TELUS CORPORATION

Management's discussion and analysis

2019 Q2

TELUS®

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, 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. Updates to the assumptions on which our 2019 outlook is based are presented in *Section 9 Update to 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:

- Regulatory decisions and developments including changes to our regulatory regime or the outcomes of proceedings, cases or inquiries relating to its application, including but not limited to those set out in *Section 9.1 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; CRTC consumer protection regulations; amendments to existing federal legislation; changes to the cost burden associated with CRTC-mandated network interconnections; potential threats to unitary federal regulatory authority over telecommunications; 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 and transfer of spectrum licences, and the cost and availability of spectrum; the federal government's announcement of a formal consultation on the auctioning of 3800 MHz spectrum, expected to take place in 2022; the impact on us and other Canadian telecommunications carriers of government or regulatory actions with respect to certain countries or suppliers, including the executive order signed by U.S. President Donald Trump permitting the Secretary of Commerce to block certain technology transactions deemed to constitute national security risks and the imposition of additional license requirements on the export, re-export and transfer of goods, services and technology to Huawei Technologies Co. Ltd. and its non-U.S. affiliates; restrictions on non-Canadian ownership and control of TELUS common shares and the ongoing monitoring and compliance with such restrictions; and our ability to comply with complex and changing regulation of the healthcare and medical devices industry in the provinces of Canada in which we operate, including as an operator of health clinics.
- Competitive environment including: our ability to continue to retain customers through an enhanced customer service experience, 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, new 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-TV providers, 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, 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; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services, and timely and effective enforcement of related regulatory safeguards; our ability to compete successfully in customer care and business services (CCBS) given our competitors' brand recognition, consolidation and strategic alliances, as well as technology development and, in our TELUS Health business, our ability to compete with other providers of electronic medical records and pharmacy management products, 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 that could achieve expanded Canadian footprints.

- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice local and long distance services from impacts of OTT applications and wireless substitution, a declining overall market for paid TV services while content costs per unit continue to grow, including as a result of content piracy and signal theft and as a result of 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 mobile phone ABPU and mobile phone ARPU declines as a result of, among other factors, substitution to messaging and OTT applications; substitution to increasingly available Wi-Fi services; and disruptive technologies, such as OTT IP services, including Network as a Service in the business market, that may displace or re-rate our existing data services.
- 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 need 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 ability to build out adequate broadband capacity); our reliance on wireless network access agreements, which have facilitated our deployment of wireless technologies; 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 network equipment, TELUS TV® and wireless handsets; the performance of wireless technology; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data; deployment and operation of new wireline broadband network technologies at a reasonable cost and availability and success of new products and services to be rolled out using such network technologies; network reliability and change management; self-learning tools and automation that may change the way we interact with customers; and uncertainties around our strategy to replace certain legacy wireline network technologies, systems and services to reduce operating costs.
- Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties, due to: 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 and prepare for a more efficient and timely evolution to 5G wireless services; utilizing acquired spectrum; investments in network resiliency and reliability; subscriber demand for data; evolving systems and business processes; implementing efficiency initiatives; supporting large complex deals; and future wireless spectrum auctions held by Innovation, Science and Economic Development Canada (ISED), including the 3500 MHz and millimetre wave spectrum auctions expected to take place in 2020 and 2021, respectively, and the announcement of a formal consultation on the auctioning of 3800 MHz spectrum, expected to take place in 2022. Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results.
- 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 implement effective change management for system replacements and upgrades, process redesigns and business integrations (such as our ability to successfully integrate acquisitions, 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 to 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, additional exposure to litigation or regulatory proceedings; and real estate joint venture risks.
- Data protection including risks that malfunctions or unlawful acts could result in the 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 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 outsourcing; offshoring and reorganizations, including any full-time equivalent (FTE) employee reduction programs; procurement initiatives; and real estate rationalization.
- Implementation of large enterprise deals, which may be adversely impacted by available resources, system limitations and degree of co-operation from other service providers.
- Foreign operations and our ability to successfully manage operations in foreign jurisdictions, including managing risks such as currency fluctuations.
- 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; supply chain disruptions, delays and economics, including as a result of government restrictions or trade actions; natural disaster threats; epidemics; pandemics; 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.
- Human resource matters including: recruitment, retention and appropriate training in a highly competitive industry, and the level of our employee engagement.

- Financing and debt requirements including: our ability to carry out financing activities, refinance our maturing debt 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 debt 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, and regulatory decisions and developments. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors based on our financial position and outlook. Shares may be purchased under our normal course issuer bid (NCIB) when and if we consider it opportunistic, based on our financial position and outlook, and the market price of TELUS common shares. There can be no assurance that our dividend growth program or any NCIB will be maintained, not changed 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 as a result of changes to applicable accounting standards or tax authorities adopting more aggressive auditing practices, 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 change, waste and waste recycling, risks relating to fuel systems on our properties, and changing government and public expectations regarding environmental matters and our responses.
- 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; 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 discount rates; fluctuations in foreign exchange rates of the currencies in the regions in which we operate, the impact of tariffs on trade between Canada and the U.S., and global implications of a trade conflict between the U.S. and China.

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 our 2018 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 MD&A.

Management's discussion and analysis (MD&A)

August 2, 2019

Contents

Section	Description
1. Introduction	1.1 Preparation of the MD&A 1.2 The environment in which we operate 1.3 Consolidated highlights
2. Core business and strategy	
3. Corporate priorities for 2019	
4. Capabilities	4.1 Principal markets addressed and competition 4.2 Operational resources 4.3 Liquidity and capital resources 4.4 Changes in internal control over financial reporting
5. Discussion of operations	5.1 General 5.2 Summary of consolidated quarterly results and trends 5.3 Consolidated operations 5.4 Wireless segment 5.5 Wireline segment
6. Changes in financial position	
7. Liquidity and capital resources	7.1 Overview 7.2 Cash provided by operating activities 7.3 Cash used by investing activities 7.4 Cash (used) provided by financing activities 7.5 Liquidity and capital resource measures 7.6 Credit facilities 7.7 Sale of trade receivables 7.8 Credit ratings 7.9 Financial instruments, commitments and contingent liabilities 7.10 Outstanding share information 7.11 Transactions between related parties
8. Accounting matters	8.1 Critical accounting estimates and judgments 8.2 Accounting policy developments
9. Update to general trends, outlook and assumptions, and regulatory developments and proceedings	9.1 Communications industry regulatory developments and proceedings
10. Risks and risk management	
11. Definitions and reconciliations	11.1 Non-GAAP and other financial measures 11.2 Operating indicators

Copyright © 2019 TELUS. All rights reserved. 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 estimates regarding economic growth, 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 three-month and six-month periods ended June 30, 2019, and should be read together with our June 30, 2019, condensed interim 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 interim 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). Our interim consolidated financial statements comply with IFRS-IASB and Canadian GAAP and have been prepared in accordance with International Accounting Standard 34, *Interim Financial Reporting*. In this MD&A, the term IFRS refers to these standards. We adopted IFRS 16, *Leases,* on January 1, 2019, with retrospective application, with the cumulative effect of the initial application of the new standard recognized at the date of initial application, January 1, 2019. This method of application does not result in the retrospective adjustment of amounts reported for periods prior to fiscal 2019. The most significant effect of the new standard is the lessee's recognition of the initial present value of unavoidable future lease payments as right-of-use lease assets and lease liabilities, including those for most leases that would have previously been accounted for as operating leases. This results in depreciation of right-of-use lease assets and financing costs arising from lease liabilities, rather than as part of Goods and services purchased. The adoption of the new standard has resulted in an increase to Property, plant and equipment of approximately $1.0 billion and long-term debt of approximately $1.4 billion as at January 1, 2019. However, the implementation of IFRS 16 does not have any impact on economics or cash flows. 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**).

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 interim consolidated financial statements were reviewed by our Audit Committee and authorized by our Board of Directors (Board) for issuance on August 2, 2019.

In this MD&A, unless otherwise indicated, results for the second quarter of 2019 (three-month period ended June 30, 2019) and the six-month period ended June 30, 2019 are compared with results from the second quarter of 2018 (three-month period ended June 30, 2018) and the six-month period ended June 30, 2018.

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 industry. Our estimates regarding our environment also form an important part of the assumptions on which our targets are based.

Economic growth

We currently estimate that the rate of economic growth in Canada in 2019 will be 1.5%, as updated in our first quarter 2019 MD&A, based on a composite of estimates from Canadian banks and other sources. For our incumbent local exchange carrier (ILEC) provinces in Western Canada, we estimate that economic growth will be 1.9% in 2019 in British Columbia (B.C.) and 1.2% in Alberta, both updated in our first quarter 2019 MD&A. The Bank of Canada's July 2019 Monetary Policy Report estimated that economic growth in Canada will be 1.3% in 2019. The extent to which these economic growth estimates affect us and the timing of their impact will depend upon the actual experience of specific sectors of the Canadian economy.

With respect to the national unemployment rate, Statistics Canada's Labour Force Survey reported a rate of 5.5% for June 2019 (5.6% reported for December 2018 and 6.0% for June 2018). The unemployment rate for B.C. was 4.5% for June 2019 (4.4% for December 2018 and 5.2% for June 2018), while the unemployment rate for Alberta was 6.6% for June 2019 (6.4% for December 2018 and 6.5% for June 2018). Based on a composite of estimates from Canadian banks and other sources, we estimate that the unemployment rate in 2019 will be 5.8% in Canada (unchanged from our

2018 annual MD&A), 4.5% in B.C. (previously 4.9% as reported in our 2018 annual MD&A) and 6.8% in Alberta (previously 6.2% as reported in our 2018 annual MD&A).

With respect to the pace of housing starts, Canada Mortgage and Housing Corporation reported the seasonally adjusted annual rate (SAAR) of housing starts in June 2019 in Canada was approximately 246,000 units (246,000 units for June 2018). The SAAR of housing starts in June 2019 for B.C. and Alberta was approximately 62,000 and 32,000 units, respectively (37,000 and 26,000 units in June 2018, respectively). Based on a composite of estimates from Canadian banks and other sources, on an unadjusted basis, we estimate that housing starts in 2019 will total approximately 196,000 units in Canada (unchanged from our 2018 annual MD&A), 37,000 units in B.C., and 26,000 units in Alberta.

1.3 Consolidated highlights

Spectrum

Innovation, Science and Economic Development Canada's (ISED) 600 MHz wireless spectrum auction occurred from March 14, 2019 through April 4, 2019. We were the successful auction participant on 12 wireless spectrum licences in B.C., Alberta, Saskatchewan, Ontario and Quebec for a total purchase price of $931 million ($2.35 per MHz-pop, where pop refers to the population in a licence area), equating to a national average of 11.3 MHz.

Long-term debt issues and notice of early redemption of 2020 Notes

On April 3, 2019, we issued $1.0 billion of senior unsecured 3.30% Notes, Series CY, which will mature on May 2, 2029.

On May 22, 2019, we announced an offering of US$500 million of senior unsecured 4.30% Notes which were issued on May 28, 2019, and will mature on June 15, 2049. The net proceeds from this offering have been used to repay outstanding indebtedness, including outstanding commercial paper, to redeem $650 million of the $1.0 billion aggregate principal amount on our 5.05% Notes, Series CH due July 23, 2020, and for general corporate purposes. We have fully hedged the principal and interest obligations of the notes by entering into a foreign exchange derivative (a cross currency interest rate exchange agreement), which effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 4.27% and an issued and outstanding amount of $672 million (reflecting a fixed exchange rate of $1.3435).

On June 26, 2019, we announced an offering of $800 million of senior unsecured 2.75% Notes, Series CZ, which were issued on July 2, 2019, and will mature on July 8, 2026. The net proceeds from this offering will be used to redeem the remaining $350 million of our 5.05% Notes, Series CH, to repay outstanding indebtedness, including outstanding commercial paper, and for general corporate purposes. Our average term to maturity of long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) was approximately 12.5 years as at June 30, 2019, increasing from approximately 12.2 years as at December 31, 2018, and approximately 11.9 years as at June 30, 2018. Our weighted average cost of long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) was 4.12% as at June 30, 2019, as compared to 4.18% as at December 31, 2018, and 4.24% as at June 30, 2018.

On May 31, 2019, we exercised our right to early redeem, on July 23, 2019, $650 million of our 5.05% Notes, Series CH. On July 3, 2019, we exercised our right to early redeem, on August 7, 2019, the remaining $350 million not called for redemption on May 31, 2019. The long-term debt prepayment premium for the entire $1 billion Series CH notes redemption will be recorded in the three-month period ending September 30, 2019, and is estimated to be approximately $30 million before income taxes. Subsequent to this early redemption and the issuance of 2.75% Notes, Series CZ, the average term to maturity of our long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) is expected to be approximately 12.8 years, our weighted average cost of long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) is expected to be 3.98%, and we will no longer have any TELUS Corporation notes maturing in 2020.

Endless data, device financing and family discounts

As part of our commitment to putting customers first, on July 3, 2019, we introduced endless data in combination with device financing and family discounts. Our Peace of Mind™ rate plans give customers access to endless data starting at $75 per month for 10 GB of high-speed data. If a customer reaches their high-speed data threshold within their monthly billing cycle, data speeds will be reduced to 512 Kbps without the customer being charged overages. TELUS Easy Payment®, our device financing program, gives customers access to any smartphone for as little as $0 upfront, with financing options over 24 or 36 months. TELUS Family Discounts provide incremental savings off the monthly rate plan with every new family member who signs up.

Consolidated highlights

($ millions, except footnotes and unless noted otherwise)	Second quarters ended June 30			Six-month periods ended June 30		
	2019	2018	Change	**2019**	2018	Change
Consolidated statements of income						
Operating revenues	**3,597**	3,453	4.2%	**7,103**	6,830	4.0%
Operating income	**740**	692	6.9%	**1,502**	1,411	6.4%
Income before income taxes	**551**	542	1.7%	**1,145**	1,105	3.6%
Net income	**520**	397	31.0%	**957**	809	18.3%
Net income attributable to Common Shares	**517**	390	32.6%	**945**	800	18.1%
Adjusted Net income[1]	**416**	414	0.5%	**869**	849	2.4%
Earnings per share (EPS) ($)						
Basic EPS	**0.86**	0.66	30.3%	**1.57**	1.34	17.2%
Adjusted basic EPS[1]	**0.69**	0.70	(1.4)%	**1.45**	1.42	2.1%
Diluted EPS	**0.86**	0.66	30.3%	**1.57**	1.34	17.2%
Dividends declared per Common Share ($)	**0.5625**	0.5250	7.1%	**1.1075**	1.0300	7.5%
Basic weighted-average Common Shares outstanding (millions)	**601**	596	0.8%	**601**	595	1.0%
Consolidated statements of cash flows						
Cash provided by operating activities	**1,160**	1,206	(3.8)%	**1,950**	2,044	(4.6)%
Cash used by investing activities	**(1,600)**	(795)	101.3%	**(2,562)**	(1,727)	48.3%
Acquisitions	**(26)**	(47)	(44.7)%	**(188)**	(251)	(25.1)%
Capital expenditures[2]	**(770)**	(791)	(2.7)%	**(1,416)**	(1,441)	(1.7)%
Cash (used) provided by financing activities	**69**	(143)	n/m	**415**	(143)	n/m
Other highlights						
Subscriber connections[3,4] (thousands)				**14,165**	13,503	4.9%
Earnings before interest, income taxes, depreciation and amortization (EBITDA)[1]	**1,373**	1,251	9.8%	**2,752**	2,520	9.2%
Restructuring and other costs[1]	**29**	35	(17.1)%	**65**	69	(5.8)%
Adjusted EBITDA[1,5]	**1,402**	1,286	9.0%	**2,817**	2,589	8.8%
Adjusted EBITDA margin[1,6] (%)	**39.0**	37.2	1.8 pts.	**39.7**	37.9	1.8 pts.
Free cash flow[1]	**324**	329	(1.5)%	**477**	772	(38.2)%
Net debt to EBITDA – excluding restructuring and other costs[1] (times)				**2.94**	2.66	0.28

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 interim consolidated financial statements. Refer to *Note 31* of the interim consolidated financial statements for further information.

3 The sum of active mobile phone subscribers, mobile connected device subscribers, Internet access subscribers, residential voice subscribers and TELUS TV subscribers, measured at the end of the respective periods based on information in billing and other systems. Fourth quarter of 2018 opening mobile phone subscriber connections have been adjusted to exclude an estimated 23,000 subscribers impacted by the CRTC's final pro-rating ruling in June 2018, which was effective October 1, 2018. During the first quarter of 2019, we adjusted cumulative Internet subscriber connections to add approximately 16,000 subscribers from acquisitions undertaken during the quarter.

4 Effective for the first quarter of 2019, with retrospective application, we revised our definition of a wireless subscriber and now report mobile phones and mobile connected devices as separate subscriber bases so as to be consistent with the way we manage our business and to align with global peers. As a result of the change, total subscribers and associated operating statistics (gross additions, net additions, churn, average billing per subscriber per month, or ABPU, and average revenue per subscriber per month, or ARPU) were adjusted to reflect (i) the movement of certain subscribers from the mobile phones subscriber base to the newly created mobile connected devices subscriber base, and (ii) the inclusion of previously undisclosed IoT and mobile health subscribers in our mobile connected devices subscriber base. For additional information on our subscriber definitions, see *Section 11.2 Operating indicators.*

5 Adjusted EBITDA for all periods excludes restructuring and other costs (see *Section 11.1* for restructuring and other costs amounts).

6 Adjusted EBITDA margin is Adjusted EBITDA divided by Operating revenues.

Operating highlights

- **Consolidated operating revenues** increased by $144 million in the second quarter of 2019 and $273 million in the first six months of 2019:

  Service revenues increased by $133 million in the second quarter of 2019 and $267 million in the first six months of 2019, mainly due to growth in wireless network revenue and wireline data services revenue, partly offset by the ongoing declines in wireline legacy voice and legacy data service revenues.

Equipment revenues increased by $14 million in the second quarter of 2019 and $18 million in the first six months of 2019, primarily due to increased wireless revenue mainly from greater volumes of higher-value smartphones in the sales mix.

Other operating income decreased by $3 million in the second quarter of 2019 and $12 million in the first six months of 2019, largely due to higher net gains in 2018 from the sale of certain assets.

For additional details on operating revenues, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

- During the 12-month period ending on June 30, 2019, our total **subscriber connections** increased by 662,000 reflecting a 3.2% increase in mobile phone subscribers, a 21.4% increase in mobile connected device subscribers, a 7.1% increase in Internet subscribers and a 7.1% increase in TELUS TV subscribers, partly offset by a 3.5% decline in residential voice subscribers.

  Our mobile phone net additions were 82,000 in the second quarter of 2019 and 93,000 in the first six months of 2019, up 13,000 and 27,000, respectively, from the same periods in 2018. Effective for the first quarter of 2019, with retrospective application, we have revised our definition of a mobile phone subscriber, see *Section 11.2 Operating indicators* for definitions. These increases were due to growth in high-value customer additions, resulting from demographic shifts and growth in the Canadian population, successful promotions and expanded channels, and, for the first six months of 2019, a lower mobile phone churn rate. Mobile connected device net additions were 72,000 in the second quarter of 2019 and 121,000 in the first six months of 2019, up 35,000 in the quarter and 43,000 in the six-month period, due to growth in our IoT offerings, including the connected device growth arising from our subscribers expanding their IoT services to their growing customer bases, partially offset by the strategic focus away from lower-margin subsidized tablets. Our comparatively low mobile phone churn rate was 1.01% in both the second quarter of 2019 and the first six months of 2019, up from 0.99% in the second quarter of 2018 and down from 1.04% in the first six months of 2018. (See *Section 5.4 Wireless segment* for additional details.)

  Internet net additions were 25,000 in the second quarter of 2019 and 47,000 in the first six months of 2019, down 4,000 from both the quarter and six-month period in 2018, due to continued net new demand from consumers and businesses offset by increased competitive intensity. TELUS TV net additions were 16,000 in the second quarter of 2019 and 33,000 in the first six months of 2019, up 1,000 in the quarter and 12,000 in the six-month period. The increases reflect a lower customer churn rate resulting from stronger retention efforts and, for the first six months of 2019, higher gross additions resulting from diversification of our product offerings. 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 putting our customers first, contributed to combined Internet and TV subscriber growth of 202,000 or 7.1% over the last 12 months. We had made TELUS PureFibre® available to over two million households and businesses, representing approximately 64% of our broadband footprint by June 30, 2019. As well, residential voice net losses improved by 10.0% in the quarter and 23.1% in the first six months of 2019, due to our expanding fibre footprint and bundled product offerings and the success of our stronger retention efforts, including lower-priced offerings. (See *Section 5.5 Wireline segment* for additional details.)

- **Operating income** increased by $48 million in the second quarter of 2019 and $91 million in the first six months of 2019, reflecting higher wireless network growth driven by a growing subscriber base and higher wireless equipment margins, in addition to growth in wireline data service margins and EBITDA contribution from our customer care and business services (CCBS) and TELUS Health businesses, and the effects of implementing IFRS 16 described in *Section 1.1*. These factors were partly offset by declines from wireline legacy voice and legacy data services, as well as increased depreciation and amortization, including the depreciation recorded arising from the application of IFRS 16.

  EBITDA, which includes restructuring and other costs, increased by $122 million or 9.8% in the second quarter of 2019 and increased by $232 million or 9.2% in the first six months of 2019.

  Adjusted EBITDA, which excludes restructuring and other costs, increased by $116 million or 9.0% in the second quarter of 2019 and increased by $228 million or 8.8% in the first six months of 2019. The increases reflect both higher wireless network revenue and higher wireless equipment margins driven by a growing subscriber base, growth in wireline data service margins and EBITDA contribution from our CCBS and TELUS Health businesses. Additionally, upon the application of IFRS 16, Goods and services purchased decreased and, correspondingly, Adjusted EBITDA increased. These factors were partly offset by declines in wireline legacy voice and legacy data services and a decline in the EBITDA contribution from our legacy business services. Applying a retrospective IFRS 16 simulation to fiscal 2018 results, which are cash-based proxy adjustments, all as used by our Chief Executive Officer (our chief operating decision-maker) to assess performance, pro forma consolidated Adjusted

EBITDA growth was approximately 4.5% in both the quarter and the six-month period. (See *Section 5.3 Consolidated operations* for additional details.)

