costs (attributable to Common Shares) [1]	**749**	724
Numerator	**2,384**	2,925
Denominator – Borrowing costs	**749**	724
Ratio (times)	**3.2**	4.0

1 Interest on Long-term debt plus Interest on short-term borrowings and other plus long-term debt prepayment premium, adding capitalized interest and deducting borrowing costs attributable to non-controlling interests.

EBITDA (earnings before interest, income taxes, depreciation and amortization): We have issued guidance on and report EBITDA because it is a key measure used to evaluate performance at a consolidated level. EBITDA is commonly reported and widely used by investors and lending institutions as an indicator of a company's operating performance and ability to incur and service debt, and as a valuation metric. EBITDA should not be considered an alternative to Net income in measuring TELUS' performance, nor should it be used as a measure of cash flow. EBITDA as calculated by TELUS is equivalent to Operating revenues and Other income less the total of Goods and services purchased expense and Employee benefits expense.

We calculate EBITDA – excluding restructuring and other costs, as it is a component of the **EBITDA – excluding restructuring and other costs interest coverage** ratio and the **Net debt to EBITDA – excluding restructuring and other costs** ratio.

We also calculate **Adjusted EBITDA** to exclude items of an unusual nature that do not reflect our ongoing operations and should not, in our opinion, be considered in a long-term valuation metric or should not be included in an assessment of our ability to service or incur debt.

EBITDA reconciliation

Years ended December 31 ($ millions)	2020	2019
Net income	**1,260**	1,776
Financing costs	**771**	733
Income taxes	**451**	468
Depreciation	**2,107**	1,929
Amortization of intangible assets	**905**	648
EBITDA	**5,494**	5,554
Add restructuring and other costs included in EBITDA	**259**	134
EBITDA – excluding restructuring and other costs	**5,753**	5,688
Add other equity losses related to real estate joint ventures	**19**	5
Deduct retirement of a provision arising from business acquisition-related written put options within TI	**(71)**	—
Adjusted EBITDA	**5,701**	5,693

Calculation of EBITDA margin

Years ended December 31 ($ millions, except margin)	2020	2019
Numerator – EBITDA	**5,494**	5,554

Denominator – Operating revenues and Other income	**15,463**	14,658
EBITDA margin (%)	**35.5**	37.9

Calculation of Adjusted EBITDA margin

Years ended December 31 ($ millions, except margin)	**2020**	2019
Numerator – Adjusted EBITDA	**5,701**	5,693
Adjusted Operating revenues and Other income:		
Operating revenues and Other income	**15,463**	14,658
Other equity losses related to real estate joint ventures	**19**	5
Retirement of a provision arising from business acquisition-related written put options within TI	**(71)**	—
Denominator – Adjusted Operating revenues and Other income	**15,411**	14,663
Adjusted EBITDA margin (%)	**37.0**	38.8

EBITDA – excluding restructuring and other costs interest coverage: This measure is defined as EBITDA –excluding restructuring and other costs, divided by Net interest cost, calculated on a 12-month trailing basis. This measure is similar to the coverage ratio covenant in our credit facilities, as described in *Section 7.6 Credit facilities*.

Free cash flow: We report this measure as a supplementary indicator of our operating performance, and there is no generally accepted industry definition of free cash flow. It should not be considered an alternative to the measures in the Consolidated statements of cash flows. Free cash flow excludes certain working capital changes (such as trade receivables and trade payables), proceeds from divested assets and other sources and uses of cash, as found in the Consolidated statements of cash flows. It provides an indication of how much cash generated by operations is available after capital expenditures (excluding purchases of spectrum licences) that may be used to, among other things, pay dividends, repay debt, purchase shares or make other investments. We exclude impacts of accounting changes that do not impact cash, such as IFRS 15 and IFRS 16. Free cash flow may be supplemented from time to time by proceeds from divested assets or financing activities.

Free cash flow calculation

Years ended December 31 ($ millions)	**2020**	2019
EBITDA	**5,494**	5,554
Deduct non-cash gains from the sale of property, plant and equipment	**(4)**	(21)
Restructuring and other costs, net of disbursements	**35**	(36)
Effects of contract asset, acquisition and fulfilment (IFRS 15 impact) and TELUS Easy Payment device financing	**43**	(118)
Effects of lease principal (IFRS 16 impact)	**(365)**	(333)
Leases formerly accounted for as finance leases (IFRS 16 impact)	**86**	108
Items from the Consolidated statements of cash flows:		
Share-based compensation, net	**27**	(2)
Net employee defined benefit plans expense	**102**	78
Employer contributions to employee defined benefit plans	**(51)**	(41)
Interest paid	**(740)**	(714)
Interest received	**13**	7
Capital expenditures (excluding spectrum licences)[1]	**(2,775)**	(2,906)
Free cash flow before income taxes	**1,865**	1,576
Income taxes paid, net of refunds	**(430)**	(644)
Free cash flow	**1,435**	932

1 Refer to *Note 31* of the Consolidated financial statements for further information.

The following reconciles our definition of free cash flow with Cash provided by operating activities.