- **Income before income taxes** increased by $9 million in the second quarter of 2019 and $40 million in the first six months of 2019. Higher Operating income, as noted above, was partly offset by an increase in Financing costs. The increase in Financing costs resulted primarily from foreign exchange, the financing costs recorded that arose from lease liabilities upon the application of IFRS 16 described in *Section 1.1* and from higher average long-term debt outstanding. (See *Financing costs* in *Section 5.3.)*
- **Income taxes** decreased by $114 million in the second quarter of 2019 and $108 million in the first six months of 2019. The effective tax rate decreased from 26.7% to 5.6% in the second quarter of 2019 and from 26.7% to 16.4% in the first six months of 2019. These reductions were predominantly attributed to the 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** increased by $127 million in the second quarter of 2019 and $145 million in the first six months of 2019. These increases were driven by lower Income taxes and higher Operating income, partly offset by increased Financing costs.

  Adjusted Net income, which excludes the effects of restructuring and other costs and income tax-related adjustments, increased by $2 million or 0.5% in the second quarter of 2019 and $20 million or 2.4% in the first six months of 2019.

Reconciliation of adjusted Net income

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions)	**2019**	2018	Change	**2019**	2018	Change
Net income attributable to Common Shares	**517**	390	127	**945**	800	145
Add (deduct):						
Restructuring and other costs, after income taxes	**22**	25	(3)	**47**	50	(3)
Favourable income tax-related adjustments	**(123)**	(1)	(122)	**(123)**	(1)	(122)
Adjusted Net income	**416**	414	2	**869**	849	20

- **Basic EPS** increased by $0.20 or 30.3% in the second quarter of 2019 and $0.23 or 17.2% in the first six months of 2019. These increases were driven by lower Income taxes and higher Operating income, partly offset by increased Financing costs and the effect of a higher number of Common Shares outstanding.

  Adjusted basic EPS, which excludes the effects of restructuring and other costs and income tax-related adjustments, decreased by $0.01 or 1.4% in the second quarter of 2019 and increased by $0.03 or 2.1% in the first six months of 2019.

Reconciliation of adjusted basic EPS

	Second quarters ended June 30			Six-month periods ended June 30		
($)	**2019**	2018	Change	**2019**	2018	Change
Basic EPS	**0.86**	0.66	0.20	**1.57**	1.34	0.23
Add (deduct):						
Restructuring and other costs, after income taxes, per share	**0.03**	0.04	(0.01)	**0.08**	0.08	—
Favourable income tax-related adjustments, per share	**(0.20)**	—	(0.20)	**(0.20)**	—	(0.20)
Adjusted basic EPS	**0.69**	0.70	(0.01)	**1.45**	1.42	0.03

- **Dividends declared per Common Share** were $0.5625 in the second quarter of 2019 and $1.1075 in the first six months of 2019, reflecting increases of 7.1% from the second quarter of 2018 and 7.5% from the first six months of 2018. On August 1, 2019, the Board declared a third quarter dividend of $0.5625 per share on the issued and outstanding Common Shares, payable on October 1, 2019, to shareholders of record at the close of business on September 10, 2019. The third quarter dividend increased by $0.0375 per share or 7.1% from the $0.5250 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** was 2.94 times at June 30, 2019, up from 2.66 times at June 30, 2018, as the increase in net debt, which includes the $1.6 billion recognition of lease liabilities upon the application of IFRS 16 in addition to the two debt issuances described earlier in this section, exceeded the effect of the increase in EBITDA – excluding restructuring and other costs (including that the transition method for IFRS 16 has currently only included six months' effect on the trailing EBITDA); the implementation of IFRS 16 had the combined effect of increasing the ratio by 0.18 as at June 30, 2019. (See *Section 4.3 Liquidity and capital resources* and *Section 7.5 Liquidity and capital resource measures.*)
- **Cash provided by operating activities** decreased by $46 million in the second quarter of 2019, primarily due to other operating working capital changes and increased income taxes paid, partly offset by growth in EBITDA. In the first six months of 2019, Cash provided by operating activities decreased by $94 million, largely due to increased income taxes paid, including a one-time catch-up payment of $270 million, other operating working capital changes, increased interest paid and increased restructuring and other costs disbursements, which was partially offset by growth in EBITDA. Additionally, repayments of lease liabilities under IFRS 16 increased Cash provided by operating activities by $64 million in the second quarter of 2019 and $152 million in the first six months of 2019, as described in *Section 7.2 Cash provided by operating activities*.
- **Cash used by investing activities** increased by $805 million in the second quarter of 2019 and $835 million in the first six months of 2019, largely attributed to the cash payment for the 600 MHz spectrum acquisition, partially offset by lower cash payments for business acquisitions and lower cash payments for capital assets, excluding spectrum licences. **Acquisitions** decreased by $21 million in the second quarter of 2019 and $63 million in the first six months of 2019 as we made larger cash payments for business acquisitions in both the second quarter of 2018 and the first six months of 2018. **Capital expenditures** decreased by $21 million in the second quarter of 2019 and $25 million in the first six months of 2019, primarily due to timing of expenditures on radio access network capacity upgrades. We have made TELUS PureFibre available to approximately 64% of our broadband footprint at June 30, 2019. (See *Section 7.3 Cash used by investing activities.*)
- **Cash used by financing activities** decreased by $212 million in the second quarter of 2019 and $558 million in the first six months of 2019, primarily reflecting increased issues of long-term debt, net of redemptions. (See *Section 7.4 Cash (used) provided by financing activities.*)
- **Free cash flow** decreased by $5 million in the second quarter of 2019, largely from increased income taxes paid, partially offset by higher Adjusted EBITDA. Free cash flow decreased by $295 million in the first six months of 2019, resulting primarily from increased income taxes paid, including the $270 million one-time catch-up payment as described in *Cash provided by operating activities*, and increased interest paid. The free cash flow decrease in the first six months of 2019 was partly offset by higher Adjusted EBITDA, lower capital expenditures and the timing of device subsidy repayments and associated revenue recognition. Our definition of free cash flow 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.*)

2. Core business and strategy

Our core business and our strategic imperatives were described in our 2018 annual MD&A.

3. Corporate priorities for 2019

Our annual corporate priorities are used to advance our long-term strategic imperatives and address near-term opportunities and challenges. The following table provides a discussion of activities and initiatives that relate to our 2019 corporate priorities.

Honouring our customers, communities and social purpose by our team delivering on our brand promise

- In April 2019, we launched our Assistive 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.
- During the quarter, we expanded our Internet for Good™ and Mobility for Good™ programs to support 25,000 more B.C. families and youth. Additionally, we expanded our Mobility for Good program into both Manitoba and New Brunswick. Internet for Good offers low-income families access to low-cost high-speed Internet and a computer, and 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.
- In June, we launched our Welcome to Canada initiative, which expands our Internet and Mobility for Good programs, in a customized pilot, to support government-assisted refugees arriving in B.C. TELUS will provide refurbished phones, wireless access and Internet services 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 May, we held our 14th annual TELUS Days of Giving® with more than 27,000 TELUS team members participating in over 2,000 volunteer activities across Canada.
- Throughout the quarter, close to 25,000 Canadians participated in TELUS Wise® workshops. These workshops are free of charge and help foster the responsible use of technology in our digital world.
- As noted in *Section 1.3*, we launched Peace of Mind rate plans and Easy Payment device financing together with family discounts to offer Canadians endless data with no overage charges.

Leveraging our broadband networks to drive TELUS' growth

- In the J.D. Power 2019 Canada Wireless Network Quality Study, TELUS ranked first in network quality across the three regions evaluated: West region, Ontario and East region.
- We have won two Speedtest Awards from Ookla for Fastest Mobile Network and Most Expansive Coverage in Canada. This builds upon the *Canada: State of Mobile Networks March 2019* report published by Tutela which ranked TELUS number one for latency and tied for first place for consistent quality.
- Throughout the quarter, we made a series of announcements regarding the connection of additional homes and businesses to our TELUS PureFibre infrastructure, including:
  - An investment of $100 million in the city of St. Albert, Alberta, including the neighbouring communities in Sturgeon County to connect by the end of 2020.
  - An investment of $60 million to bring TELUS PureFibre to numerous communities across our incumbent footprint in Eastern Quebec, including: 13 communities in the Côte-de-Gaspé and Haute-Gaspésie Regional community municipalities (RCM), 14 communities in La Matapédia RCM, 12 communities in La Mitis RCM, 10 communities in the L'Islet RCM and to Sainte-Apolline-de-Patton in the Montmagny RCM, seven communities in Mékinac and the Chenaux RCM, and 13 communities in the Portneuf RCM, respectively, and to upgrade our network infrastructure to the latest LTE technology. These investments were made with support from the federal government's Connect to Innovate program and the Quebec government's Québec branché program.
  - An investment of $150 million in 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.
- We were the successful auction participant on 12 wireless spectrum licences across B.C., Alberta, Saskatchewan, Ontario and Quebec in Innovation, Science and Economic Development Canada's 600 MHz wireless spectrum auction. The acquisition of 600 MHz spectrum will enable us to deliver enhanced urban and rural connectivity and advance our national 5G growth strategy.

Fuelling our future through recurring efficiency gains

- We are focusing on the expansion of customer self-serve adoption, which benefits both client satisfaction and company productivity, through virtual assistants and digital platforms, while improving team member productivity by utilizing robotic process automation.
- We have established an ongoing program that integrates our acquisitions, evolve stakeholder relationships, and simplify our business, which improves our overall organizational efficiency while driving cost savings and working capital benefits to be re-invested in our customers first strategy.
- In 2019, we undertook three debt offerings of $1.0 billion, US$500 million and $800 million, in order to lower our weighted average cost of long-term debt and increase our average term-to-maturity.
- With our Peace of Mind rate plans and Easy Payment device financing options, we have simplified our suite of offerings,

making it easier for our customers to select what they want and for our team members to assist our customers. • Through the deployment of Xavient's capabilities, TELUS International is continuing to enhance digital experience offerings to customers, while building strength in industries such as healthcare and games.
Driving emerging opportunities to build scale in TELUS Health and TELUS International
• TELUS International continued to expand its global operations with opening of a sixth site in Manila, Philippines, in addition to the new customer care locations in Noida, India and Chengdu, China opened earlier in the first quarter of 2019.

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

For a discussion of our principal markets and an overview of competition, refer to *Section 4.1* of our 2018 annual MD&A.

4.2 Operational resources

Wireless

Our low mobile phone churn rate (combined postpaid and prepaid) was 1.01% in the second quarter of 2019, despite strong competitive and economic pressures. This speaks to the success of our differentiated customers first culture and our ongoing focus on delivering an outstanding customer experience, combined with attractive new products and services, our retention programs and leading network quality. For a definition of churn, see *Section 11.2* of this MD&A.

Innovation, Science and Economic Development Canada's (ISED) held its 600 MHz auction from March 14 through April 4, 2019. We were the successful auction participant on 12 wireless licences equating to a national average of 11.3 MHz. The acquisition of this spectrum will enable us to deliver enhanced urban and rural connectivity and advance our national 5G growth strategy.

Since mid-2013, we have invested more than $4.6 billion to acquire wireless spectrum licences in spectrum auctions and other transactions, which has more than doubled our national spectrum holdings in support of our top corporate priority to put customers first. Wireless data consumption has been increasing rapidly and we have responded by investing to extend the capacity of our network to support the additional data consumption and growth in our wireless subscriber base. This includes investments in wireless small cells connected to our fibre technology to improve coverage and capacity and to prepare for a more efficient and timely evolution to 5G wireless services.

As at June 30, 2019, our 4G LTE technology covered 99% of Canada's population, consistent with June 30, 2018. Furthermore, we have continued to invest in the roll-out of our LTE advanced network, which covered approximately 93% of Canada's population at June 30, 2019, up from more than 91% one year before.

Wireline

We are continuing to invest in our incumbent local exchange carrier (ILEC) urban and rural communities with commitments to deliver broadband technology capabilities to as many Canadians as possible. We are expanding our fibre footprint by connecting more homes and businesses directly to fibre in communities across B.C., Alberta and Eastern Quebec. In addition, we have increased broadband Internet speeds, expanded our IP TV video-on-demand library and high-definition content, including 4K TV and 4K HDR capabilities, and enhanced the marketing of data products and bundles resulting in improved churn rates. Our fibre technology is also an essential component of our wireless access technology and will enable 5G deployment in the future as referenced above. Our home and business smart technology lines of business integrate security and safety monitoring with smart devices.

As at June 30, 2019, our high-speed broadband footprint covered approximately 3.2 million households and businesses in B.C., Alberta and Eastern Quebec, including approximately 2.04 million households and businesses covered with fibre-optic cable (representing approximately 64% of our total high-speed broadband footprint), which provides these premises with immediate access to our gigabit-capable fibre-optic technology. This is up from approximately 1.65 million households and businesses in the second quarter of 2018.

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 Share 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, 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 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. 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. (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 10.7 Financing, debt requirements and returning cash to shareholders* in our 2018 annual MD&A.)
- On August 1, 2019, the Board declared a third quarter dividend of $0.5625 per share, payable on October 1, 2019, to shareholders of record at the close of business on September 10, 2019. The third quarter dividend for 2019 reflects a cumulative increase of $0.0375 per share or 7.1% from the $0.5250 per share dividend declared one year earlier.
- During the three-month and six-month periods ending June 30, 2019, our dividend reinvestment and share purchase plan trustee purchased shares from Treasury for the dividend reinvestment and share purchase plan, instead of acquiring Common Shares in the stock market for $22 million and $45 million, respectively, with no discount applicable. Effective with the dividend to be paid October 1, 2019, we will offer Common Shares from Treasury at a discount of 2%.

Purchase Common Shares

- During the three-month and six-month periods ended June 30, 2019, and up to the date of this MD&A, we did not purchase or cancel any shares pursuant to our 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 $293 million at June 30, 2019, all of which was denominated in U.S. dollars (US$224 million), compared to $774 million (US$569 million) at December 31, 2018, and $3 million (US$2 million) at June 30, 2018.
- Our net draws on the TELUS International (Cda) Inc. credit facility were US$307 million at June 30, 2019, compared to US$313 million at December 31, 2018, and US$334 million at June 30, 2018. The credit facility is non-recourse to TELUS Corporation.
- Proceeds from securitized trade receivables were $100 million at June 30, 2019 (December 31 and June 30, 2018 were $100 million).

Report on financing and capital structure management plans

Maintain compliance with financial objectives

- Maintain investment grade credit ratings in the range of BBB+ or the equivalent – On August 2, 2019, 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 2.00 to 2.50 times – As measured at June 30, 2019, this ratio was 2.94 times, outside of the objective range, primarily due to the funding of spectrum licences, the elevated strategic capital investments in our fibre-optic infrastructure and the application of IFRS 16 effective January 1, 2019 (including that the transition method for IFRS 16 has currently only included six months' effect on the trailing EBITDA). Given the cash demands of the recent 2019 and upcoming spectrum auctions, 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 2.50 times in the medium term (following upcoming spectrum auctions), consistent with our long-term strategy. (See *Section 7.5 Liquidity and capital resource measures.*)
- Dividend payout ratio of 65 to 75% of net earnings per share for 2019 on a prospective basis – Our objective range is on a prospective basis through 2019. The dividend payout ratio we present in this MD&A is a historical measure utilizing the last four quarters of dividends declared and earnings per share, and is disclosed for illustrative purposes in evaluating our target guideline. As at June 30, 2019, the historical ratio was 75%, and the adjusted historical ratio of 84% exceeded the objective range. So as to be consistent with the way we manage our business, we have revised our target guideline, effective January 1, 2020, to be calculated as 60 to 75% of free cash flow on a prospective basis. (See *Section 7.5 Liquidity and capital resource measures.*)
- Generally maintain a minimum of $1 billion in unutilized liquidity – As at June 30, 2019, our unutilized liquidity on a consolidated basis was over $2.5 billion. (See *Section 7.6 Credit facilities.*)

4.4 Changes in internal control over financial reporting

Disclosure controls and procedures

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.

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, Internet 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. 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 such distinction has been increasingly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure and technology. The continued build-out of our technology-agnostic fibre-optic infrastructure, in combination with converged edge network technology, has significantly affected this judgment, as has 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. As we do not currently aggregate operating segments, our reportable segments as at June 30, 2019, are also wireless and wireline. Segmented information in *Note 5* of the interim consolidated financial statements is regularly reported to our Chief Executive Officer (CEO) (our chief operating decision-maker).

We applied IFRS 16 with a transition date of January 1, 2019. As noted in *Section 1.1*, upon the application of IFRS 16, we did not retrospectively adjust amounts reported for periods prior to fiscal 2019. Refer to *Note 2* of the interim consolidated financial statements for further information.

5.2 Summary of consolidated quarterly results and trends

Summary of quarterly results

($ millions, except per share amounts)	**2019 Q2**	2019 Q1	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	2017 Q3
Operating revenues[1]	**3,597**	3,506	3,764	3,774	3,453	3,377	3,541	3,404
Operating expenses								
Goods and services purchased[2,3]	**1,466**	1,421	1,784	1,685	1,491	1,408	1,635	1,522
Employee benefits expense[2]	**758**	706	745	740	711	700	683	638
Depreciation and amortization	**633**	617	586	572	559	550	564	547
Total operating expenses	**2,857**	2,744	3,115	2,997	2,761	2,658	2,882	2,707
Operating income	**740**	762	649	777	692	719	659	697
Financing costs before long-term debt prepayment premium	**189**	168	159	162	150	156	144	149
Long-term debt prepayment premium	**—**	—	—	34	—	—	—	—
Income before income taxes	**551**	594	490	581	542	563	515	548
Income taxes	**31**	157	122	134	145	151	161	142
Net income	**520**	437	368	447	397	412	354	406
Net income attributable to Common Shares	**517**	428	357	443	390	410	353	403
Net income per Common Share:								
Basic earnings per share (EPS)	**0.86**	0.71	0.60	0.74	0.66	0.69	0.59	0.68
Adjusted basic EPS[4]	**0.69**	0.75	0.69	0.74	0.70	0.73	0.66	0.70
Diluted EPS	**0.86**	0.71	0.60	0.74	0.66	0.69	0.59	0.68
Dividends declared per Common Share	**0.5625**	0.5450	0.5450	0.5250	0.5250	0.5050	0.5050	0.4925
Additional information:								
EBITDA[4]	**1,373**	1,379	1,235	1,349	1,251	1,269	1,223	1,244
Restructuring and other costs[3,4]	**29**	36	75	173	35	34	54	23
Non-recurring gains and equity income (non-recurring losses and equity losses) related to real estate joint ventures	**—**	—	—	171	—	—	(2)	—
MTS net recovery[5]	**—**	—	—	—	—	—	21	—
Adjusted EBITDA[4]	**1,402**	1,415	1,310	1,351	1,286	1,303	1,258	1,267
Cash provided by operating activities	**1,160**	790	948	1,066	1,206	838	979	1,133
Free cash flow[4]	**324**	153	122	303	329	443	274	215

1 In the third quarter of 2018, we recorded equity income related to real estate joint ventures of $171 million arising from the sale of TELUS Garden.

2 Goods and services purchased and Employee benefits expense amounts include restructuring and other costs.

3 In the third quarter of 2018, we recorded a donation to the TELUS Friendly Future Foundation™ of $118 million as part of other costs.

4 See *Section 11.1 Non-GAAP and other financial measures.*

5 Refer to our 2018 annual MD&A for definition.

Trends

The trend of year-over-year increases in consolidated revenue reflects: (i) wireless network revenue generated from growth in our subscriber base; (ii) growth in wireline service revenue, including customer care and business services (CCBS) revenues, Internet and enhanced data services revenues, TELUS Health revenues, TELUS TV revenues, and home and business smart technology (including security) revenues; and (iii) increased equipment revenues. Increased wireline data service revenue also includes revenues from business acquisitions. Increased Internet and TV service revenues are being generated by subscriber growth and higher Internet revenue per customer. Year-over-year wireless equipment revenues generally increased from higher-value smartphones in the sales mix and a higher volume of new contracts. 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, excepting the effects of the application of IFRS 16 first evidenced in the first quarter of 2019, reflects higher wireless equipment expenses associated with higher-value smartphones in the sales mix and a general increase in new contracts; increased wireline TV costs of sales associated with a growing subscriber base; and increases in wireless and wireline customer service, roaming and external labour expenses to support growth in both our subscriber base and business acquisitions.

In the third quarter of 2018, Operating revenues include equity income related to real estate joint ventures of $171 million arising from the sale of TELUS Garden. Additionally in the third quarter of 2018, Goods and services purchased include a $118 million charitable donation to the TELUS Friendly Future Foundation.

The trend of year-over-year increases in net Employee benefits expense reflects increases in the number of employees resulting from business acquisitions, including those supporting CCBS revenue growth, expansion of our TELUS Health offerings, and growth in 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 related to cost efficiency and effectiveness programs. In the fourth quarter of 2016, there was an immediately vesting transformative compensation expense which was a one-time payment in lieu of wage increases for the period July 1, 2016 to December 31, 2018; we expect year-over-year increases in net Employee benefits expense in 2019 as part of 2019 compensation increases in line with inflation.

The trend of year-over-year increases in Depreciation and amortization reflects increases due to growth in capital assets, which is supporting the expansion of our broadband footprint and enhanced LTE technology coverage, and growth in business acquisitions. The investments in our fibre-optic technology also support our small-cell technology strategy to improve coverage and capacity while preparing for a more efficient and timely evolution to 5G. Depreciation and amortization under the application of IFRS 16 are higher than would have been the case prior to IFRS 16.

The trend of year-over-year increases in Financing costs reflects an increase in long-term debt outstanding, mainly associated with our generational investments in fibre to homes and businesses and wireless technology, and our business acquisitions. Financing costs include a long-term debt prepayment premium of $34 million in the third quarter of 2018. 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 future periods. Financing costs also includes Interest accretion on provisions and Employee defined benefit plans net interest expense. Additionally, for the eight periods shown, Financing costs include varying amounts of foreign exchange gains or losses and varying amounts of interest income. Under the application of IFRS 16, commencing in 2019, Financing costs are higher than would have been the case prior to IFRS 16 driven by interest on lease liabilities.

The trend in Net income reflects the items noted above, as well as non-cash adjustments arising from substantively enacted income tax changes and adjustments recognized in the current periods for income taxes of prior periods. Historically, the trend in basic EPS has been impacted by the same trends as Net income and can also be impacted by share purchases under our normal course issuer bid (NCIB) programs. While a 12-month program is currently in place, there have been no purchases under the program, which commenced in January 2019.

The general trend of year-over-year decreases in Cash provided by operating activities reflects higher year-over-year income taxes paid, including a one-time catch-up payment in income taxes paid of $270 million in the first quarter of 2019, and higher interest payments arising from increases in debt outstanding and year-over-year variances in fixed-term interest rates. Cash provided by operating activities was impacted by IFRS 16, which prospectively results in the principal component of lease payments being reflected as a financing activity. The general trend of year-over-year increases in free cash flow reflects the above factors affecting Cash provided by operating activities excepting that the implementation of IFRS 16 (and the implementation of IFRS 15 on January 1, 2018) does not affect the free cash flow amount determined. For further discussion on these trends, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment*.

5.3 Consolidated operations

The following is a discussion of our consolidated financial performance. Segment information in *Note 5* of the interim 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.*

Operating revenues

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Service	**3,086**	2,953	4.5%	**6,106**	5,839	4.6%
Equipment	**501**	487	2.9%	**970**	952	1.9%
Revenues arising from contracts with customers	**3,587**	3,440	4.3%	**7,076**	6,791	4.2%
Other operating income	**10**	13	(23.1)%	**27**	39	(30.8)%
Operating revenues	**3,597**	3,453	4.2%	**7,103**	6,830	4.0%

Consolidated operating revenues increased by $144 million in the second quarter of 2019 and $273 million in the first six months of 2019.

- **Service revenues** increased by $133 million in the second quarter of 2019 and $267 million in the first six months of 2019, reflecting growth in wireless network revenue and wireline data services, partly offset by the continuing declines in wireline legacy voice and legacy data service revenues. Wireless network revenue increases reflect a growing wireless subscriber base. The increase in wireline data service revenue reflects increased CCBS revenue growth, as well as increases in Internet and enhanced data services, TELUS Health revenues, TELUS TV revenue and revenues from our home and business smart technology (including security) lines of business, partly offset by decreased legacy data service revenues. Internet and TV revenues increased due to subscriber growth, as well as higher Internet revenue per customer.
- **Equipment revenues** increased by $14 million in the second quarter of 2019 and $18 million in the first six months of 2019, primarily due to increased wireless revenue mainly from greater volumes of higher-value smartphones in the sales mix.
- **Other operating income** decreased by $3 million in the second quarter of 2019 and $12 million in the first six months of 2019, largely due to higher net gains in 2018 from the sale of certain assets.

Operating expenses

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Goods and services purchased	**1,466**	1,491	(1.7)%	**2,887**	2,899	(0.4)%
Employee benefits expense	**758**	711	6.6%	**1,464**	1,411	3.8%
Depreciation	**470**	411	14.4%	**940**	822	14.4%
Amortization of intangible assets	**163**	148	10.1%	**310**	287	8.0%
Operating expenses	**2,857**	2,761	3.5%	**5,601**	5,419	3.4%

Consolidated operating expenses increased by $96 million in the second quarter of 2019 and $182 million in the first six months of 2019.

- **Goods and services purchased** decreased by $25 million in the second quarter of 2019 and $12 million in the first six months of 2019, driven by the application of IFRS 16 in both periods. In the first six months of 2019, the decrease in Goods and services purchased was partially offset by higher wireline product costs associated with TELUS Health services, higher TV content costs, higher administrative and other costs supporting CCBS revenue growth and related to business acquisitions, increased external labour costs to support a growing subscriber base, and higher equipment sales expenses mainly from higher-value smartphones in the sales mix. Under the new accounting standard, depreciation of right-of-use lease assets and financing costs arising from lease liabilities are not part of Goods and services purchased and we did not retrospectively adjust amounts reported for periods prior to fiscal 2019. As a result, the impact of IFRS 16 on Goods and services purchased is a decrease of $66 million in the second quarter of 2019 and $149 million in the first six months of 2019.
- **Employee benefits expense** increased by $47 million in the second quarter of 2019 and $53 million in the first six months of 2019, primarily due to higher compensation and benefit costs resulting from an increase in the number of employees supporting CCBS revenue growth, business acquisitions, and compensation increases in line with inflation. This was partly offset by lower compensation and benefit costs from a decrease in the number of domestic FTEs, excluding business acquisitions, lower share-based compensation, higher capitalized labour costs and lower labour-related restructuring and other costs.
- **Depreciation** increased by $59 million in the second quarter of 2019 and $118 million in the first six months of 2019, due primarily to the application of IFRS 16. Under the new accounting standard, depreciation of right-of-use lease assets is recognized, largely related to our real estate leases (including cell site leases and retail store leases), and we did not retrospectively adjust amounts reported for periods prior to fiscal 2019. As a result, the impact of IFRS 16 on Depreciation is an increase of $46 million in the second quarter of 2019 and $94 million in the first six months of 2019. Total Depreciation also increased due to higher expenditures associated with growth in capital assets over the last 12 months, including those arising from our investments in fibre and business acquisitions.
- **Amortization of intangible assets** increased by $15 million in the second quarter of 2019 and $23 million in the first six months of 2019, reflecting higher expenditures associated with the intangible asset base over the last 12 months, including those arising from business acquisitions.

Operating income

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Wireless EBITDA (See *Section 5.4*)	**919**	844	8.9%	**1,827**	1,680	8.8%
Wireline EBITDA (See *Section 5.5*)	**454**	407	11.5%	**925**	840	10.1%
EBITDA	**1,373**	1,251	9.8%	**2,752**	2,520	9.2%
Depreciation and amortization (discussed above)	**(633)**	(559)	13.2%	**(1,250)**	(1,109)	12.7%
Operating income	**740**	692	6.9%	**1,502**	1,411	6.4%

Operating income increased by $48 million in the second quarter of 2019 and $91 million in the first six months of 2019, while EBITDA increased by $122 million in the second quarter of 2019 and $232 million in the first six months of 2019. These increases reflect higher wireless network revenue growth driven by a growing subscriber base and higher wireless equipment margins, in addition to growth in wireline data service margins and EBITDA contribution from our CCBS and TELUS Health businesses, and the effects of implementing IFRS 16. These factors were partly offset by declines from wireline legacy voice and legacy data services.

Adjusted EBITDA

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Wireless Adjusted EBITDA (See *Section 5.4*)	**924**	851	8.6%	**1,841**	1,697	8.5%
Wireline Adjusted EBITDA (See *Section 5.5*)	**478**	435	9.9%	**976**	892	9.4%
Adjusted EBITDA	**1,402**	1,286	9.0%	**2,817**	2,589	8.8%

Adjusted EBITDA increased by $116 million or 9.0% in the second quarter of 2019 and $228 million or 8.8% in the first six months of 2019. The increases reflect both higher wireless network revenue and higher wireless equipment margins driven by a growing subscriber base, growth in wireline data service margins, EBITDA contribution from our CCBS and TELUS Health businesses, and the effects of implementing IFRS 16. These factors were partly offset by declines in wireline legacy voice and legacy data services and a decline in the EBITDA contribution from our legacy business services.

For purposes of our CEO's (our chief operating decision-maker) assessment of performance during the 2019 fiscal year relative to the fiscal 2018 year, we have simulated IFRS 16 adjustments to the fiscal 2018 results in calculating pro forma results. This IFRS 16 simulation to fiscal 2018 results, which are cash-based proxy adjustments and used by our CEO to assess performance, resulted in pro forma consolidated Adjusted EBITDA growth of approximately 4.5% in both the second quarter of 2019 and the first six months of 2019.

Financing costs

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Gross interest on long-term debt, excluding lease liabilities	**161**	151	6.6%	**311**	295	5.4%
Capitalized long-term debt interest	**(4)**	—	n/m	**(4)**	—	n/m
Interest on lease liabilities	**16**	—	n/m	**32**	—	n/m
Interest on short-term borrowings and other	**3**	(1)	n/m	**8**	1	n/m
Interest accretion on provisions	**5**	6	(16.7)%	**11**	10	10.0%
Interest expense	**181**	156	16.0%	**358**	306	17.0%
Employee defined benefit plans net interest	**—**	3	(100.0)%	**—**	7	(100.0)%
Foreign exchange losses (gains)	**11**	(6)	n/m	**4**	(2)	n/m
Interest income	**(3)**	(3)	—%	**(5)**	(5)	—%
Financing costs	**189**	150	26.0%	**357**	306	16.7%

Financing costs increased by $39 million in the second quarter of 2019 and $51 million in the first six months of 2019, mainly due to the following factors:

- **Interest expense** increased by $25 million in the second quarter of 2019 and $52 million in the first six months of 2019, resulting from:
  - Gross interest on long-term debt, excluding lease liabilities increased by $10 million in the second quarter of 2019 and $16 million in the first six months of 2019, due to an increase in average long-term debt balances outstanding, partly 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 and lease liabilities) was 4.12% at June 30, 2019, as compared to 4.24% one year earlier. (See *Long-term debt issues and repayments* in *Section 7.4*.)

- Capitalized long-term debt interest is in respect of debt incurred for the purchase of spectrum licences during the 600 MHz wireless spectrum auction held by Innovation, Science and Economic Development Canada (ISED), which we expect to deploy in our existing network in future periods. Capitalization of long-term debt interest will continue until substantially all of the activities necessary to prepare the spectrum for its intended use are complete.
- Interest on lease liabilities of $16 million in the second quarter of 2019 and $32 million in the first six months of 2019 represents the financing costs increase arising from lease liabilities upon the application of IFRS 16 as we did not retrospectively adjust amounts reported for periods prior to fiscal 2019. This interest on lease liabilities was largely related to our real estate leases (including cell site leases and retail store leases), whereas prior to the application of IFRS 16, these costs would have been accounted for in Goods and services purchased.
- Interest on short-term borrowings and other increased by $4 million in the second quarter of 2019 and $7 million in the first six months of 2019, due to the draw-down of amounts advanced to us from an arm's-length securitization trust during the first quarter of 2019, where the cash amounts outstanding under the securitization trust were reduced in the first six months of 2019. (See *Long-term debt issues and repayments* in *Section 7.4*.)
- Interest accretion on provisions was relatively flat in both the second quarter of 2019 and the first six months of 2019.

- **Employee defined benefit plans net interest** decreased by $3 million in the second quarter of 2019 and $7 million in the first six months of 2019, primarily due to the change in the defined benefit plan surplus as at December 31, 2018, to $57 million (net of plan asset ceiling limit of $263 million), compared to a defined benefit plan deficit of $334 million (net of plan asset ceiling limit of $110 million) one year earlier, partly offset by an increase in the discount rate.
- **Foreign exchange losses (gains)** have fluctuated as a result of movement of the Canadian dollar relative to the U.S. dollar.
- **Interest income** was flat in the second quarter of 2019 and the first six months of 2019.

Income taxes

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions, except tax rates)	**2019**	2018	Change	**2019**	2018	Change
Income tax computed at applicable statutory rates	**147**	147	—%	**308**	299	3.0%
Revaluation of deferred income tax liability to reflect future income tax rates	**(121)**	—	n/m	**(121)**	—	n/m
Adjustments recognized in the current period for income taxes of prior periods	**(2)**	—	n/m	**(2)**	—	n/m
Other	**7**	(2)	n/m	**3**	(3)	n/m
Income taxes	**31**	145	(78.6)%	**188**	296	(36.5)%
Income taxes computed at applicable statutory rates (%)	**26.7**	27.2	(0.5)pts.	**26.9**	27.1	(0.2)pts.
Revaluation of deferred income tax liability to reflect future income tax rates (%)	**(22.0)**	—	n/m	**(10.6)**	—	n/m
Adjustments recognized in the current period for income taxes of prior periods (%)	**(0.3)**	—	(0.3)pts.	**(0.2)**	—	(0.2)pts.
Other (%)	**1.2**	(0.5)	n/m	**0.3**	(0.4)	n/m
Effective tax rate (%)	**5.6**	26.7	(21.1)pts.	**16.4**	26.7	(10.3)pts.

Total income tax expense decreased by $114 million in the second quarter of 2019 and $108 million in the first six months of 2019. The effective tax rate decreased from 26.7% to 5.6% in the second quarter of 2019 and from 26.7% to 16.4% in the first six months of 2019. These reductions were predominantly attributed to the 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

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Net income	**520**	397	31.0%	**957**	809	18.3%
Other comprehensive income (net of income taxes):						
Items that may be subsequently reclassified to income	**21**	(39)	n/m	**(22)**	(50)	(56.0)%
Items never subsequently reclassified to income	**8**	105	(92.4)%	**32**	62	(48.4)%
Comprehensive income	**549**	463	18.6%	**967**	821	17.8%

Comprehensive income increased by $86 million in the second quarter of 2019 and $146 million in the first six months of 2019, primarily from increases in Net income. 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

Wireless trends and seasonality

The historical trend over the last eight quarters in wireless network revenue reflects growth in our subscriber base, as well as higher-value smartphones in the sales mix of gross additions and retention units. There has been a general year-over-year increase in equipment revenues from higher-value smartphones in the sales mix and a higher volume of new contracts, however this trend may change with the introduction of our device financing program. The general trend of year-over-year increases in 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 network, combined with our low churn rate, which reflects our focus on customers first initiatives. Our expenditures on network improvements increase capacity and coverage, allowing us to grow revenue through net additions of wireless subscribers. Although there have historically been significant third and fourth quarter seasonal effects that result in increased loading, competitive intensity in both the consumer and business markets, launches of new devices, rate plans, device financing programs, contract terms, and the strategic decision to focus on margin-accretive loading as contrasted to lower-margin subsidized tablet loading and non-accretive prepaid-to-postpaid migrations, may impact subscriber addition results and trends for future periods.

Mobile phone ABPU growth has been moderating, primarily due to: (i) competitive pressures driving larger allotments of data and rate plans, which includes plans with bonus data and unlimited data plans, data sharing and 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-priced rate plans, such as data share plans, in addition to more higher-value smartphones in the sales mix, and an increased proportion of higher-rate customers in the subscriber mix. As a result of increased competitive pressures, 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. However, the introduction of our Peace of Mind rate plans may increase the monthly recurring revenue of base plans. The economic environment, consumer behaviour, the regulatory environment, device selection and other factors also impact mobile phone ABPU, and as a consequence, there can be no assurance that mobile phone ABPU will return to growth in the coming quarters.

Our connected device subscriber base has been increasing with our expanded Internet of Things (IoT) offerings. IoT technologies are expected to continue their growth and IoT customers, along with other connected device subscribers, will be able to realize greater benefits that are dependent upon 5G deployment.

The trend of our comparatively low mobile phone blended churn rate reflects our customers first efforts, retention programs and focus on building, maintaining and enhancing our high-quality network. With our improvements in customer loyalty resulting in a generally decreasing mobile phone churn rate, our lifetime revenue per customer has increased despite moderating mobile phone ABPU. We may experience pressure on our mobile phone blended churn rate if the level of competitive intensity increases (in part due to increased promotional activity), if there is an increase in customers on expired or no contracts (compared to current experience), or due to regulatory changes. Accordingly, our wireless segment historical operating results and trends may not be reflective of results and trends for future periods.

The trends in wireless EBITDA-based operating metrics have been impacted by our adoption of IFRS 16 effective January 1, 2019, as discussed further in *Note 2* of the interim consolidated financial statements.

Wireless operating indicators

As at June 30	2019	2018	Change
Subscribers[1,2] (000s):			
Mobile phones[1]	**8,552**	8,284	3.2%
Mobile connected devices	**1,338**	1,102	21.4%
Total	**9,890**	9,386	5.4%
HSPA+ population coverage[3] (millions)	**37.0**	37.0	—%
LTE population coverage[3] (millions)	**36.9**	36.8	0.3%

	Second quarters ended June 30			Six-month periods ended June 30		
	2019	2018	Change	**2019**	2018	Change
Mobile phones gross additions[2] (000s):	**336**	310	8.4%	**605**	573	5.6%
Subscriber net additions[2] (000s):						
Mobile phones	**82**	69	18.8%	**93**	66	40.9%
Mobile connected devices	**72**	37	94.6%	**121**	78	55.1%
Total	**154**	106	45.3%	**214**	144	48.6%
Mobile phones ABPU, per month[2,4] ($)	**73.43**	73.05	0.5%	**72.81**	72.60	0.3%
Mobile phones ARPU, per month[2,4] ($)	**60.30**	61.04	(1.2)%	**59.81**	60.65	(1.4)%
Mobile phones churn, per month[2,4] (%)	**1.01**	0.99	0.02 pts.	**1.01**	1.04	(0.03)pts.

1 Fourth quarter of 2018 opening mobile phone subscriber connections have been adjusted to exclude an estimated 23,000 subscribers impacted by the CRTC's final pro-rating ruling in June 2018, which was effective October 1, 2018.

2 Effective for the first quarter of 2019, with retrospective application, we revised our definition of a wireless subscriber and now report mobile phones and mobile connected devices (e.g. tablets, Internet keys, IoT, wearables, connected automobile systems) as separate subscriber bases so as to be consistent with the way we manage our business and to align with global peers. As a result of the change, total subscribers and associated operating statistics (gross additions, net additions, churn, ABPU and ARPU) were adjusted to reflect (i) the movement of certain subscribers from the mobile phones subscriber base to the newly created mobile connected devices subscriber base, and (ii) the inclusion of previously undisclosed IoT and mobile health subscribers in our mobile connected devices subscriber base. For additional information on our subscriber definitions, see *Section 11.2 Operating indicators*.

3 Including network access agreements with other Canadian carriers.

4 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 – Wireless segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Network revenue	**1,523**	1,497	1.7%	**3,015**	2,969	1.5%
Equipment and other service revenues	**455**	424	7.3%	**882**	835	5.6%
Revenues arising from contracts with customers	**1,978**	1,921	3.0%	**3,897**	3,804	2.4%
Other operating income	**5**	8	(37.5)%	**10**	15	(33.3)%
External operating revenues	**1,983**	1,929	2.8%	**3,907**	3,819	2.3%
Intersegment revenues	**14**	12	16.7%	**27**	23	17.4%
Wireless operating revenues	**1,997**	1,941	2.9%	**3,934**	3,842	2.4%

Total wireless operating revenues increased by $56 million in the second quarter of 2019 and $92 million in the first six months of 2019.

Network revenue from external customers increased by $26 million in the second quarter of 2019 or 1.7% and $46 million in the first six months of 2019 or 1.5%, reflecting 5.4% growth in the subscriber base over the last 12 months, partly offset by declining mobile phone ARPU as discussed below. **Mobile phone ABPU** was $73.43 in the second quarter of 2019 and $72.81 in the first six months of 2019, reflecting increases of $0.38 or 0.5% in the second quarter and $0.21 or 0.3% for the six-month period. The increases reflect growth from customers selecting plans with larger data buckets or periodically topping up their data buckets, the introduction of our Platinum rate plan and higher-value smartphones in the sales mix which were partly offset by declines in chargeable data usage, the impact of the competitive environment putting pressure on base rate plan prices in the current and prior periods and changes in our customer mix. **Mobile phone ARPU** was $60.30 in the second quarter of 2019 and $59.81 in the first six months of 2019, reflecting decreases of $0.74 or 1.2% for the quarter and $0.84 or 1.4% for the six-month period, as the declines in chargeable data usage, competitive pressures on base rate plan prices and changes in our customer mix mentioned above more than offset the increased number of customers selecting plans with larger data buckets.

- **Mobile phone gross additions** were 336,000 in the second quarter of 2019 and 605,000 for the first six months of 2019, reflecting increases of 26,000 for the quarter and 32,000 for the six-month period, driven by growth in high-value customer additions (including demographic shifts), growth in the Canadian population, successful promotions and expanded channels.
- Our **mobile phone churn rate** was 1.01% in both the second quarter of 2019 and the first six months of 2019, as compared to 0.99% in the second quarter of 2018 and 1.04% in the first six months of 2018. The slight increase in our mobile phone churn rate during the second quarter of 2019 reflects increased competitive intensity and being more disciplined on matching competitive offers. This was partially mitigated by our focus on executing customers first initiatives and retention programs, as well as our leading network quality, all of which drove the improvement in our mobile phone churn rate in the first six months of 2019.
- **Net subscriber additions** were 154,000 in the second quarter of 2019 and 214,000 in the first six months of 2019, compared to 106,000 and 144,000, respectively, in the comparable periods of 2018. Mobile phone net additions increased by 13,000 in the second quarter of 2019, driven by higher mobile phone gross additions and partly offset by higher mobile phone churn, as described above. Mobile phone net additions increased by 27,000 in the first six months of 2019, driven by higher mobile phone gross additions and a lower mobile phone churn rate, as described above. We continue to focus on margin accretion growth with the focus away from non-accretive prepaid-to-postpaid migrations. Mobile connected device net additions improved by 35,000 in the second quarter of 2019 and 43,000 in the first six months of 2019, driven by growth in our IoT offerings, including the connected device growth arising from our subscribers expanding their IoT services to their growing customer bases, partly offset by less focus on lower-margin subsidized tablet loading.

Equipment and other service revenues increased by $31 million in the second quarter of 2019 and $47 million in the first six months of 2019, due to greater volumes of higher-value smartphones in the sales mix.