Free cash flow reconciliation with Cash provided by operating activities

Years ended December 31 ($ millions)	**2020**	2019
Free cash flow	**1,435**	932
Add (deduct):		
Capital expenditures (excluding spectrum licences)	**2,775**	2,906
Adjustments to reconcile to Cash provided by operating activities	**364**	89
Cash provided by operating activities	**4,574**	3,927

Net debt: We believe that net debt is a useful measure because it represents the amount of Short-term borrowings and long-term debt obligations that are not covered by available Cash and temporary investments. The nearest IFRS measure to net debt is Long-term debt, including Current maturities of Long-term debt. Net debt is a component of the **Net debt to EBITDA – excluding restructuring and other costs** ratio.

Calculation of Net debt

As at December 31 ($ millions)	**2020**	2019
Long-term debt including current maturities	**20,288**	18,474

Debt issuance costs netted against long-term debt	**97**	87
Derivative (assets) liabilities, net	**120**	(37)
Accumulated other comprehensive income amounts arising from financial instruments used to manage interest rate and currency risks associated with U.S. dollar-denominated long-term debt (excluding tax effects)	**69**	110
Cash and temporary investments, net	**(848)**	(535)
Short-term borrowings	**100**	100
Net debt	**19,826**	18,199

Net debt to EBITDA – excluding restructuring and other costs: This measure is defined as net debt at the end of the period divided by 12-month trailing EBITDA – excluding restructuring and other costs. (See discussion in *Section 7.5 Liquidity and capital resource measures.*) This measure is similar to the leverage ratio covenant in our credit facilities, as described in *Section 7.6 Credit facilities*.

Net interest cost: This measure is the denominator in the calculation of **EBITDA – excluding restructuring and other costs interest coverage** . Net interest cost is defined as financing costs, excluding capitalized long-term debt interest, employee defined benefit plans net interest and recoveries on redemption and repayment of debt, calculated on a 12-month trailing basis. Expenses recorded for the long-term debt prepayment premium, if any, are included in net interest cost. Net interest cost was $792 million in 2020 and $755 million in 2019.

Restructuring and other costs: With the objective of reducing ongoing costs, we incur associated incremental, non-recurring restructuring costs. We may also incur atypical charges, which are included in other costs, when undertaking major or transformational changes to our business or operating models or post-acquisition business integration. In other

costs, we include incremental atypical external costs incurred in connection with business acquisition or disposition activity, as well as significant litigation costs in respect of losses or settlements, adverse retrospective regulatory decisions and incremental atypical costs incurred due to the COVID-19 pandemic.

Components of restructuring and other costs

Years ended December 31 ($ millions)	**2020**	2019
Goods and services purchased	**209**	65
Employee benefits expense	**50**	69
Restructuring and other costs included in EBITDA	**259**	134

11.2 Operating indicators

The following measures are industry metrics that are useful in assessing the operating performance of a wireless and wireline telecommunications entity, but do not have a standardized meaning under IFRS-IASB.

Mobile phone average billing per subscriber per month (ABPU) is calculated as network revenue derived from monthly service plan, roaming and usage charges, as well as monthly re-payments of the outstanding device balance owing from customers on contract; divided by the average number of mobile phone subscribers on the network during the period, and is expressed as a rate per month.

Mobile phone average revenue per subscriber per month (ARPU) is calculated as network revenue derived from monthly service plan, roaming and usage charges; divided by the average number of mobile phone subscribers on the network during the period, and is expressed as a rate per month.

Churn is calculated as the number of subscribers deactivated during a given period divided by the average number of subscribers on the network during the period, and is expressed as a rate per month. Mobile phone churn refers to the aggregate average of both prepaid and postpaid mobile phone churn. A TELUS, Koodo or Public Mobile brand prepaid mobile phone subscriber is deactivated when the subscriber has no usage for 90 days following expiry of the prepaid credits.

Mobile connected device subscriber means a TELUS subscriber on an active service plan with a recurring revenue-generating portable unit (e.g. tablets, internet keys, Internet of Things, wearables and connected cars) that is connected to the TELUS network and is intended for limited or no cellular voice capability.

Mobile phone subscriber means a TELUS subscriber on an active service plan with a recurring revenue-generating portable unit (e.g. feature phones and smartphones) that is connected to the TELUS network and provides voice, text and/or data connectivity.

Internet subscriber means a TELUS subscriber on an active internet plan with a recurring revenue-generating fixed unit that is connected to the TELUS network and provides internet connectivity.

Residential voice subscriber means a TELUS subscriber on an active phone plan with a recurring revenue-generating fixed unit that is connected to the TELUS network and provides voice service.

Security subscriber means a TELUS subscriber on an active security plan with a recurring revenue-generating fixed unit that is connected to the TELUS security and automation platform.

TV subscriber means a TELUS subscriber on an active TV plan with a recurring revenue-generating fixed unit subscription for video services from a TELUS TV platform (e.g. Optik TV and Pik TV).

Exhibit 99.5

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement No. 333-238061 on Form F-10, Registration Statement No. 333-232967 on Form F-3D and Registration Statement Nos. 333-125486 and 333-181463 on Form S-8 and to the use of our reports dated February 11, 2021 relating to the financial statements of TELUS Corporation (the "Company") and the effectiveness of the Company's internal control over financial reporting appearing in this Annual Report on Form 40-F for the year ended December 31, 2020.

/s/ Deloitte LLP
Chartered Professional Accountants
Vancouver, Canada
February 11, 2021