Other operating income decreased by $3 million in the second quarter and $5 million in the first six months of 2019, largely resulting from lower net gains from the sale of property, plant and equipment.

Intersegment revenues represent network services eliminated upon consolidation along with the associated wireline expenses.

Operating expenses – Wireless segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Goods and services purchased:						
Equipment sales expenses	**443**	423	4.7%	**865**	841	2.9%
Network operating expenses	**198**	207	(4.3)%	**382**	407	(6.1)%
Marketing expenses	**101**	99	2.0%	**190**	182	4.4%
Other[1]	**165**	199	(17.1)%	**346**	392	(11.7)%
Employee benefits expense[1]	**171**	169	1.2%	**324**	340	(4.7)%
Wireless operating expenses	**1,078**	1,097	(1.7)%	**2,107**	2,162	(2.5)%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures.*

Wireless operating expenses decreased by $19 million in the second quarter of 2019 and $55 million in the first six months of 2019.

Equipment sales expenses increased by $20 million in the second quarter of 2019 and $24 million in the first six months of 2019, reflecting higher-value smartphones in the sales mix.

Network operating expenses decreased by $9 million in the second quarter of 2019 and $25 million in the first six months of 2019, mainly due to the application of IFRS 16.

Marketing expenses increased by $2 million in the second quarter of 2019 and $8 million in the first six months of 2019, primarily due to higher commissions expense.

Other goods and services purchased decreased by $34 million in the second quarter of 2019, mainly due to success of cost reduction programs and the application of IFRS 16, partly offset by higher external labour. Other goods and services purchased decreased by $46 million in the first six months of 2019, mainly due to the application of IFRS 16, cost reduction programs, and the non-recurrence of higher costs associated with an aggressive holiday rate plan offer that stimulated significant traffic in the prior year, partly offset by higher external labour.

Employee benefits expense increased by $2 million in the second quarter of 2019 and decreased by $16 million in the first six months of 2019. The slight increase in the second quarter of 2019 was mainly due to higher internal labour costs from compensation increases in line with inflation and higher labour-related restructuring and other costs due to

efficiency initiatives, partly offset by higher capitalized labour costs. Employee benefits expense decreased in the first six months of 2019, mainly due to lower internal labour costs including lower FTEs, higher capitalized labour costs, and lower labour-related restructuring and other costs.

EBITDA – Wireless segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions, except margins)	**2019**	2018	Change	**2019**	2018	Change
EBITDA	**919**	844	8.9%	**1,827**	1,680	8.8%
Add restructuring and other costs included in EBITDA	**5**	7	n/m	**14**	17	n/m
Adjusted EBITDA[1]	**924**	851	8.6%	**1,841**	1,697	8.5%
EBITDA margin (%)	**46.0**	43.5	2.5 pts.	**46.4**	43.7	2.7 pts.
Adjusted EBITDA margin[2] (%)	**46.3**	43.8	2.5 pts.	**46.8**	44.2	2.6 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.

Wireless EBITDA increased by $75 million or 8.9% in the second quarter of 2019 and $147 million or 8.8% in the first six months of 2019. Wireless Adjusted EBITDA increased by $73 million or 8.6% in the second quarter of 2019, reflecting higher network revenue growth driven by a larger subscriber base, savings from cost reduction programs, higher equipment margins which includes our strategic focus away from non-accretive prepaid-to-postpaid migrations, and the implementation of IFRS 16. Wireless Adjusted EBITDA increased by $144 million or 8.5% in the first six months of 2019, reflecting higher network revenue growth driven by a larger subscriber base, lower employee benefits expense, savings from cost reduction programs, higher equipment margins and the implementation of IFRS 16.

Applying a retrospective IFRS 16 simulation to fiscal 2018 results (see *Section 5.3*), pro forma wireless Adjusted EBITDA growth was approximately 5.1% in the second quarter of 2019 and was approximately 5.0% in the first six months of 2019.

5.5 Wireline segment

Wireline trends

The trend over the last eight quarters of increases in wireline service revenue reflects growth in Internet and enhanced data services, CCBS revenues, TELUS TV revenues, TELUS Health revenues, and home and business smart technology (including security) revenues, and is partly offset by declining wireline legacy voice and legacy data revenues. As well, increased wireline data service revenue also includes revenues from business acquisitions. The increases in 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 and expansion of our fibre footprint. We expect continued Internet subscriber base growth as the economy grows and as we continue our investments in expanding our fibre-optic infrastructure. The total number of TELUS TV subscribers has increased as a result of higher net additions from diverse product offerings, fibre expansion and bundled product offerings, combined with our low customer churn rate. Residential voice subscriber losses continue to reflect the ongoing trend of substitution to wireless and Internet-based services, but have been partly mitigated by the success of our bundled service offerings and lower-priced offerings. The trend of declining 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. The migration of business products and services offerings to IP services and the introduction of new competitors yield inherently lower margins compared to some legacy business products and service offerings.

The trends in wireline EBITDA-based operating metrics have been impacted by our adoption of IFRS 16 effective January 1, 2019, as discussed further in *Note 2* of the interim consolidated financial statements.

Wireline operating indicators

At June 30 (000s)	**2019**	2018	Change
Subscriber connections:			
Internet[1]	**1,921**	1,794	7.1%
TELUS TV	**1,126**	1,051	7.1%
Residential voice	**1,228**	1,272	(3.5)%
Total wireline subscriber connections[1]	**4,275**	4,117	3.8%

	Second quarters ended June 30			Six-month periods ended June 30		
(000s)	**2019**	2018	Change	**2019**	2018	Change
Subscriber connection net additions (losses):						
Internet	**25**	29	(13.8)%	**47**	51	(7.8)%
TELUS TV	**16**	15	6.7%	**33**	21	57.1%
Residential voice	**(9)**	(10)	10.0%	**(20)**	(26)	23.1%
Total wireline subscriber connection net additions	**32**	34	(5.9)%	**60**	46	30.4%

1 During the first quarter of 2019, we adjusted cumulative subscriber connections to add approximately 16,000 subscribers from acquisitions undertaken during the quarter.

Operating revenues – Wireline segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Data services	**1,265**	1,131	11.8%	**2,484**	2,220	11.9%
Voice services	**249**	277	(10.1)%	**502**	558	(10.0)%
Other services and equipment	**95**	111	(14.4)%	**193**	209	(7.7)%
Revenues arising from contracts with customers	**1,609**	1,519	5.9%	**3,179**	2,987	6.4%
Other operating income	**5**	5	—%	**17**	24	(29.2)%
External operating revenues	**1,614**	1,524	5.9%	**3,196**	3,011	6.1%
Intersegment revenues	**60**	50	20.0%	**116**	102	13.7%
Wireline operating revenues	**1,674**	1,574	6.4%	**3,312**	3,113	6.4%

Total wireline operating revenues increased by $100 million in the second quarter of 2019 and $199 million in the first six months of 2019.

- **Data services** revenues increased by $134 million in the second quarter of 2019 and $264 million in the first six months of 2019. The increases were driven by: (i) growth in CCBS revenues, primarily due to growth in business volumes resulting from expanded services for existing customers as well as customer growth; (ii) increased Internet and enhanced data service revenues, reflecting higher revenue per customer as a result of upgrades to faster Internet speeds, larger data usage Internet rate plans and certain rate changes, as well as a 7.1% increase in our Internet subscribers over the last 12 months; (iii) increased TELUS Health revenues, driven by both business acquisitions and expanded services for existing customers; (iv) revenues from our home and business smart technology (including security) lines of business; and (v) increased TELUS TV revenues, reflecting subscriber growth of 7.1% over the last 12 months. This growth was partly offset by the ongoing decline in legacy data service revenues.
- **Voice services** revenues decreased by $28 million in the second quarter of 2019 and $56 million in the first six months of 2019, reflecting the ongoing decline in legacy voice revenues from technological substitution, greater use of inclusive long distance plans and price plan changes. We experienced a 3.5% decline in residential voice subscribers over the last 12 months, as compared to a 4.5% decline in residential voice subscribers for the 12-month period ended June 30, 2018.
- **Other services and equipment** revenues decreased by $16 million in both the second quarter of 2019 and in the first six months of 2019, mainly due to lower data and voice equipment sales.
- **Wireline subscriber connection net additions** were 32,000 in the second quarter of 2019 and 60,000 in the first six months of 2019, reflecting a decrease of 2,000 and an increase of 14,000, respectively, compared to the net additions in the same periods of 2018.
  - **Internet net additions** were 25,000 in the second quarter of 2019 and 47,000 in the first six months of 2019, reflecting decreases of 4,000 for both the quarter and the six-month period, compared to the net additions in the respective periods in 2018, due to continued net new demand from consumers and businesses offset by

increased competitive intensity. This was partly offset by continued healthy customer demand for our high-speed broadband services, including fibre to the premises. Our continued focus on connecting more homes and businesses directly to fibre (with TELUS PureFibre available to approximately 64% of our broadband footprint at the end of the second quarter of 2019), expanding and enhancing our addressable high-speed Internet and Optik TV footprint, and bundling these services together contributed to combined Internet and TV subscriber growth of 202,000 over the last 12 months.

- **TELUS TV net additions** were 16,000 in the second quarter of 2019 and 33,000 in the first six months of 2019, reflecting increases of 1,000 for the quarter and 12,000 for the six-month period compared to the net additions in the respective periods in 2018. The increases reflect a lower customer churn rate from stronger retention efforts and for the first six months of 2019, higher gross additions as a result of our diverse product offerings.
- **Residential voice net losses** were limited to only 9,000 in the second quarter of 2019 representing our fewest quarterly net losses since 2004 and 20,000 in the first six months of 2019, as compared to residential voice net losses of 10,000 and 26,000, respectively, in the same periods in 2018. The residential voice subscriber losses continue to reflect the trend of substitution to wireless and Internet-based services, partially mitigated by our expanding fibre footprint and bundled product offerings, and the success of our stronger retention efforts, including lower-priced offerings.

Other operating income was flat in the second quarter of 2019 and decreased by $7 million in the first six months of 2019 due to the non-recurrence of first quarter 2018 gains on the sale of certain assets.

Intersegment revenues represent services including CCBS provided to the wireless segment. Such revenue is eliminated upon consolidation together with the associated expenses in wireless.

Operating expenses – Wireline segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions)	**2019**	2018	Change	**2019**	2018	Change
Goods and services purchased[1]	**633**	625	1.3%	**1,247**	1,202	3.7%
Employee benefits expense[1]	**587**	542	8.3%	**1,140**	1,071	6.4%
Wireline operating expenses	**1,220**	1,167	4.5%	**2,387**	2,273	5.0%

1 Includes restructuring and other costs. See *Section 11.1 Non-GAAP and other financial measures.*

Total wireline operating expenses increased by $53 million in the second quarter of 2019 and $114 million in the first six months of 2019.

Goods and services purchased increased by $8 million in the second quarter of 2019 and $45 million in the first six months of 2019, mainly due to higher product costs associated with growth in TELUS Health services, higher TV content costs mainly driven by our growing TV content rates and TV subscriber base, and increases in non-labour-related restructuring and other costs related to efficiency initiatives, as well as higher external labour and other administrative costs supporting CCBS revenue growth and related to business acquisitions. The increase in Goods and services purchased was partly offset by the application of IFRS 16.

Employee benefits expense increased by $45 million in the second quarter of 2019 and $69 million in the first six months of 2019, primarily due to increases in compensation and benefit costs resulting from an increase in the number of employees supporting CCBS revenue growth, business acquisitions, and higher internal labour costs from compensation increases in line with inflation, partly offset by a decrease in the number of FTEs in Canada, excluding business acquisitions, lower share-based compensation and lower labour-related restructuring and other costs.

EBITDA – Wireline segment

	Second quarters ended June 30			Six-month periods ended June 30		
($ in millions, except margins)	**2019**	2018	Change	**2019**	2018	Change
EBITDA	**454**	407	11.5%	**925**	840	10.1%
Add restructuring and other costs included in EBITDA	**24**	28	n/m	**51**	52	n/m
Adjusted EBITDA[1]	**478**	435	9.9%	**976**	892	9.4%
EBITDA margin (%)	**27.1**	25.9	1.2 pts.	**27.9**	27.0	0.9 pts.
Adjusted EBITDA margin[2] (%)	**28.5**	27.7	0.8 pts.	**29.5**	28.7	0.8 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.

Wireline EBITDA increased by $47 million or 11.5% in the second quarter of 2019 and $85 million or 10.1% in the first six months of 2019. Wireline Adjusted EBITDA increased by $43 million or 9.9% in the second quarter of 2019 and

$84 million and 9.4% in the first six months of 2019. This reflected an increased contribution from our CCBS business from expanded services for existing customers, higher Internet margins and higher TELUS Health margins inclusive of business acquisitions, and the implementation of IFRS 16, partly offset by the continued declines in legacy voice and legacy data services, higher employee benefits expense and other costs related to business acquisitions, and a decline in the EBITDA contribution from our legacy business services.

Applying a retrospective IFRS 16 simulation to fiscal 2018 results (see *Section 5.3*), pro forma wireline Adjusted EBITDA growth was approximately 3.5% in the second quarter of 2019 and was approximately 3.4% in the first six months of 2019.

6. Changes in financial position

Financial position at: ($ millions)	June 30 2019	Dec. 31 2018	Change	Change includes:
Current assets				
Cash and temporary investments, net	**217**	414	(197)	See *Section 7 Liquidity and capital resources*
Accounts receivable	**1,835**	1,600	235	An increase due to the timing of wireless wholesale customer receipts
Income and other taxes receivable	**102**	3	99	Instalments to date are greater than the expense
Inventories	**334**	376	(42)	A decrease in the volume of handsets, partly offset by a higher cost mix of smartphones
Contract assets	**859**	860	(1)	Refer to description in non-current assets
Prepaid expenses	**653**	539	114	Increased due to the annual prepayment of statutory employee benefits, maintenance contracts, property taxes and wireless spectrum license fees, net of amortization
Current derivative assets	**10**	49	(39)	A decrease in the spread between the hedging rate and the actual rate at the balance sheet date.
Current liabilities				
Short-term borrowings	**100**	100	—	See *Section 7.7 Sale of trade receivables*
Accounts payable and accrued liabilities	**2,797**	2,570	227	Increase in payables associated with the timing of wireless wholesale payments and the timing of accounts payable, partly offset by a decrease in payroll and other employee-related liabilities. See *Note 23* of the interim consolidated financial statements
Income and other taxes payable	**48**	218	(170)	Decrease due to final instalment payments for the previous year partially offset by current income tax expense in excess of instalments for the current year
Dividends payable	**339**	326	13	Effects of increases in the dividend rate as well as the number of shares outstanding
Advance billings and customer deposits	**665**	656	9	An increase in wireline advance billings during the period. See *Note 24* of the interim consolidated financial statements
Provisions	**93**	129	(36)	Restructuring disbursements exceeded new restructuring provisions. See *Note 25* of the interim consolidated financial statements
Current maturities of long-term debt	**1,564**	836	728	An increase due to amounts reclassified from long-term debt relating to the early redemption of our $1,000 of our 5.05% Notes, Series CH on July 23, 2019, and August 7, 2019, and initial recognition of lease liabilities due to implementation of IFRS 16, partially offset by a decrease in outstanding commercial paper
Current derivative liabilities	**5**	9	(4)	Maturation of the interest rate swap associated with the refinancing of debt maturing.
Working capital (Current assets subtracting Current liabilities)	**(1,601)**	(1,003)	(598)	TELUS normally has a negative working capital position. See *Financing and capital structure management plans* in *Section 4.3* and the *Liquidity risk* discussion in *Section 7.9.*

Financial position at: ($ millions)	June 30 2019	Dec. 31 2018	Change	Change includes:
Non-current assets				
Property, plant and equipment, net	**13,549**	12,091	1,458	See *Capital expenditures* in *Section 7.3 Cash used by investing activities* and *Depreciation* in *Section 5.3 Consolidated operations*
Intangible assets, net	**11,965**	10,934	1,031	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	**4,888**	4,747	141	Acquisitions including a telecommunications business
Contract assets	**422**	458	(36)	A decrease primarily driven by the seasonality of device balance re-payments exceeding new customers as loading of new customer contracts is typically higher in the third and fourth quarters
Other long-term assets	**919**	986	(67)	A decrease in derivative assets due to the movement of foreign exchange rates relative to hedged rates. See *Note 20* of the interim consolidated financial statements.
Non-current liabilities				
Provisions	**690**	728	(38)	A decrease due to implementation of IFRS 16. See *Note 25* of the interim consolidated financial statements
Long-term debt	**15,015**	13,265	1,750	See *Section 7.4 Cash (used) provided by financing activities*
Other long-term liabilities	**738**	731	7	An increase in derivative liabilities due to the movement of foreign exchange rates relative to hedged rates, as well as the increase in the notional amount due to the issuance of the US$500 million of senior unsecured 4.30% Notes, partially offset by a decrease in pension and post-retirement liabilities resulting from actual returns being in excess of the discount rate, as well as a decrease in the tenant inducement allowance as a result of the implementation of IFRS 16. See *Note 27* of the interim consolidated financial statements
Deferred income taxes	**3,103**	3,148	(45)	An overall decrease due to the reduction in the Alberta corporate income tax rate partially offset by an increase in temporary differences between the accounting and tax basis of assets and liabilities.
Owners' equity				
Common equity	**10,504**	10,259	245	See *condensed interim consolidated statements of changes in owners' equity* in the interim consolidated financial statements
Non-controlling interests	**92**	82	10	See *condensed interim consolidated statements of changes in owners' equity* in the interim consolidated financial statements.

7. Liquidity and capital resources

This section contains forward-looking statements, including those with respect to our 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.

7.1 Overview

Our capital structure financial policies and financing and capital structure management plans are described in *Section 4.3*.

Cash flows

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions)	**2019**	2018	Change	**2019**	2018	Change
Cash provided by operating activities	**1,160**	1,206	(46)	**1,950**	2,044	(94)
Cash used by investing activities	**(1,600)**	(795)	(805)	**(2,562)**	(1,727)	(835)
Cash (used) provided by financing activities	**69**	(143)	212	**415**	(143)	558
Increase (decrease) in Cash and temporary investments, net	**(371)**	268	(639)	**(197)**	174	(371)
Cash and temporary investments, net, beginning of period	**588**	415	173	**414**	509	(95)
Cash and temporary investments, net, end of period	**217**	683	(466)	**217**	683	(466)

7.2 Cash provided by operating activities

Analysis of changes in cash provided by operating activities

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions)	**2019**	2018	Change	**2019**	2018	Change
EBITDA (see *Section 5.4* and *Section 5.5*)	**1,373**	1,251	122	**2,752**	2,520	232
Restructuring and other costs, net of disbursements	**1**	7	(6)	**(32)**	3	(35)
Employee defined benefit plans expense, net of employer contributions	**7**	10	(3)	**11**	14	(3)
Share-based compensation expense, net of payments	**20**	35	(15)	**39**	53	(14)
Interest paid, net of interest received	**(144)**	(127)	(17)	**(321)**	(275)	(46)
Income taxes paid, net of recoveries received	**(122)**	(52)	(70)	**(473)**	(108)	(365)
Other operating working capital changes	**25**	82	(57)	**(26)**	(163)	137
Cash provided by operating activities	**1,160**	1,206	(46)	**1,950**	2,044	(94)

- Restructuring and other costs, net of disbursements represented a net change of $6 million in the second quarter of 2019 and $35 million in the first six months of 2019. In the first six months of 2019, there were increased disbursements of restructuring and other costs related to improving our overall cost structure and operational effectiveness.
- Interest paid, net of interest received increased by $17 million in the second quarter of 2019 and $46 million in the first six months of 2019, largely due to interest paid on lease liabilities, and an increase in the average long-term debt balance which was partly offset by a lower weighted-average interest rate on long-term debt.
- Income taxes paid, net of recoveries received increased by $70 million in the second quarter of 2019 and $365 million in the first six months of 2019, primarily due to higher required instalment payments, and in the first six months of 2019, a one-time catch-up payment of $270 million.
- For a discussion of Other operating working capital changes, see *Section 6 Changes in financial position* and *Note 31(a)* of the interim consolidated financial statements.
- Cash provided by operating activities was impacted by the implementation of IFRS 16, as the repayments of lease liabilities, where the principal component of leases that were previously accounted for as operating leases and previously classified within Cash provided by operating activities is reflected as Cash used by financing activities under the new accounting standard. These repayments were $64 million in the second quarter of 2019 and $152 million in the first six months of 2019.

7.3 Cash used by investing activities

Analysis of changes in cash used by investing activities

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions)	**2019**	2018	Change	**2019**	2018	Change
Cash payments for capital assets, excluding spectrum licences	**(645)**	(735)	90	**(1,438)**	(1,473)	35
Cash payment for spectrum licences	**(931)**	—	(931)	**(931)**	—	(931)
Cash payments for acquisitions, net	**(26)**	(47)	21	**(188)**	(251)	63
Real estate joint ventures advances, net of receipts	**(8)**	(6)	(2)	**(15)**	(11)	(4)
Proceeds on dispositions and Other	**10**	(7)	17	**10**	8	2
Cash used by investing activities	**(1,600)**	(795)	(805)	**(2,562)**	(1,727)	(835)

- The decrease in Cash payments for capital assets, excluding spectrum licences for both the second quarter of 2019 and the first six months of 2019, was composed of:
  - A decrease in capital expenditures of $21 million in the second quarter of 2019 and $25 million in the first six months of 2019 (see *Capital expenditure measures* table and discussion below).
  - Lower capital expenditure payments with respect to payment timing differences, as the change in associated Accounts payable and accrued liabilities increased by $69 million in the second quarter of 2019 and $10 million in the first six months of 2019.

- Cash payment for spectrum licences in the second quarter of 2019 and the first six months of 2019 relate to the 600 MHz spectrum auction.
- In the second quarter of 2019, we made cash payments for business acquisitions, including a telecommunications business and other individually immaterial acquisitions complementary to our existing lines of business. This is compared to business acquisition activity in the first six months of 2018, which included certain assets of AlarmForce Industries Inc., Xavient Information Systems and other individually immaterial acquisitions complementary to our existing lines of business.

Capital expenditure measures

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions, except capital intensity)	**2019**	2018	Change	**2019**	2018	Change
Capital expenditures[1]						
Wireless segment	**223**	243	(8.2)%	**400**	425	(5.9)%
Wireline segment	**547**	548	(0.2)%	**1,016**	1,016	—%
Consolidated	**770**	791	(2.7)%	**1,416**	1,441	(1.7)%
Wireless segment capital intensity (%)	**11**	13	(2) pts.	**10**	11	(1) pt.
Wireline segment capital intensity (%)	**33**	35	(2) pts.	**31**	33	(2) pts.
Consolidated capital intensity[2] (%)	**21**	23	(2) pts.	**20**	21	(1) pt.

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 condensed interim consolidated statements of cash flows. Refer to *Note 31* of the interim consolidated financial statements for further information.

2 See *Section 11.1 Non-GAAP and other financial measures*.

Consolidated capital expenditures decreased by $21 million in the second quarter of 2019 and $25 million in the first six months of 2019 due to the timing of expenditures on radio access network capacity upgrades and roll-out of 5G network technology as most in-quarter expenditures were focused on pre-positioning activities. With our ongoing investments, we are advancing wireless speeds and coverage, including pre-positioning for 5G, 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 and TELUS TV subscriber growth, and our customers' demand for faster Internet speeds, and extend the reach and functionality of our business and healthcare solutions. At June 30, 2019, we made TELUS PureFibre available to approximately 64% of our broadband footprint.

7.4 Cash (used) provided by financing activities

Analysis of changes in cash (used) provided by financing activities

	Second quarters ended June 30			Six-month periods ended June 30		
($ millions)	**2019**	2018	Change	**2019**	2018	Change
Dividends paid to holders of Common Shares	**(307)**	(278)	(29)	**(610)**	(557)	(53)
Issue (repayment) of short-term borrowings, net	**(400)**	13	(413)	**—**	7	(7)
Long-term debt issued, net of redemptions and repayment	**805**	132	673	**1,054**	398	656
Issue of shares by subsidiary to non-controlling interests	**—**	—	—	**—**	24	(24)
Other	**(29)**	(10)	(19)	**(29)**	(15)	(14)
Cash (used) provided by financing activities	**69**	(143)	212	**415**	(143)	558

Dividends paid to holders of Common Shares

For the second quarter of 2019 and the first six months of 2019, cash dividends paid to the holders of Common Shares increased by $29 million and $53 million, respectively, which reflects higher dividend rates under our dividend growth program (see *Section 4.3*), as well as an increase in the number of shares outstanding. In connection with dividends declared during the three-month and six-month periods ended June 30, 2019, the dividend reinvestment and share purchase plan trustee purchased shares from Treasury for the dividend reinvestment and share purchase plan instead of acquiring Common Shares in the stock market for $22 million and $45 million, respectively, with no discount applicable. Effective with the dividend to be paid October 1, 2019, we will offer Common Shares from Treasury at a discount of 2%.

In July 2019, we paid dividends of $339 million to the holders of Common Shares.

Issue (repayment) of short-term borrowings, net

In the first quarter of 2019, we drew down amounts advanced to us from an arm's-length securitization trust to finance working capital. In the second quarter of 2019, we repaid these amounts.

Long-term debt issues and repayments

For the second quarter of 2019, long-term debt issues net of repayments were $805 million, resulting in a change of $673 million compared to long-term debt issues net of repayments of $132 million for the second quarter of 2018, primarily composed of:

- A net decrease in commercial paper outstanding, including foreign exchange effects, of $812 million to a balance of $293 million (US$224 million) at June 30, 2019, from a balance of $1,105 million (US$827 million) at March 31, 2019. Our commercial paper program, when utilized, provides low-cost funds and is fully backstopped by the five-year committed credit facility (see *Section 7.6 Credit facilities*).
- A decrease in net draws on the TELUS International (Cda) Inc. credit facility, including foreign exchange effects, of $9 million. As at June 30, 2019, net draws were US$307 million. As at March 31, 2019, net draws were US$308 million. The credit facility is non-recourse to TELUS Corporation.
- The April 3, 2019, issue of $1.0 billion senior unsecured 3.30% Notes, Series CY due May 2, 2029. The proceeds were used to repay outstanding indebtedness, including outstanding commercial paper, for the reduction of cash amounts outstanding under an arm's-length securitization trust, and for general corporate purposes.
- The May 28, 2019, issue of US$500 million of senior unsecured 4.30% 30-year Notes due June 15, 2049. The net proceeds from this offering were used to repay outstanding indebtedness, including outstanding commercial paper, the redemption of $650 million of the $1.0 billion aggregate principal amount on our 5.05% Notes, Series CH due July 23, 2020, and for general corporate purposes. We have fully hedged the principal and interest obligations of the notes by entering into a foreign exchange derivative (a cross currency interest rate exchange agreement) which effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 4.27% and an issued and outstanding amount of $672 million (reflecting a fixed exchange rate of $1.3435).
- Repayments of lease liabilities of $64 million, largely related to the implementation of IFRS 16, where the principal component of leases that were previously accounted for as operating leases and previously classified within Cash provided by operating activities is reflected as Cash used by financing activities under the new accounting standard.

For the first six months of 2019, long-term debt issues net of repayments were $1,054 million, resulting in a change of $656 million from the first six months of 2018. In addition to some activity from the second quarter of 2019, the change in balance for the first six months of 2019 was primarily composed of:

- A net decrease in commercial paper outstanding, including foreign exchange effects, of $481 million from a balance of $774 million (US$569 million) at December 31, 2018.
- A decrease in net draws on the TELUS International (Cda) Inc. credit facility, including foreign exchange effects, of $23 million. As at December 31, 2018, net draws were US$313 million.
- Repayments of lease liabilities of $152 million, largely related to the implementation of IFRS 16.

In comparison, for the second quarter of 2018, long-term debt issues net of repayments were $132 million and were primarily composed of:

- A net decrease in commercial paper outstanding, including foreign exchange effects, of $840 million to a balance of $3 million (US$2 million) at June 30, 2018, from a balance of $843 million (US$654 million) at March 31, 2018.
- A decrease in net draws on the TELUS International (Cda) Inc. credit facility, including foreign exchange effects, of $1 million. As at June 30, 2018, net draws were US$334 million. As at March 31, 2018, net draws were US$342 million.
- The June 2018 issue of US$750 million of senior unsecured 4.60% Notes due November 16, 2048.

Long-term debt issues net of repayments for the first six months of 2018 were $398 million. In addition to some activity from the second quarter of 2018, the change in balance for the first six months of 2018 was primarily composed of:

- A net reduction in commercial paper, including foreign exchange effects, of $1,137 million in the first six months of 2018 from a balance of $1,140 million (US$908 million) at December 31, 2017.
- An increase in net draws on the TELUS International (Cda) Inc. credit facility, including foreign exchange effects, of $93 million. As at December 31, 2017, net draws were US$276 million.
- The March 1, 2018 issues of $600 million of senior unsecured 3.625% Notes, Series CX due March 1, 2028, and $150 million through the re-opening of 4.70% Notes, Series CW due March 6, 2048.
- The March 2018 repayment of $250 million of 1.50% Notes, Series CS.

The average term to maturity of our long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) was approximately 12.5 years as at June 30, 2019, increasing from approximately 12.2 years as at December 31, 2018, and approximately 11.9 years as at June 30, 2018. Additionally, our weighted average cost of long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) was 4.12% as at June 30, 2019, as compared to 4.18% as at December 31, 2018, and 4.24% as at June 30, 2018. On May 31, 2019, we exercised our right to early redeem, on July 23, 2019, $650 million of our 5.05% Notes, Series CH. On July 3, 2019, we exercised our right to early redeem, on August 7, 2019, the remaining $350 million not called for redemption on May 31, 2019. The long-term debt prepayment premium for the entire $1 billion Series CH notes redemption will be recorded in the three-month period ending September 30, 2019, and is estimated to be approximately $30 million before income taxes.

Issue of shares by subsidiary to non-controlling interests
In connection with our February 2018 acquisition of Xavient, our TELUS International (Cda) Inc. subsidiary issued shares to non-controlling interests. There was no comparable activity in the second quarter of 2019 or first six months of 2019.

7.5 Liquidity and capital resource measures

Net debt was $16.6 billion at June 30, 2019, an increase of $2.9 billion when compared to one year earlier, resulting mainly from the $1.6 billion recognition of lease liabilities upon the application of IFRS 16, the issuances of the US$500 million of senior unsecured 4.30% Notes and $1.0 billion of Series CY notes as described in *Section 7.4*, and lower Cash and temporary investments. Additionally, there was an increase in commercial paper outstanding.

Fixed-rate debt as a proportion of total indebtedness excludes lease liabilities and was 96% as at June 30, 2019, consistent with 96% one year earlier, which includes a decrease in the amounts drawn on the TELUS International (Cda) Inc. credit facility, which is non-recourse to TELUS Corporation, offset by a net increase in commercial paper outstanding, which emulates floating-rate debt.

Net debt to EBITDA – excluding restructuring and other costs ratio was 2.94 times, as measured at June 30, 2019, up from 2.66 times one year earlier, largely attributed to the $1.6 billion recognition of lease liabilities upon the application of IFRS 16 as we did not retrospectively adjust amounts reported for periods prior to fiscal 2019 (see *Note 2(a)* of the interim consolidated financial statements). Our long-term objective for this measure is within a range of 2.00 to 2.50 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 June 30, 2019, this ratio remains outside of the long-term objective range due to prior issuances of incremental debt, primarily due to the funding of spectrum licences, and the elevated strategic capital investments in our fibre-optic infrastructure, partially offset by growth in EBITDA – excluding restructuring and other costs (including that the transition method for IFRS 16 has currently only included six months' effect on the trailing EBITDA); the implementation of IFRS 16 had the combined effect of increasing the ratio by 0.18 as at June 30, 2019. These acquired 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 recent 2019 and upcoming spectrum auctions, 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 2.50 times in the medium term (following upcoming 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 net debt to operating cash flow ratio to exceed 4.00:1.00 (see *Section 7.6 Credit facilities*).

Liquidity and capital resource measures

As at, or 12-month periods ended, June 30	2019	2018	Change
Components of debt and coverage ratios[1] ($ millions)			
Net debt	**16,602**	13,667	2,935
EBITDA – excluding restructuring and other costs	**5,649**	5,133	516
Net interest cost	**706**	589	117
Debt ratios			
Fixed-rate debt as a proportion of total indebtedness (excluding lease liabilities) (%)	**96**	96	— pts.
Average term to maturity of long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) (years)	**12.5**	11.9	0.6
Weighted average interest rate on long-term debt (excluding commercial paper, the revolving component of the TELUS International (Cda) Inc. credit facility and lease liabilities) (%)	**4.12**	4.24	(0.12) pts.
Net debt to EBITDA – excluding restructuring and other costs[1] (times)	**2.94**	2.66	0.28
Coverage ratios[1] (times)			
Earnings coverage	**4.2**	4.7	(0.5)
EBITDA – excluding restructuring and other costs interest coverage	**8.0**	8.8	(0.8)
Other measures[1] (%)			
Dividend payout ratio	**75**	77	(2) pts.
Dividend payout ratio of adjusted net earnings	**84**	77	7 pts.

1 See *Section 11.1 Non-GAAP and other financial measures.*

Earnings coverage ratio for the 12-month period ended June 30, 2019 was 4.2 times, down from 4.7 times one year earlier. An increase in income before borrowing costs and income taxes increased the ratio by 0.3, while an increase in borrowing costs, including the recognition of interest (currently only for the six-month period ended June 30, 2019) on lease liabilities upon the application of IFRS 16, reduced the ratio by 0.8.

EBITDA – excluding restructuring and other costs interest coverage ratio for the 12-month period ended June 30, 2019 was 8.0 times, down from 8.8 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.7, while an increase in net interest costs, including the recognition of interest (currently only for the six-month period ended June 30, 2019) on lease liabilities upon the application of IFRS 16, reduced the ratio by 1.5.

Dividend payout ratios: Actual dividend payout decisions will continue to be subject to our Board's assessment and the determination of our financial position and outlook, as well as our dividend payout objective range of 65 to 75% of prospective net earnings per share for 2019. The disclosed basic and adjusted dividend payout ratios are historical measures utilizing the last four quarters of dividends declared and earnings per share. So as to be consistent with the way we manage our business, we have revised our target guideline, effective January 1, 2020, to be calculated as 60 to 75% of free cash flow on a prospective basis. The historical measures for the 12-month period ended June 30, 2019, are presented for illustrative purposes in evaluating our target guideline, with the adjusted dividend payout ratio exceeding the objective range.

7.6 Credit facilities

At June 30, 2019, we had available liquidity of approximately $2.0 billion from the TELUS revolving credit facility and approximately $200 million of available liquidity from the TELUS International (Cda) Inc. credit facility. 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 June 30, 2019

($ millions)	Expiry	Size	Drawn	Outstanding undrawn letters of credit	Backstop for commercial paper program	Available liquidity
Five-year revolving facility [1]	May 31, 2023	2,250	—	—	(293)	1,957

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 4.00 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 June 30, 2019, our consolidated leverage ratio was approximately 2.94 to 1.00, and our consolidated coverage ratio was approximately 8.00 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 June 30, 2019. 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 Canada and the U.S. is dependent on our credit ratings (see *Section 7.8 Credit ratings*).

TELUS International (Cda) Inc. credit facility

As at June 30, 2019, TELUS International (Cda) Inc. had a bank credit facility, secured by its assets, expiring on December 20, 2022, with a syndicate of financial institutions. The credit facility is composed of a US$350 million revolving component and an amortizing US$120 million term loan component. The credit facility is non-recourse to TELUS Corporation. The outstanding revolving component had a weighted average interest rate of 3.83% as at June 30, 2019.

Other letter of credit facilities

At June 30, 2019, we had $182 million of letters of credit outstanding (December 31, 2018 – $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. Available liquidity under various uncommitted letters of credit facilities was $133 million at June 30, 2019. We had arranged $880 million of incremental letters of credit to allow us to participate in Innovation, Science and Economic Development Canada's 600 MHz wireless spectrum auction that was held in March to April 2019, as discussed further in *Note 18(a)* of the interim consolidated financial statements. Concurrent with funding the purchase of the spectrum licences these incremental letters of credit were extinguished.

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 June 30, 2019. (See *Note 22* of the interim 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 at least a BB credit rating 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 August 2, 2019.

7.8 Credit ratings

There were no changes to our investment grade credit ratings as of August 2, 2019.

7.9 Financial instruments, commitments and contingent liabilities

Financial instruments

Our financial instruments and the nature of certain risks that they may be subject to were described in *Section 7.9* of our 2018 annual MD&A.

Liquidity risk

As a component of our capital structure financial policies, discussed in *Section 4.3 Liquidity and capital resources*, 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; maintaining bilateral bank facilities and syndicated credit facilities; maintaining a commercial paper program; maintaining an in-effect shelf prospectus; continuously monitoring forecast and actual cash flows; and managing maturity profiles of financial assets and financial liabilities.

As at June 30, 2019, we could offer less than $0.1 billion of debt or equity securities pursuant to a shelf prospectus that is in effect until June 2020. Subsequent to June 30, 2019, we renewed our shelf prospectus, which is in effect until August 2022, and as at August 2, 2019, we could offer $3.0 billion of debt or equity securities.

As at the date of this MD&A, we had liquidity of approximately $2.0 billion available from the TELUS revolving credit facility and approximately $200 million of available liquidity from the TELUS International (Cda) Inc. credit facility (see *Section 7.6 Credit facilities*), as well as $400 million available under our trade receivables securitization program (see *Section 7.7 Sale of trade receivables*). This adheres to our objective of generally maintaining at least $1 billion of available liquidity. We believe that our investment grade credit ratings contribute to reasonable access to capital markets.

Commitments and contingent liabilities

Purchase obligations

As at June 30, 2019, our contractual commitments related to the acquisition of property, plant and equipment were $165 million through to December 31, 2022, as compared to $177 million over a period ending December 31, 2022, reported in our 2018 annual report.

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.

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* of the interim consolidated financial statements.

Indemnification obligations

As at June 30, 2019, we had no liability recorded in respect of our indemnification obligations.

7.10 Outstanding share information

Outstanding shares (millions)	June 30, 2019	July 31, 2019
Common Shares	601	602
Common Share options – all exercisable (one for one)	<1	<1

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 $8 million and $27 million in the second quarter of 2019 and first six months of 2019, respectively, as compared to $27 million and $34 million in the comparable periods in 2018. The decrease in compensation expense for key management personnel was due to lower share-based compensation primarily arising from the timing of issuance as awards in 2019 are expected to be made during the three-month period ending September 30, 2019. See *Note 30(a)* of the interim 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

In the second quarter of 2019, we had transactions with real estate joint ventures, which are related parties to us, as set out in *Note 21* of the interim consolidated financial statements.

For the TELUS Sky real estate joint venture, commitments and contingent liabilities include construction-related contractual commitments through to 2020 (approximately $25 million at June 30, 2019) and construction financing ($342 million with three Canadian financial institutions as 66-2/3% lender and TELUS as 33-1/3% lender) under a credit agreement maturing August 31, 2019; the credit agreement is expected to be extended in August 2019 for an amount not materially more than that currently advanced. 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, 2018. 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 of revenues and expenses 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 and are described in *Section 8.1* of our 2018 annual MD&A, which is hereby incorporated by reference.

8.2 Accounting policy developments

Our accounting policy developments were discussed in *Section 8.2 Accounting policy developments* of our 2018 annual MD&A. See *Note 2* of the interim consolidated financial statements for additional details.

9. Update to 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.

The assumptions for our 2019 outlook, as described in *Section 9 General trends, outlook and assumptions, and regulatory developments and proceedings* of our 2018 annual MD&A, remain the same, except for the following as updated in our first quarter 2019 MD&A:

- Our revised estimate for economic growth in Canada in 2019 is 1.5% (previously 2.0% as reported in our 2018 annual MD&A). For our incumbent local exchange carrier (ILEC) provinces in Western Canada, we currently estimate that annual rates of economic growth will be 1.9% in 2019 in B.C. (previously 2.3% as reported in our 2018 annual MD&A) and 1.2% in Alberta (previously 2.1% as reported in our 2018 annual MD&A).
- Our revised estimate for the unemployment rate is 4.5% in 2019 in B.C. (previously 4.9% as reported in our 2018 annual MD&A) and 6.8% in Alberta (previously 6.2% as reported in our 2018 annual MD&A).

The extent to which these economic growth estimates affect us and the timing of their impact will depend upon the actual experience of specific sectors of the Canadian economy.

9.1 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), Innovation, Science and Economic Development Canada (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 and description of all of the specific issues described. Although we have indicated where 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 10.2 Regulatory matters* of our 2018 annual MD&A.

Radiocommunication licences and spectrum-related matters

ISED regulates, among other matters, the allocation and use of radio spectrum in Canada and licences 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 attaching 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.

600 MHz spectrum auction

On March 12, 2019, ISED commenced the auction of 600 MHz band spectrum, which included a 30 MHz set-aside for facilities-based providers who serve less than 10% of the national subscriber share and are actively providing commercial telecommunication services to the general public in the licensed area of interest. The 600 MHz auction concluded on April 4, 2019, and ISED published the results on April 10, 2019. TELUS successfully acquired 20 MHz in B.C., Alberta, Saskatchewan, Eastern Ontario, Southern Quebec and Eastern Quebec equating to a national average of 11.3 MHz, at a cost of $931 million ($2.35 per MHz-pop).

Repurposing the 3500 MHz spectrum to support 5G

On June 6, 2018, ISED released its *Consultation on Revisions to the 3500 MHz Band to Accommodate Flexible Use and Preliminary Consultation on Changes to the 3800 MHz Band*, proposing to claw back 56 to 66% of the band from fixed wireless incumbents (predominantly Inukshuk, which is a joint venture owned by Bell and Rogers, and Xplornet) and to auction the amount clawed back in 2020. 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* and its *Consultation on a Policy and Licensing Framework for Spectrum in the 3500 MHz Band* to define a licensing framework (i.e. auction rules and conditions of licence) for the 3500 MHz band. Although the transition decision, by way of a clawback, ensures a portion on the band is available for auction in all markets, there is a risk that the auction rules will favour certain carriers over us and impact our ability to acquire 3500 MHz band spectrum.

Repurposing mmWave spectrum to support 5G

On June 5, 2017, ISED issued a *Consultation on Releasing Millimetre Wave Spectrum to Support 5G*, proposing to release 3.25 GHz of millimetre wave (mmWave) spectrum for licensed use and 7 GHz for licence-exempt use largely in line with recent U.S. mmWave developments. On June 6, 2018, ISED released an *Addendum to the Consultation on Releasing Millimetre Wave Spectrum to Support 5G*, proposing to release an additional 1 GHz of spectrum in the 26.5 – 27.5 GHz range. 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 and targets auctioning this spectrum in 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 mmWave band spectrum.

Regulatory and federal government reviews

The CRTC and the federal government have initiated public proceedings to review various matters. They are discussed below.

Review of mobile wireless services

On February 28, 2019, the CRTC released its anticipated consultation to review the regulatory framework for wireless services. The review will examine 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. The CRTC also provided a preliminary view that there should be more opportunity for MVNOs. We have intervened in 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. We will participate in all stages of this proceeding, which will take place over the remainder of 2019 and into 2020. 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 mid-2020, at the earliest.

Wireline wholesale services 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 Internet access service for Internet service provider (ISP) competitors. This includes access to fibre-to-the-premises (FTTP) facilities. This requirement is being phased in

geographically beginning in the largest markets in Ontario and Quebec (i.e. in the serving territories of Bell, Cogeco, Rogers and Videotron). The CRTC initiated a follow-up proceeding to determine the technical configurations, appropriate costs and wholesale cost-based rates in those regions. The FTTP follow-up activities directed in TRP 2015-326 remain ongoing. For the second phase, which involves FTTP wholesale services for the rest of Canada (including our serving territories), a proceeding on technical configurations for disaggregated wholesale services commenced in 2017 and the associated cost study and tariff review will follow.

The timing of the implementation of disaggregated wholesale services may also be affected by an application to the CRTC filed by the Canadian Network Operators Consortium Inc. (CNOC) to review and vary TRP 2015-326 and to seek, among other things, interim relief removing a speed cap pursuant to which the existing aggregated wholesale access regime will not apply to speeds in excess of 100 Mbps pending the introduction of disaggregated service; and permanent relief granting wholesale access to FTTP facilities on an aggregated basis. On March 20, 2019, the CRTC granted CNOC's application for interim relief. We have been granted leave to appeal that decision to the Federal Court of Appeal, with a decision expected in 2020. The CRTC's decision with respect to the permanent relief sought by CNOC remains under reserve. We anticipate no material adverse impact in the short term with respect to CNOC's application for interim relief. Given the phased implementation of the mandated provision of wholesale access to our FTTP network, it is too early to determine what impact *Telecom Regulatory Policy 2015-326* will have on us in the longer term.

Follow-up proceedings further to the CRTC report on sales practices of large telecommunications carriers

On February 20, 2019, the CRTC released its *Report on Aggressive or Misleading Communications Retail Sales Practices*. The CRTC published this report further to a proceeding it commenced, at the direction of the Governor in Council, to examine claims of aggressive or misleading sales practices concerning telecommunications services, the prevalence and impact on consumers, and potential solutions. While the report itself is not a legally binding direction or order, it does note that the CRTC may commence certain follow-up proceedings and activities, including, but not limited to, a new secret shopper program, enhanced consumer information tools and complaints disclosure, and a proceeding to determine whether mandatory compliance measures and enhanced public reporting measures should be imposed on providers that fall below a threshold of acceptable behaviour. Until the CRTC releases greater details on its follow-up activities, we are unable to determine any new potential impacts on us.

Competition Bureau market study on competition in broadband services

On May 10, 2018, the Competition Bureau commenced a market study to better understand the competitive dynamics of Canada's broadband Internet services industry. The Bureau states that the purpose of the study is to better understand these market outcomes and the competitive dynamics of Canadian broadband markets more generally, including whether resellers are fulfilling their role in placing increased competitive discipline on traditional broadband services provided by telephone and cable companies. The Bureau expects to publish the results of the study in a public report, which may include recommendations to relevant government authorities, as appropriate. The Bureau states that the study will enable it to, among other things: make informed regulatory interventions regarding steps that regulators or policymakers could take to further support competition in the broadband industry; and increase its knowledge and understanding of the competitive dynamics of the broadband industry, and the telecommunications industry more generally, to inform the Bureau's future work. We are participating in this proceeding and filed our initial submissions with the Bureau on August 31, 2018. The Bureau continues to undertake further stakeholder engagement and research, as well as information analysis. Until the Bureau releases its final report, which is expected in August 2019, we are unable to determine any new potential impacts on us.

Phase-out of the local service subsidy regime

On June 26, 2018, the CRTC issued *Phase-out of the local service subsidy regime, Telecom Regulatory Policy CRTC 2018-213*. In this decision, the CRTC determined that it would phase out the existing local service subsidy over three years, from January 1, 2019 to December 31, 2021. In September 2018, the Independent Telecommunications Providers Association (ITPA), which represents small ILECs, brought an application to the CRTC to review and vary this decision. In its application, the ITPA seeks to keep the existing local service subsidy regime in place. The record of this proceeding is now closed with a decision anticipated later this year. If upheld, the impact of this decision is not expected to be material.

Review of the price cap and local forbearance regimes

Simultaneously with the release of the *Phase-out of the local service subsidy regime* decision noted above, the CRTC issued *Review of the price cap and local forbearance regimes, Telecom Notice of Consultation CRTC 2018-214*. In this proceeding, the CRTC is reviewing, among other things: pricing constraints for residential local exchange services; whether compensation to ILECs is required given that the local service subsidy is being eliminated further to the *Phase-out of the local service subsidy regime* decision; whether there is still a need for an exogenous factor mechanism in the price cap regimes; and whether changes are necessary to test for local forbearance. Final submissions were filed on March 22, 2019 with a decision anticipated later this year. The impact of this decision is unknown at this time.

Internet code

On July 31, 2019, the CRTC released *Telecom Regulatory Policy CRTC 2019-269, The Internet Code*. The Internet Code provides protections to consumers of retail fixed Internet access services, including cable, fibre, DSL, fixed wireless, and satellite services. The Internet Code does not apply to small businesses and does not apply to mobile wireless data services (which are covered separately by the *Wireless Code*). Among other things, the Internet Code requires ISPs to communicate with customers using clear language; to guarantee pricing during a fixed-duration contract; to provide a critical information summary; and to provide a trial period. ISPs are required to comply with the Internet Code by January 31, 2020.

Policy direction to CRTC

Under section 8 of the *Telecommunications Act*, the Governor in Council may provide broad direction to the CRTC on how to implement the policy objectives set out in the Act. On June 18, 2019, the Governor in Council issued a new policy direction under this power. This direction requires the CRTC to consider other forms of competition including, potentially, resale-based models. This is conditioned, however, by a direction to also consider impacts on investment. The preamble to the policy direction also indicates that it exists alongside the previous policy direction, issued in 2006, which requires the CRTC to, among other things, rely on market forces to the maximum extent feasible as the means of achieving the telecommunications policy objectives. The degree, if any, to which this could affect us is unknown at this point and it is too early to conclusively determine any potential impact on us.

Potential for new security legislation

In the federal budget released March 19, 2019, the government announced its intention to propose new legislation and make necessary amendments to existing federal legislation in order to introduce a new critical cyber systems framework. The degree, if any, to which this could affect us is unknown at this point and it is too early to conclusively determine any potential impact on us.

U.S. security developments

On May 16, 2019, U.S. President Donald Trump signed an executive order 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 (the BIS) amended the U.S. Export Administration Regulations to add Huawei Technologies Co. Ltd. and its non-U.S. affiliates (collectively, Huawei) to the BIS' Entity List, which resulted in the imposition of additional license requirements (the Restrictions) on the export, re-export and transfer of goods, services and technology to Huawei by persons subject to the Restrictions. Subsequently, on May 20, 2019, the BIS adopted a final rule creating a 90-day temporary general license partially restoring the BIS' former licensing requirements for exports, re-exports and transfer to Huawei in connection with certain transactions, including in connection with the continued operation of existing networks and equipment and the provision of support to existing handsets. Given the range of potential government or regulatory actions by the U.S. government with respect to Huawei, the impact on TELUS, and on Canadian wireless service providers generally, cannot currently be predicted.

CRTC questions regarding device financing

On July 16, 2019, the CRTC sent providers of retail mobile wireless data services, including TELUS, a set of questions regarding the provision of customer device financing plans separate from the provision of wireless services. Among other things, the questions ask whether we plan to offer financing plans and, if so, the proposed terms of any such plans. We filed a response on July 30, 2019, as required by the CRTC. The CRTC has not indicated any regulatory views on any such plans and has not indicated what action, if any, it is considering. Accordingly, it is too early to determine the impact on us of this inquiry.

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 extend 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 its licence terms 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.

CRTC report on the future of broadcasting distribution in Canada
On September 22, 2017, the Governor in Council issued an Order in Council pursuant to section 15 of the *Broadcasting Act* to request that the CRTC hold hearings and report on distribution models of the future and how Canadians will access programming. On May 31, 2018, the CRTC issued its report, titled "Harnessing Change: The Future of Programming Distribution in Canada," which provides an overview of the state of programming content distribution in Canada and sets out some options for change to the policy framework for consideration. This report will likely form part of the record for the joint review of the *Broadcasting Act* and *Telecommunications Act* by a panel of experts, described below. The CRTC has also announced in its forecast of activities for 2019 to 2020 that it intends to implement some of the new initiatives discussed in its report. Further consultations are anticipated but the outcomes are not expected to have any negative material impact on us.

Review of the Telecommunications Act, the Radiocommunication Act and the Broadcasting Act
On June 5, 2018, the federal government announced a joint review of Canada's telecommunications and broadcasting legislation to be conducted by a panel of seven experts, which will have until January 31, 2020 to provide its final recommendations. Written submissions in response to the panel's call for comments were filed on January 11, 2019. On June 26, 2019, the panel released an interim "What We Heard Report," which provided a summary of the input it has received from industry and other stakeholders. The interim report did not include any formal recommendations from the panel which will be provided in the panel's final report. At this time, we do not know the impact of the review and any resulting legislative amendments.

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 Standing Committee on Industry, Science and Technology (Industry Committee), with the assistance of the Standing Committee on Canadian Heritage (Heritage Committee), completed the review of the *Copyright Act* and its policy framework in January 2019. The Heritage Committee issued a report on remuneration models for Canadian artists and the creative industries on May 15, 2019. This report was intended to feed into the work of the Industry Committee, which issued its own report providing recommendations to the government for amendments to the *Copyright Act* on June 3, 2019. Although the Industry Committee has requested that a comprehensive government response be tabled by September 1, 2019, but no legislative amendments to the *Copyright Act* are expected prior to the conclusion of the federal election in the fall. 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.

10. Risks and risk management

The principal risks and uncertainties that could affect our future business results and associated risk mitigation activities were described in our 2018 annual MD&A and have not materially changed since December 31, 2018. Reference is made as well to the summary of risks and uncertainties in the *Caution regarding forward-looking statements* at the beginning of this MD&A.

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.

Adjusted Net income and adjusted basic earnings per share: These measures are used to evaluate performance at a consolidated level and exclude items that may obscure the underlying trends in business performance. These measures should not be considered alternatives to Net income and basic earnings per share in measuring TELUS' performance. Items that may, in management's view, obscure the underlying trends in business performance include significant gains or losses associated with real estate development partnerships, gains on exchange of wireless spectrum licences, restructuring and other costs, long-term debt prepayment premiums (when applicable), income tax-related adjustments, asset retirements related to restructuring activities and gains arising from business combinations. (See *Reconciliation of adjusted Net income* and *Reconciliation of adjusted basic EPS* in *Section 1.3*.)

Capital intensity: This measure is calculated as capital expenditures (excluding spectrum licences) divided by total operating revenues. This measure provides a basis for comparing the level of capital expenditures to those of other companies of varying size within the same industry.

Dividend payout ratio: This is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as reported in the financial statements, divided by the sum of basic earnings per share for the most recent four quarters for interim reporting periods. For fiscal years, the denominator is annual basic earnings per share. Our objective range for the annual 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 Dividend payout ratio

12-month periods ended June 30 ($)	**2019**	2018
Numerator – Sum of the last four quarterly dividends declared per Common Share	**2.1775**	2.0275
Denominator – Net income per Common Share	**2.90**	2.62
Ratio (%)	**75**	77

Dividend payout ratio of adjusted net earnings: This ratio is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as reported in the financial statements, divided by adjusted net earnings per share. Adjusted net earnings per share is basic earnings per share, as used in the **Dividend payout ratio,** adjusted to exclude the gain on the exchange of wireless spectrum licences, gains and equity income related to real estate joint ventures, provisions related to business combinations, long-term debt prepayment premium (when applicable) and income tax-related adjustments.

Calculation of Dividend payout ratio of adjusted net earnings

12-month periods ended June 30 ($)	**2019**	2018
Numerator – Sum of the last four quarterly dividends declared per Common Share	**2.1775**	2.0275
Adjusted net earnings ($ millions):		
Net income attributable to Common Shares	**1,745**	1,556
(Deduct) add non-recurring gains and equity income related to real estate joint ventures, after income taxes	**(150)**	1
Provisions related to business combinations, after income taxes	**(17)**	(22)
(Deduct net favourable) add net unfavourable income tax-related adjustments	**(129)**	21
Add long-term debt prepayment premium, after income taxes	**25**	—
Add initial and committed donation to TELUS Friendly Future Foundation, after income taxes	**90**	—
	1,564	1,556
Denominator – Adjusted net earnings per Common Share	**2.60**	2.62
Adjusted ratio (%)	**84**	77

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

12-month periods ended June 30 ($ millions, except ratio)	**2019**	2018
Net income attributable to Common Shares	**1,745**	1,556
Income taxes (attributable to Common Shares)	**432**	593
Borrowing costs (attributable to Common Shares)[1]	**682**	576
Numerator	**2,859**	2,725
Denominator – Borrowing costs	**682**	576
Ratio (times)	**4.2**	4.7

1 Interest on Long-term debt plus Interest on short-term borrowings and other plus long-term debt prepayment premium, adding back 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 an exclusive measure of cash flow. EBITDA as calculated by TELUS is equivalent to Operating revenues 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

	Second quarters ended June 30		Six-month periods ended June 30	
($ millions)	**2019**	2018	**2019**	2018
Net income	**520**	397	**957**	809
Financing costs	**189**	150	**357**	306
Income taxes	**31**	145	**188**	296
Depreciation	**470**	411	**940**	822
Amortization of intangible assets	**163**	148	**310**	287
EBITDA	**1,373**	1,251	**2,752**	2,520
Add restructuring and other costs included in EBITDA	**29**	35	**65**	69
EBITDA – excluding restructuring and other costs and **Adjusted EBITDA**	**1,402**	1,286	**2,817**	2,589

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. It should not be considered an alternative to the measures in the condensed interim 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 condensed interim 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

	Second quarters ended June 30		Six-month periods ended June 30	
($ millions)	**2019**	2018	**2019**	2018
EBITDA	**1,373**	1,251	**2,752**	2,520
Deduct non-cash gains from the sale of property, plant and equipment	**(5)**	(8)	**(10)**	(16)
Restructuring and other costs, net of disbursements	**1**	7	**(32)**	3
Effects of contract asset, acquisition and fulfilment (IFRS 15 impact)*	**15**	4	**53**	22
Effects of lease principal (IFRS 16 impact)	**(64)**	—	**(152)**	—
Leases formerly accounted for as finance leases (IFRS 16 impact)	**13**	—	**26**	—
Items from the condensed interim consolidated statements of cash flows:				
Share-based compensation, net	**20**	35	**39**	53
Net employee defined benefit plans expense	**19**	24	**39**	49
Employer contributions to employee defined benefit plans	**(12)**	(14)	**(28)**	(35)
Interest paid[1]	**(147)**	(130)	**(326)**	(280)
Interest received	**3**	3	**5**	5
Capital expenditures (excluding spectrum licences)[2]	**(770)**	(791)	**(1,416)**	(1,441)
Free cash flow before income taxes	**446**	381	**950**	880
Income taxes paid, net of refunds	**(122)**	(52)	**(473)**	(108)
Free cash flow	**324**	329	**477**	772

1 Includes $16 million interest paid on lease liabilities in the second quarter ended June 30, 2019, and $31 million interest paid on lease liabilities in the six-month period ended June 30, 2019.

2 Refer to *Note 31* of the interim consolidated financial statements for further information.

* See the following page for the reconciliation of effects of contract asset, acquisition and fulfilment.

Reconciliation of effects of contract asset, acquisition and fulfilment

	Second quarters ended June 30		Six-month periods ended June 30	
($ millions)	**2019**	2018	**2019**	2018
From *Note 6(c)* of the interim consolidated financial statements:				
Net additions arising from operations	**350**	303	**671**	584
Amounts billed in period and thus reclassified to accounts receivable	**(357)**	(313)	**(703)**	(617)
Change in impairment allowance, net	**(4)**	2	**(4)**	1
Other	**1**	4	**2**	4
From *Note 20* of the interim consolidated financial statements:				
Additions – Total	**71**	72	**133**	148
Amortization – Total	**(76)**	(72)	**(152)**	(142)
Effects of contract asset, acquisition and fulfilment	**(15)**	(4)	**(53)**	(22)

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

	Second quarters ended June 30		Six-month periods ended June 30	
($ millions)	**2019**	2018	**2019**	2018
Free cash flow	**324**	329	**477**	772
Add (deduct):				
Capital expenditures (excluding spectrum licences)	**770**	791	**1,416**	1,441
Adjustments to reconcile to Cash provided by operating activities	**66**	86	**57**	(169)
Cash provided by operating activities	**1,160**	1,206	**1,950**	2,044

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 June 30 ($ millions)	**2019**	2018
Long-term debt including current maturities	**16,579**	14,145
Debt issuance costs netted against long-term debt	**105**	93
Derivative liabilities, net	**92**	63
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)	**(57)**	(64)
Cash and temporary investments, net	**(217)**	(683)
Short-term borrowings	**100**	113
Net debt	**16,602**	13,667

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 $706 million in the 12-month period ended June 30, 2019, and $589 million in the 12-month period ended June 30, 2018; currently, this reflects interest on lease liabilities only for the six-month period ended June 30, 2019, due to the IFRS 16 transition methodology.

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 the context of losses or settlements, and adverse retrospective regulatory decisions.

Components of restructuring and other costs

	Second quarters ended June 30		Six-month periods ended June 30	
($ millions)	**2019**	2018	**2019**	2018
Goods and services purchased	**8**	10	**26**	15
Employee benefits expense	**21**	25	**39**	54
Restructuring and other costs included in EBITDA	**29**	35	**65**	69

11.2 Operating indicators

As a result of our subscriber definition changes effective the first quarter of 2019, certain subscribers were moved from the mobile phones subscriber base to the newly created mobile connected devices subscriber base. Specifically, data-centric devices intended for limited or no cellular voice capabilities (such as tablets, Internet keys, connected cars and wearables) were moved to the mobile connected devices subscriber base in alignment with the revised definitions. Our newly created mobile connected devices subscriber base combines these data-centric devices moved from mobile phone subscribers with previously undisclosed Internet of Things and mobile health subscribers.

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, 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, smartphones) that is connected to the TELUS network and provides voice, text and/or data connectivity.

Wireline subscriber means a TELUS subscriber on an active service plan with a recurring revenue-generating fixed unit that is connected to the TELUS network and provides access to stand-alone telecommunication services, namely Internet, TV and residential voice (previously residential network access line).

TELUS CORPORATION

CONDENSED INTERIM CONSOLIDATED FINANCIAL STATEMENTS

(UNAUDITED)

JUNE 30, 2019

condensed interim consolidated statements of income and other comprehensive income (unaudited)

Periods ended June 30 (millions except per share amounts)	Note	Three months 2019	Three months 2018	Six months 2019	Six months 2018
OPERATING REVENUES					
Service		**$ 3,086**	$ 2,953	**$ 6,106**	$ 5,839
Equipment		**501**	487	**970**	952
Revenues arising from contracts with customers	*6*	**3,587**	3,440	**7,076**	6,791
Other operating income	*7*	**10**	13	**27**	39
		3,597	3,453	**7,103**	6,830
OPERATING EXPENSES					
Goods and services purchased		**1,466**	1,491	**2,887**	2,899
Employee benefits expense	*8*	**758**	711	**1,464**	1,411
Depreciation	*17*	**470**	411	**940**	822
Amortization of intangible assets	*18*	**163**	148	**310**	287
		2,857	2,761	**5,601**	5,419
OPERATING INCOME		**740**	692	**1,502**	1,411
Financing costs	*9*	**189**	150	**357**	306
INCOME BEFORE INCOME TAXES		**551**	542	**1,145**	1,105
Income taxes	*10*	**31**	145	**188**	296
NET INCOME		**520**	397	**957**	809
OTHER COMPREHENSIVE INCOME	*11*				
Items that may subsequently be reclassified to income					
Change in unrealized fair value of derivatives designated as cash flow hedges		**10**	(22)	**(39)**	(29)
Foreign currency translation adjustment arising from translating financial statements of foreign operations		**11**	(17)	**17**	(21)
		21	(39)	**(22)**	(50)
Items never subsequently reclassified to income					
Employee defined benefit plan re-measurements		**8**	105	**32**	62
		29	66	**10**	12
COMPREHENSIVE INCOME		**$ 549**	$ 463	**$ 967**	$ 821
NET INCOME ATTRIBUTABLE TO:					
Common Shares		**$ 517**	$ 390	**$ 945**	$ 800
Non-controlling interests		**3**	7	**12**	9
		$ 520	$ 397	**$ 957**	$ 809
COMPREHENSIVE INCOME ATTRIBUTABLE TO:					
Common Shares		**$ 543**	$ 464	**$ 949**	$ 821
Non-controlling interests		**6**	(1)	**18**	—
		$ 549	$ 463	**$ 967**	$ 821
NET INCOME PER COMMON SHARE	*12*				
Basic		**$ 0.86**	$ 0.66	**$ 1.57**	$ 1.34
Diluted		**$ 0.86**	$ 0.66	**$ 1.57**	$ 1.34
TOTAL WEIGHTED AVERAGE COMMON SHARES OUTSTANDING					
Basic		**601**	596	**601**	595
Diluted		**601**	596	**601**	595

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

condensed interim consolidated statements of financial position (unaudited)

As at (millions)	Note	June 30, 2019	December 31, 2018
ASSETS			
Current assets			
Cash and temporary investments, net		**$ 217**	$ 414
Accounts receivable	*6(b)*	**1,835**	1,600
Income and other taxes receivable		**102**	3
Inventories	*1(b)*	**334**	376
Contract assets	*6(c)*	**859**	860
Prepaid expenses	*20*	**653**	539
Current derivative assets	*4(d)*	**10**	49
		4,010	3,841
Non-current assets			
Property, plant and equipment, net	*17*	**13,549**	12,091
Intangible assets, net	*18*	**11,965**	10,934
Goodwill, net	*18*	**4,888**	4,747
Contract assets	*6(c)*	**422**	458
Other long-term assets	*20*	**919**	986
		31,743	29,216
		$ 35,753	$ 33,057
LIABILITIES AND OWNERS' EQUITY			
Current liabilities			
Short-term borrowings	*22*	**$ 100**	$ 100
Accounts payable and accrued liabilities	*23*	**2,797**	2,570
Income and other taxes payable		**48**	218
Dividends payable	*13*	**339**	326
Advance billings and customer deposits	*24*	**665**	656
Provisions	*25*	**93**	129
Current maturities of long-term debt	*26*	**1,564**	836
Current derivative liabilities	*4(d)*	**5**	9
		5,611	4,844
Non-current liabilities			
Provisions	*25*	**690**	728
Long-term debt	*26*	**15,015**	13,265
Other long-term liabilities	*27*	**738**	731
Deferred income taxes		**3,103**	3,148
		19,546	17,872
Liabilities		**25,157**	22,716
Owners' equity			
Common equity	*28*	**10,504**	10,259
Non-controlling interests		**92**	82
		10,596	10,341
		$ 35,753	$ 33,057

Contingent Liabilities	*29*

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

		Common equity							
		Equity contributed							
		Common Shares *(Note 28)*							
(millions)	*Note*	Number of shares	Share capital	Contributed surplus	Retained earnings	Accumulated other comprehensive income	Total	Non-controlling interests	Total
Balance as at January 1, 2018		595	$ 5,205	$ 370	$ 3,794	$ 47	$ 9,416	$ 42	$ 9,458
Net income	*2(c)*	—	—	—	800	—	800	9	809
Other comprehensive income	*11*	—	—	—	62	(41)	21	(9)	12
Dividends	*13*	—	—	—	(614)	—	(614)	—	(614)
Dividends reinvested and optional cash payments	*13(b), 14(c)*	1	42	—	—	—	42	—	42
Share option award net-equity settlement feature	*14(d)*	—	1	(1)	—	—	—	—	—
Change in ownership interests of subsidiary	*31(a)*	—	—	14	—	—	14	30	44
Balance as at June 30, 2018		596	$ 5,248	$ 383	$ 4,042	$ 6	$ 9,679	$ 72	$ 9,751
Balance as at January 1, 2019									
As previously reported		**599**	**$ 5,390**	**$ 383**	**$ 4,474**	**$ 12**	**$ 10,259**	**$ 82**	**$ 10,341**
IFRS 16, *Leases* transitional amount	*2(c)*	**—**	**—**	**—**	**(153)**	**(1)**	**(154)**	**(8)**	**(162)**
As adjusted		**599**	**5,390**	**383**	**4,321**	**11**	**10,105**	**74**	**10,179**
Net income		**—**	**—**	**—**	**945**	**—**	**945**	**12**	**957**
Other comprehensive income	*11*	**—**	**—**	**—**	**32**	**(28)**	**4**	**6**	**10**
Dividends	*13*	**—**	**—**	**—**	**(668)**	**—**	**(668)**	**—**	**(668)**
Dividends reinvested and optional cash payments	*13(b), 14(c)*	**—**	**46**	**—**	**—**	**—**	**46**	**—**	**46**
Share option award net-equity settlement feature	*14(d)*	**—**	**1**	**(1)**	**—**	**—**	**—**	**—**	**—**
Issue of shares in business combination	*18(b)*	**2**	**72**	**—**	**—**	**—**	**72**	**—**	**72**
Balance as at June 30, 2019		**601**	**$ 5,509**	**$ 382**	**$ 4,630**	**$ (17)**	**$ 10,504**	**$ 92**	**$ 10,596**

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

condensed interim consolidated statements of cash flows (unaudited)

		Three months		Six months	
Periods ended June 30 (millions)	*Note*	**2019**	2018	**2019**	2018
OPERATING ACTIVITIES					
Net income		**$ 520**	$ 397	**$ 957**	$ 809
Adjustments to reconcile net income to cash provided by operating activities:					
Depreciation and amortization		**633**	559	**1,250**	1,109
Deferred income taxes	*10*	**(39)**	14	**(8)**	21
Share-based compensation expense, net	*14(a)*	**20**	35	**39**	53
Net employee defined benefit plans expense	*15(a)*	**19**	24	**39**	49
Employer contributions to employee defined benefit plans		**(12)**	(14)	**(28)**	(35)
Non-current contract assets		**15**	12	**36**	31
Income from equity accounted investments		**1**	2	**1**	2
Other		**(13)**	(64)	**66**	(60)
Net change in non-cash operating working capital	*31(a)*	**16**	241	**(402)**	65
Cash provided by operating activities		**1,160**	1,206	**1,950**	2,044
INVESTING ACTIVITIES					
Cash payments for capital assets, excluding spectrum licences	*31(a)*	**(645)**	(735)	**(1,438)**	(1,473)
Cash payment for spectrum licences	*18(a)*	**(931)**	—	**(931)**	—
Cash payments for acquisitions, net	*18(b)*	**(26)**	(47)	**(188)**	(251)
Real estate joint ventures advances	*21(c)*	**(9)**	(7)	**(17)**	(13)
Real estate joint venture receipts	*21(c)*	**1**	1	**2**	2
Proceeds on dispositions		**—**	—	**—**	15
Other		**10**	(7)	**10**	(7)
Cash used by investing activities		**(1,600)**	(795)	**(2,562)**	(1,727)
FINANCING ACTIVITIES	*31(b)*				
Dividends paid to holders of Common Shares	*13(a)*	**(307)**	(278)	**(610)**	(557)
Issue (repayment) of short-term borrowings, net		**(400)**	13	**—**	7
Long-term debt issued	*26*	**2,422**	1,279	**3,588**	3,440
Redemptions and repayment of long-term debt	*26*	**(1,617)**	(1,147)	**(2,534)**	(3,042)
Issue of shares by subsidiary to non-controlling interests	*31(a)*	**—**	—	**—**	24
Other		**(29)**	(10)	**(29)**	(15)
Cash (used) provided by financing activities		**69**	(143)	**415**	(143)
CASH POSITION					
Increase (decrease) in cash and temporary investments, net		**(371)**	268	**(197)**	174
Cash and temporary investments, net, beginning of period		**588**	415	**414**	509
Cash and temporary investments, net, end of period		**$ 217**	$ 683	**$ 217**	$ 683
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS					
Interest paid		**$ (147)**	$ (130)	**$ (326)**	$ (280)
Interest received		**$ 3**	$ 3	**$ 5**	$ 5
Income taxes paid, net					
In respect of comprehensive income		**$ (122)**	$ (52)	**$ (458)**	$ (108)
In respect of business acquisitions		**—**	—	**(15)**	—
		$ (122)	$ (52)	**$ (473)**	$ (108)

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

JUNE 30, 2019

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).

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" are used to refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries.

Notes to condensed interim consolidated financial statements		Page
General application		
1.	Condensed interim consolidated financial statements	7
2.	Accounting policy developments	7
3.	Capital structure financial policies	10
4.	Financial instruments	12
Consolidated results of operations focused		
5.	Segment information	17
6.	Revenue from contracts with customers	19
7.	Other operating income	20
8.	Employee benefits expense	21
9.	Financing costs	21
10.	Income taxes	21
11.	Other comprehensive income	23
12.	Per share amounts	25
13.	Dividends per share	25
14.	Share-based compensation	25
15.	Employee future benefits	29
16.	Restructuring and other costs	30
Consolidated financial position focused		
17.	Property, plant and equipment	31
18.	Intangible assets and goodwill	32
19.	Leases	34
20.	Other long-term assets	35
21.	Real estate joint ventures	35
22.	Short-term borrowings	38
23.	Accounts payable and accrued liabilities	38
24.	Advance billings and customer deposits	38
25.	Provisions	39
26.	Long-term debt	40
27.	Other long-term liabilities	43
28.	Common Share capital	43
29.	Contingent liabilities	44
Other		
30.	Related party transactions	46
31.	Additional statement of cash flow information	47

1 condensed interim consolidated financial statements

(a) Basis of presentation

The notes presented in our condensed interim consolidated financial statements include only significant events and transactions and are not fully inclusive of all matters normally disclosed in our annual audited financial statements; thus, our interim consolidated financial statements are referred to as condensed. Our condensed interim consolidated financial statements should be read in conjunction with our audited consolidated financial statements for the year ended December 31, 2018.

Our condensed interim consolidated financial statements are expressed in Canadian dollars and follow the same accounting policies and methods of their application as set out in our consolidated financial statements for the year ended December 31, 2018, other than as set out in *Note 2*. 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. Our condensed interim consolidated financial statements comply with International Accounting Standard 34, *Interim Financial Reporting* and reflect all adjustments (which are of a normal recurring nature) that are, in our opinion, necessary for a fair statement of the results for the interim periods presented.

Our condensed interim consolidated financial statements for the three-month and six-month periods ended June 30, 2019, were authorized by our Board of Directors for issue on August 2, 2019.

(b) Inventories

Our inventories primarily consist of wireless handsets, parts and accessories totalling $276 million at June 30, 2019 (December 31, 2018 – $320 million), and communications equipment held for resale. Costs of goods sold for the three-month and six-month periods ended June 30, 2019, totalled $484 million (2018 – $469 million) and $943 million (2018 – $936 million), respectively.

2 accounting policy developments

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

- In January 2016, the International Accounting Standards Board released IFRS 16, *Leases*, which is required to be applied for years beginning on or after January 1, 2019, and which supersedes IAS 17, *Leases*. The International Accounting Standards Board and the Financial Accounting Standards Board of the United States worked together to modify the accounting for leases, generally by eliminating lessees' classification of leases as either operating leases or finance leases and, for IFRS-IASB, introducing a single lessee accounting model.

  The most significant effect of the new standard is the lessee's recognition of the initial present value of unavoidable future lease payments as right-of-use lease assets and lease liabilities on the statement of financial position, including those for most leases that would previously have been accounted for as operating leases. Both leases with durations of 12 months or less and leases for low-value assets may be exempted.

  The measurement of the total lease expense over the term of a lease will be unaffected by the new standard. However, the new standard will result in an acceleration of the timing of lease expense recognition for leases that would previously have been accounted for as operating leases; the International Accounting Standards Board expects that this effect may be muted by a lessee having a portfolio of leases with varying maturities and lengths of term, and we expect that we will be similarly affected. The presentation on the statement of income and other comprehensive income required by the new standard will result in the presentation of most non-executory lease expenses as depreciation of right-of-use lease assets and financing costs arising from lease liabilities, rather than as a part of goods and services purchased (executory lease expenses will remain a part of goods and services purchased); reported operating income would thus be higher under the new standard.

  Relative to the results of applying the previous standard, although actual cash flows will be unaffected, the lessee's statement of cash flows will reflect increases in cash flows from operating activities offset equally by decreases in cash flows from financing activities. This is the result of the presentation of the payments of the "principal" component of leases, which were previously accounted for as operating leases, as a cash flow use within financing activities under the new standard.

We have applied the standard retrospectively, with the cumulative effect of the initial application of the new standard recognized at the date of initial application, January 1, 2019, subject to permitted and elected practical expedients; such method of application does not result in the retrospective adjustment of amounts reported for periods prior to fiscal 2019. The nature of the transition method selected is such that the lease population as at January 1, 2019, and the discount rates determined contemporaneously, is the basis for the cumulative effects recorded as of that date.

Implementation
As a transitional practical expedient permitted by the new standard, we have not reassessed whether contracts are, or contained, leases as at January 1, 2019, applying the criteria of the new standard; as at January 1, 2019, only contracts that were previously identified as leases applying IAS 17, *Leases,* and IFRIC 4, *Determining whether an Arrangement contains a Lease*, are a part of the transition to the new standard. Only contracts entered into (or changed) after December 31, 2018, will be assessed for being, or containing, leases applying the criteria of the new standard.

The weighted average discount rate reflected in the lease liability recognized on transition was 4.16%. The difference between the total of the minimum lease payments set out in *Note 19* of our audited consolidated financial statements for the year ended December 31, 2018, and the additions to long-term debt set out in *(c)* following arises because of the effect of discounting the minimum lease payments (approximately two-thirds of the difference) and because the minimum lease payments set out in *Note 19* of our audited consolidated financial statements for the year ended December 31, 2018, include payments for leases that have commencement dates subsequent to December 31, 2018 (approximately one-third of the difference).

The new standard requires a number of incremental recurring disclosures, as well as setting out how those disclosures are to be made; we have made these disclosures, or incorporated them by cross-reference from other notes to the financial statements, in *Note 19*.

(b) Standards, interpretations and amendments to standards not yet effective and not yet applied

- 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 is permitted. The amended standard has a narrower definition of a business, which could result in the recognition of fewer business combinations than under the current standard; the implication of this is that amounts which may have been recognized as goodwill in a business combination under the current 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 are currently assessing the impacts and transition provisions of the amended standard; however, we expect that we will apply the standard prospectively from January 1, 2020. The effects, if any, of the amended standard on our financial performance and disclosure will be dependent on the facts and circumstances of any future acquisition transactions.

(c) Impacts of application of new standard in fiscal 2019

IFRS 16, *Leases,* affected our Consolidated statement of income and other comprehensive income as follows:

Periods ended June 30, 2019 (millions except per share amounts)	Three months			Six months		
	Excluding effects of IFRS 16	IFRS 16 effects	As currently reported	Excluding effects of IFRS 16	IFRS 16 effects	As currently reported
Operating revenues	$ 3,596	$ 1	$ 3,597	$ 7,102	$ 1	$ 7,103
Operating expenses						
Goods and services purchased	1,532	(66)	1,466	3,036	(149)	2,887
Employee benefits expense	758	—	758	1,464	—	1,464
Depreciation	424	46	470	846	94	940
Amortization of intangible assets	163	—	163	310	—	310
	2,877	(20)	2,857	5,656	(55)	5,601
Operating income	719	21	740	1,446	56	1,502
Financing costs	173	16	189	326	31	357
Income before income taxes	546	5	551	1,120	25	1,145
Income taxes	29	2	31	181	7	188
Net income	517	3	520	939	18	957
Other comprehensive income						
Cumulative foreign currency translation adjustment	12	(1)	11	13	4	17
Other	18	—	18	(7)	—	(7)
	30	(1)	29	6	4	10
Comprehensive income	$ 547	$ 2	$ 549	$ 945	$ 22	$ 967
Net income attributable to:						
Common Shares	$ 513	$ 4	$ 517	$ 926	$ 19	$ 945
Non-controlling interests	4	(1)	3	13	(1)	12
	$ 517	$ 3	$ 520	$ 939	$ 18	$ 957
Comprehensive income attributable to:						
Common Shares	$ 540	$ 3	$ 543	$ 928	$ 21	$ 949
Non-controlling interests	7	(1)	6	17	1	18
	$ 547	$ 2	$ 549	$ 945	$ 22	$ 967
Net income per Common Share						
Basic	$ 0.85	$ 0.01	$ 0.86	$ 1.54	$ 0.03	$ 1.57
Diluted	$ 0.85	$ 0.01	$ 0.86	$ 1.54	$ 0.03	$ 1.57

IFRS 16, *Leases,* affected our opening January 1, 2019, Consolidated statement of financial position as follows:

As at January 1, 2019 (millions)	*Note*	Excluding effects of IFRS 16	IFRS 16 effects	As currently reported
Current assets				
Prepaid expense		$ 539	$ 12	$ 551
Non-current assets				
Property, plant and equipment, net	*17*	$ 12,091	$ 1,041	$ 13,132
Current liabilities				
Accounts payable and accrued liabilities		$ 2,570	$ (6)	$ 2,564
Provisions		$ 129	$ (9)	$ 120
Current maturities of long-term debt		$ 836	$ 180	$ 1,016
Non-current liabilities				
Provisions	*25*	$ 728	$ (48)	$ 680
Long-term debt		$ 13,265	$ 1,201	$ 14,466
Other long-term liabilities		$ 731	$ (50)	$ 681
Deferred income taxes		$ 3,148	$ (53)	$ 3,095
Owners' equity				
Retained earnings		$ 4,474	$ (153)	$ 4,321
Accumulated other comprehensive income – cumulative foreign currency translation adjustment	*11*	$ 12	$ (1)	$ 11
Non-controlling interests		$ 82	$ (8)	$ 74

IFRS 16, *Leases,* affected our Consolidated statement of cash flows as follows:

Periods ended June 30, 2019 (millions)	Three months			Six months		
	Excluding effects of IFRS 16	IFRS 16 effects	As currently reported	Excluding effects of IFRS 16	IFRS 16 effects	As currently reported
OPERATING ACTIVITIES						
Net income	$ 517	$ 3	$ 520	$ 939	$ 18	$ 957
Adjustments to reconcile net income to cash provided by operating activities:						
Depreciation and amortization	587	46	633	1,156	94	1,250
Deferred income taxes	(41)	2	(39)	(15)	7	(8)
All other operating activity line items	45	1	46	(257)	8	(249)
Cash provided by operating activities	1,108	52	1,160	1,823	127	1,950
INVESTING ACTIVITIES						
Cash used by investing activities	(1,600)	—	(1,600)	(2,562)	—	(2,562)
FINANCING ACTIVITIES						
Redemptions and repayment of long-term debt	(1,565)	(52)	(1,617)	(2,407)	(127)	(2,534)
All other financing activity line items	1,686	—	1,686	2,949	—	2,949
Cash provided (used) by financing activities	121	(52)	69	542	(127)	415
CASH POSITION						
Decrease in cash and temporary investments, net	$ (371)	$ —	$ (371)	$ (197)	$ —	$ (197)
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS						
Interest paid	$ (131)	$ (16)	$ (147)	$ (295)	$ (31)	$ (326)

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 2019, our financial objectives, which are reviewed annually, were unchanged from 2018. 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 companies. 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.

* 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 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.

As at, or for the 12-month periods ended, June 30 ($ in millions)	Objective	2019	2018
Components of debt and coverage ratios			
Net debt [1]		**$ 16,602**	$ 13,667
EBITDA – excluding restructuring and other costs [2]		**$ 5,649**	$ 5,133
Net interest cost [3]		**$ 706**	$ 589
Debt ratio			
Net debt to EBITDA – excluding restructuring and other costs	2.00 – 2.50 [4]	**2.94**	2.66
Coverage ratios			
Earnings coverage [5]		**4.2**	4.7
EBITDA – excluding restructuring and other costs interest coverage [6]		**8.0**	8.8

1 Net debt is calculated as follows:

As at June 30	*Note*	2019	2018
Long-term debt	*26*	**$ 16,579**	$ 14,145
Debt issuance costs netted against long-term debt		**105**	93
Derivative (assets) liabilities, net		**92**	63
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		**(57)**	(64)
Cash and temporary investments, net		**(217)**	(683)
Short-term borrowings	*22*	**100**	113
Net debt		**$ 16,602**	$ 13,667

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

	EBITDA (*Note 5*)	Restructuring and other costs (*Note 16*)	EBITDA – excluding restructuring and other costs
Add			
Six-month period ended June 30, 2019	$ 2,752	$ 65	$ 2,817
Year ended December 31, 2018	5,104	317	5,421
Deduct			
Six-month period ended June 30, 2018	(2,520)	(69)	(2,589)
EBITDA – excluding restructuring and other costs	$ 5,336	$ 313	$ 5,649

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).

4 Our long-term objective range for this ratio is 2.00 – 2.50 times. The ratio as at June 30, 2019, 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 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 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.

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 2.94 times as at June 30, 2019, up from 2.66 times one year earlier. The effect of the increase in net debt, largely attributed to the recognition of lease liabilities upon the application of IFRS 16 effective January 1, 2019 (see *Note 2(a)*), was exceeded by the effect of growth in EBITDA – excluding restructuring and other costs (including that the transition method for IFRS 16 has currently only included six months' effect on the trailing EBITDA); the implementation of IFRS 16 had the combined effect of increasing the ratio by 0.18 as at June 30, 2019. The earnings coverage ratio for the twelve-month period ended June 30, 2019, was 4.2 times, down from 4.7 times one year earlier. Higher borrowing costs, including the recognition of interest (currently only for the six-month period ended June 30, 2019) on lease liabilities upon the application of IFRS 16, reduced the ratio by 0.8 and an increase in income before borrowing costs and income taxes increased the ratio by 0.3. The EBITDA – excluding restructuring and other costs interest coverage ratio for the twelve-month period ended June 30, 2019, was 8.0 times, down from 8.8 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.7, while an increase in net interest costs, including the recognition of interest (currently only for the six-month period ended June 30, 2019) on lease liabilities upon the application of IFRS 16, reduced the ratio by 1.5.

Dividend payout ratio

The dividend payout ratio presented is a historical measure calculated as the sum of the last four quarterly dividends declared per Common Share, as recorded in the financial statements, divided by the sum of basic earnings per share for the most recent four quarters for interim reporting periods (divided by annual basic earnings per share if the reported

amount is in respect of a fiscal year). The dividend payout ratio of adjusted net earnings presented, also a historical measure, differs in that it excludes the gain on exchange of wireless spectrum licences, net gains and equity income from real estate joint ventures, provisions related to business combinations, immediately vesting transformative compensation expense, long-term debt prepayment premium and income tax-related adjustments.

For the 12-month periods ended June 30 ($ in millions)	Objective	2019	2018
Dividend payout ratio	65%–75% [1]	**75%**	77%
Dividend payout ratio of adjusted net earnings		**84%**	77%

1 Our objective range for the dividend payout ratio is 65%–75% of sustainable earnings on a prospective basis through 2019. So as to be consistent with the way we manage our business, we have revised our target guideline, effective January 1, 2020, to be calculated as 60% to 75% of free cash flow on a prospective basis (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). Adjusted net earnings (adjusted net earnings does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers) attributable to Common Shares is calculated as follows:

12-month periods ended June 30	2019	2018
Net income attributable to Common Shares	**$ 1,745**	$ 1,556
Gain and net equity income related to real estate redevelopment project, after income taxes	**(150)**	1
Business combination-related provisions, after income taxes	**(17)**	(22)
Income tax-related adjustments	**(129)**	21
Long-term debt prepayment premium, after income taxes	**25**	—
Initial and committed donation to TELUS Friendly Future Foundation, after income taxes	**90**	—
Adjusted net earnings attributable to Common Shares	**$ 1,564**	$ 1,556

4 financial instruments

(a) 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 (millions)	June 30, 2019	December 31, 2018
Cash and temporary investments, net	**$ 217**	$ 414
Accounts receivable	**1,835**	1,600
Contract assets	**1,281**	1,318
Derivative assets	**12**	103
	$ 3,345	$ 3,435

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.

As at June 30, 2019, the weighted average age of customer accounts receivable was 27 days (December 31, 2018 – 30 days) and the weighted average age of past-due customer accounts receivable was 60 days (December 31, 2018 – 56 days). 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 (millions)	June 30, 2019			December 31, 2018		
	Gross	Allowance	Net [1]	Gross	Allowance	Net [1]
Customer accounts receivable, net of allowance for doubtful accounts						
Less than 30 days past billing date	**$ 934**	**$ (12)**	**$ 922**	$ 762	$ (13)	$ 749
30-60 days past billing date	**224**	**(8)**	**216**	354	(10)	344
61-90 days past billing date	**59**	**(6)**	**53**	80	(8)	72
More than 90 days past billing date	**68**	**(16)**	**52**	67	(22)	45
	$ 1,285	**$ (42)**	**$ 1,243**	$ 1,263	$ (53)	$ 1,210

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 June 30, 2019, totalled $403 million (December 31, 2018 – $353 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.

Periods ended June 30 (millions)	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Balance, beginning of period	**$ 43**	$ 47	**$ 53**	$ 43
Additions (doubtful accounts expense)	**10**	11	**21**	27
Accounts written off, net of recoveries	**(11)**	(13)	**(33)**	(27)
Other	**—**	1	**1**	3
Balance, end of period	**$ 42**	$ 46	**$ 42**	$ 46

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 (millions)	**June 30, 2019**			December 31, 2018		
	Gross	Allowance	Net (*Note 6(c)*)	Gross	Allowance	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	**$ 1,073**	**$ (54)**	**$ 1,019**	$ 1,068	$ (51)	$ 1,017
The 12-month period ending two years hence	**430**	**(23)**	**407**	466	(22)	444
Thereafter	**16**	**(1)**	**15**	15	(1)	14
	$ 1,519	**$ (78)**	**$ 1,441**	$ 1,549	$ (74)	$ 1,475

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.

(b) 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),(e)*);
- 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(g)*. As at June 30, 2019, we could offer less than $0.1 billion of debt or equity securities pursuant to a shelf prospectus that is in effect until June 2020 (December 31, 2018 – $2.5 billion); subsequent to June 30, 2019, we renewed our shelf prospectus, which is in effect until August 2022, and as at August 2, 2019, we could offer $3.0 billion of debt or equity securities. 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							
As at June 30, 2019 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Construction credit facility commitment (*Note 21*)	Long-term debt, excluding leases [1] (*Note 26*)	Leases (*Notes 2(c), 26*)	Currency swap agreement amounts to be exchanged [2] (Receive)	Currency swap agreement amounts to be exchanged [2] Pay	Other	Currency swap agreement amounts to be exchanged (Receive)	Currency swap agreement amounts to be exchanged Pay	Total
2019 (balance of year)	**$ 2,408**	**$ 2**	**$ 28**	**$ 1,610**	**$ 173**	**$ (356)**	**$ 356**	**$ —**	**$ (273)**	**$ 272**	**$ 4,220**
2020	**339**	**3**	**—**	**571**	**332**	**(119)**	**118**	**—**	**(221)**	**223**	**1,246**
2021	**91**	**103**	**—**	**1,622**	**239**	**(119)**	**118**	**—**	**—**	**—**	**2,054**
2022	**16**	**—**	**—**	**2,120**	**191**	**(119)**	**118**	**5**	**—**	**—**	**2,331**
2023	**8**	**—**	**—**	**944**	**173**	**(119)**	**118**	**—**	**—**	**—**	**1,124**
2024-2028	**3**	**—**	**—**	**6,468**	**482**	**(1,980)**	**1,991**	**—**	**—**	**—**	**6,964**
Thereafter	**—**	**—**	**—**	**9,912**	**428**	**(3,116)**	**3,092**	**—**	**—**	**—**	**10,316**
Total	**$ 2,865**	**$ 108**	**$ 28**	**$ 23,247**	**$ 2,018**	**$ (5,928)**	**$ 5,911**	**$ 5**	**$ (494)**	**$ 495**	**$ 28,255**
				Total (*Note 26(g)*)			**$ 25,248**				

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 June 30, 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 swaps receive column, have been determined based upon the currency exchange rates in effect as at June 30, 2019. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swaps pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

	Non-derivative							Derivative			
				Composite long-term debt							
As at December 31, 2018 (millions)	Non-interest bearing financial liabilities	Short-term borrowings [1]	Construction credit facilities commitment (*Note 21*)	Long-term debt [1]	Finance leases [1]	Currency swap agreement amounts to be exchanged [2] (Receive)	Currency swap agreement amounts to be exchanged [2] Pay	Other	Currency swap agreement amounts to be exchanged (Receive)	Currency swap agreement amounts to be exchanged Pay	Total
2019	$ 2,372	$ 3	$ 45	$ 1,349	$ 55	$ (877)	$ 851	$ —	$ (542)	$ 516	$ 3,772
2020	251	3	—	1,567	51	(95)	89	1	—	—	1,867
2021	102	103	—	1,567	—	(95)	89	—	—	—	1,766
2022	18	—	—	2,086	—	(95)	89	1	—	—	2,099
2023	19	—	—	886	—	(95)	89	—	—	—	899
2024-2028	20	—	—	6,240	—	(1,917)	1,847	—	—	—	6,190
Thereafter	—	—	—	7,744	—	(1,964)	1,832	—	—	—	7,612
Total	$ 2,782	$ 109	$ 45	$ 21,439	$ 106	$ (5,138)	$ 4,886	$ 2	$ (542)	$ 516	$ 24,205
				Total			$ 21,293				

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, 2018.

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 swaps receive column, have been determined based upon the currency exchange rates in effect as at December 31, 2018. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swaps pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

(c) Market risks

Net income and other comprehensive income for the six-month periods ended June 30, 2019 and 2018, could have varied if the Canadian dollar: U.S. dollar exchange rate 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 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 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 statement of financial position date, which includes those in the cash-settled equity swap agreements, has been 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.

Six-month periods ended June 30 (increase (decrease) in millions)	Net income		Other comprehensive income		Comprehensive income	
	2019	2018	**2019**	2018	**2019**	2018
Reasonably possible changes in market risks [1]						
10% change in C$: US$ exchange rate						
Canadian dollar appreciates	**$ —**	$ —	**$ (55)**	$ (17)	**$ (55)**	$ (17)
Canadian dollar depreciates	**$ —**	$ —	**$ 55**	$ 17	**$ 55**	$ 17
25 basis point change in interest rates						
Interest rates increase	**$ —**	$ —	**$ 4**	$ 4	**$ 4**	$ 4
Interest rates decrease	**$ —**	$ —	**$ (4)**	$ (3)	**$ (4)**	$ (3)
25% [2] change in Common Share price [3]						
Price increases	**$ (4)**	$ (15)	**$ 1**	$ 20	**$ (3)**	$ 5
Price decreases	**$ 19**	$ 23	**$ (1)**	$ (20)	**$ 18**	$ 3

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; 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 six-month data period and calculated on a monthly basis, the volatility of our Common Share price as at June 30, 2019, was 12.5% (2018 – 7.7%).

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.

(d) 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.

As at (millions)		**June 30, 2019**				December 31, 2018			
	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-denominated purchases	HFH [3]	2020	**$ 155**	**$ 2**	US$1.00: C$1.29	2019	$ 414	$ 25	US$1.00: C$1.28
Currency risk arising from U.S. dollar revenues	HFT [4]	2019	**$ 53**	**2**	US$1.00: C$1.31	2019	$ 74	1	US$1.00: C$1.36
Changes in share-based compensation costs (*Note 14(b)*)	HFH [3]	2019	**$ 66**	**6**	$ 45.53	2019	$ 63	2	$ 45.46
Currency risk arising from U.S. dollar-denominated long-term debt (*Note 26(b)-(c)*)	HFH [3]	—	$ —	—	—	2019	$ 761	21	US$1.00: C$1.33
				$ 10				$ 49	
Other Long-Term Assets [2]									
Derivatives used to manage									
Changes in share-based compensation costs (*Note 14(b)*)	HFH [3]	2020	**$ 67**	**$ 2**	$ 48.71	—	$ —	$ —	—
Currency risks arising from U.S. dollar-denominated long-term debt [5] (*Note 26(b)-(c)*)	HFH [3]	—	$ —	—	—	2048	$ 3,134	54	US$1.00: C$1.28
				$ 2				$ 54	

As at (millions)		June 30, 2019				December 31, 2018			
	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 Liabilities [2]									
Derivatives used to manage									
Currency risk arising from U.S. dollar-denominated purchases	HFH [3]	2020	**$ 287**	**$ 3**	US$1.00: C$1.32	2019	$ 11	$ —	US$1.00: C$1.36
Currency risk arising from U.S. dollar revenues	HFT [4]	**—**	**$ —**	**—**	**—**	2019	$ 18	—	US$1.00: C$1.36
Changes in share-based compensation costs (*Note 14(b)*)	HFH [3]	**—**	**$ —**	**—**	**—**	2019	$ 2	—	$ 47.39
Currency risk arising from U.S. dollar-denominated long-term debt (*Note 26(b)-(c)*)	HFH [3]	2019	**$ 296**	**2**	US$1.00: C$1.31	—	$ —	—	—
Interest rate risk associated with non-fixed rate credit facility amounts drawn (*Note 26(e)*)	HFH [3]	2020	**$ 8**	**—**	2.64%	2019	$ 8	—	2.64%
Interest rate risk associated with refinancing of debt maturing	HFH [3]	**—**	**$ —**	**—**	**—**	2019	$ 250	9	2.40%, GOC 10-year term
				$ 5				$ 9	
Other Long-Term Liabilities [2]									
Derivatives used to manage									
Changes in share-based compensation costs (*Note 14(b)*)	HFH [3]	**—**	**$ —**	**$ —**	**—**	2020	$ 67	$ 3	$ 48.71
Currency risk arising from U.S. dollar-denominated long-term debt [5] (*Note 26(b)-(c)*)	HFH [3]	2049	**$ 5,614**	**90**	US$1.00: C$1.30	2027	$ 991	2	US$1.00: C$1.33
Interest rate risk associated with non-fixed rate credit facility amounts drawn (*Note 26(e)*)	HFH [3]	2022	**$ 135**	**4**	2.64%	2022	$ 145	1	2.64%
				$ 94				$ 6	

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 We designate only the spot element as the hedging item. As at June 30, 2019, the foreign currency basis spread included in the fair value of the derivative instruments, and which is used for purposes of assessing hedge ineffectiveness, was $36 (December 31, 2018 – $29).

Non-derivative

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

As at (millions)	June 30, 2019		December 31, 2018	
	Carrying value	Fair value	Carrying value	Fair value
Long-term debt, excluding leases (*Note 26*)	**$ 15,025**	**$ 16,105**	$ 13,999	$ 14,107

(e) 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 *(a)*, would be the primary source of hedge ineffectiveness. There was no ineffective portion of derivative instruments classified as cash flow hedging items for the periods presented.

Periods ended June 30 (millions)	Note	Amount of gain (loss) recognized in other comprehensive income (effective portion) (*Note 11*) 2019	2018	Gain (loss) reclassified from other comprehensive income to income (effective portion) (*Note 11*) Location	Amount 2019	2018
THREE-MONTHS						
Derivatives used to manage currency risk						
Arising from U.S. dollar-denominated purchases		**$ (7)**	$ 6	Goods and services purchased	**$ 4**	$ (1)
Arising from U.S. dollar-denominated long-term debt [1]	26(b)-(c)	**(29)**	15	Financing costs	**(58)**	53
		(36)	21		**(54)**	52
Derivatives used to manage other market risk						
Arising from changes in share-based compensation costs	14(b)	**(5)**	8	Employee benefits expense	**(1)**	5
		$ (41)	$ 29		**$ (55)**	$ 57
SIX-MONTHS						
Derivatives used to manage currency risk						
Arising from U.S. dollar-denominated purchases		**$ (15)**	$ 19	Goods and services purchased	**$ 9**	$ (6)
Arising from U.S. dollar-denominated long-term debt [1]	26(b)-(c)	**(151)**	58	Financing costs	**(123)**	120
		(166)	77		**(114)**	114
Derivatives used to manage other market risk						
Arising from changes in share-based compensation costs	14(b)	**5**	(1)	Employee benefits expense	**6**	2
		$ (161)	$ 76		**$ (108)**	$ 116

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 three-month and six-month periods ended June 30, 2019, were $NIL (2018 – $(8)) and $7 (2018 – $(11)), respectively.

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, and their location within the Consolidated statements of income and other comprehensive income.

		Gain (loss) recognized in income on derivatives			
		Three months		Six months	
Periods ended June 30 (millions)	Location	**2019**	2018	**2019**	2018
Derivatives used to manage currency risk	Financing costs	**$ (3)**	$ 1	**$ (5)**	$ —

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.

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 such 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 are direct costs; judgment, largely based upon historical experience, is applied in apportioning indirect expenses which are not objectively distinguishable between our wireless and wireline operations. The continued build-out of our technology-agnostic fibre-optic infrastructure, in combination with converged edge network technology, has significantly affected this judgment, as has 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.

As we do not currently aggregate operating segments, our reportable segments as at June 30, 2019, are also wireless and wireline. 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), 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.

Three-month periods ended June 30 (millions)	Wireless 2019	Wireless 2018	Wireline 2019	Wireline 2018	Eliminations 2019	Eliminations 2018	Consolidated 2019	Consolidated 2018
Operating revenues								
External revenues								
Service	**$ 1,534**	$ 1,503	**$ 1,552**	$ 1,450	**$ —**	$ —	**$ 3,086**	$ 2,953
Equipment	**444**	418	**57**	69	**—**	—	**501**	487
Revenues arising from contracts with customers	**1,978**	1,921	**1,609**	1,519	**—**	—	**3,587**	3,440
Other operating income	**5**	8	**5**	5	**—**	—	**10**	13
	1,983	1,929	**1,614**	1,524	**—**	—	**3,597**	3,453
Intersegment revenues	**14**	12	**60**	50	**(74)**	(62)	**—**	—
	$ 1,997	$ 1,941	**$ 1,674**	$ 1,574	**$ (74)**	$ (62)	**$ 3,597**	$ 3,453
Pro forma EBITDA [1] reported to chief operating decision-maker	**$ 919**	$ 872	**$ 454**	$ 433	**$ —**	$ —	**$ 1,373**	$ 1,305
Retrospective IFRS 16 simulation [2]	**—**	(28)	**—**	(26)	**—**	—	**—**	(54)
EBITDA [1]	**$ 919**	$ 844	**$ 454**	$ 407	**$ —**	$ —	**$ 1,373**	$ 1,251
CAPEX, excluding spectrum licences [3]	**$ 223**	$ 243	**$ 547**	$ 548	**$ —**	$ —	**$ 770**	$ 791

	2019	2018
Operating revenues – external (above)	**$ 3,597**	$ 3,453
Goods and services purchased	**1,466**	1,491
Employee benefits expense	**758**	711
EBITDA (above)	**1,373**	1,251
Depreciation	**470**	411
Amortization	**163**	148
Operating income	**740**	692
Financing costs	**189**	150
Income before income taxes	**$ 551**	$ 542

TELUS

Six-month periods ended June 30 (millions)	Wireless 2019	Wireless 2018	Wireline 2019	Wireline 2018	Eliminations 2019	Eliminations 2018	Consolidated 2019	Consolidated 2018
Operating revenues								
External revenues								
Service	**$ 3,034**	$ 2,982	**$ 3,072**	$ 2,857	**$ —**	$ —	**$ 6,106**	$ 5,839
Equipment	**863**	822	**107**	130	**—**	—	**970**	952
Revenues arising from contracts with customers	**3,897**	3,804	**3,179**	2,987	**—**	—	**7,076**	6,791
Other operating income	**10**	15	**17**	24	**—**	—	**27**	39
	3,907	3,819	**3,196**	3,011	**—**	—	**7,103**	6,830
Intersegment revenues	**27**	23	**116**	102	**(143)**	(125)	**—**	—
	$ 3,934	$ 3,842	**$ 3,312**	$ 3,113	**$ (143)**	$ (125)	**$ 7,103**	$ 6,830
Pro forma EBITDA [1] reported to chief operating decision-maker	**$ 1,827**	$ 1,736	**$ 925**	$ 891	**$ —**	$ —	**$ 2,752**	$ 2,627
Retrospective IFRS 16 simulation [2]	**—**	(56)	**—**	(51)	**—**	—	**—**	(107)
EBITDA [1]	**$ 1,827**	$ 1,680	**$ 925**	$ 840	**$ —**	$ —	**$ 2,752**	$ 2,520
CAPEX, excluding spectrum licences [3]	**$ 400**	$ 425	**$ 1,016**	$ 1,016	**$ —**	$ —	**$ 1,416**	$ 1,441

	Consolidated 2019	Consolidated 2018
Operating revenues – external (above)	**$ 7,103**	$ 6,830
Goods and services purchased	**2,887**	2,899
Employee benefits expense	**1,464**	1,411
EBITDA (above)	**2,752**	2,520
Depreciation	**940**	822
Amortization	**310**	287
Operating income	**1,502**	1,411
Financing costs	**357**	306
Income before income taxes	**$ 1,145**	$ 1,105

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 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 For purposes of the chief operating decision-maker's assessment of performance during the 2019 fiscal year relative to the fiscal 2018 year, we have simulated IFRS 16 adjustments to the fiscal 2018 results in calculating pro forma results. The simulated IFRS 16 adjustments are: (i) a cash-based proxy and should not be considered comparable to the results that would have been reported had IFRS 16 been applied retrospectively to each comparative period applying IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors* (see *Note 2(a)*); and (ii) do not have any standardized meaning prescribed by IFRS-IASB and are therefore unlikely to be comparable to similar measures presented by other issuers.

3 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.

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 (millions)	June 30, 2019	December 31, 2018
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	**$ 2,390**	$ 2,306
During the 12-month period ending two years hence	**888**	933
Thereafter	**29**	24
	$ 3,307	$ 3,263

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 (millions)	*Note*	**June 30, 2019**	December 31, 2018
Customer accounts receivable		**$ 1,285**	$ 1,263
Accrued receivables – customer		**179**	175
Allowance for doubtful accounts	*4*	**(42)**	(53)
		1,422	1,385
Accrued receivables – other		**413**	215
		$ 1,835	$ 1,600

(c) Contract assets

Periods ended June 30 (millions)	*Note*	Three months **2019**	Three months 2018	Six months **2019**	Six months 2018
Balance, beginning of period		**$ 1,449**	$ 1,279	**$ 1,475**	$ 1,303
Net additions arising from operations		**350**	303	**671**	584
Amounts billed in period and thus reclassified to accounts receivable [1]		**(357)**	(313)	**(703)**	(617)
Change in impairment allowance, net	*4*	**(2)**	2	**(4)**	1
Other		**1**	1	**2**	1
Balance, end of period		**$ 1,441**	$ 1,272	**$ 1,441**	$ 1,272
To be billed and thus reclassified to accounts receivable during:					
The 12-month period ending one year hence				**$ 1,019**	$ 907
The 12-month period ending two years hence				**407**	354
Thereafter				**15**	11
Balance, end of period				**$ 1,441**	$ 1,272
Reconciliation of contract assets presented in the Consolidated statements of financial position – current					
Gross contract assets				**$ 1,019**	$ 907
Reclassification to contract liabilities of contracts with contract assets less than contract liabilities	*24*			**(5)**	(5)
Reclassification from contract liabilities of contracts with contract liabilities less than contract assets	*24*			**(155)**	(142)
				$ 859	$ 760

1 For the three-month and six-month periods ended June 30, 2019, amounts billed for our wireless segment and reclassified to accounts receivable totalled $330 (2018 – $287) and $650 (2018 – $567), respectively.

7 other operating income

Periods ended June 30 (millions)	*Note*	Three months **2019**	Three months 2018	Six months **2019**	Six months 2018
Government assistance, including deferral account amortization		**$ 5**	$ 6	**$ 12**	$ 12
Investment income, gain (loss) on disposal of assets and other		**4**	7	**13**	26
Interest income	*21(c)*	**1**	—	**2**	1
		$ 10	$ 13	**$ 27**	$ 39

8 employee benefits expense

Periods ended June 30 (millions)	Note	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Employee benefits expense – gross					
Wages and salaries		**$ 762**	$ 694	**$ 1,465**	$ 1,377
Share-based compensation	*14*	**30**	41	**64**	68
Pensions – defined benefit	*15(a)*	**19**	24	**39**	49
Pensions – defined contribution	*15(b)*	**20**	20	**43**	44
Restructuring costs	*16(a)*	**19**	23	**34**	51
Other		**47**	39	**89**	79
		897	841	**1,734**	1,668
Capitalized internal labour costs, net					
Contract acquisition costs	*20*				
Capitalized		**(12)**	(9)	**(24)**	(23)
Amortized		**11**	11	**23**	23
Contract fulfilment costs	*20*				
Capitalized		**—**	(1)	**(1)**	(2)
Amortized		**—**	1	**1**	2
Property, plant and equipment		**(90)**	(87)	**(175)**	(171)
Intangible assets subject to amortization		**(48)**	(45)	**(94)**	(86)
		(139)	(130)	**(270)**	(257)
		$ 758	$ 711	**$ 1,464**	$ 1,411

9 financing costs

Periods ended June 30 (millions)	Note	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Interest expense					
Interest on long-term debt, excluding lease liabilities – gross		**$ 161**	$ 151	**$ 311**	$ 295
Interest on long-term debt, excluding lease liabilities - capitalized [1]	*18(a)*	**(4)**	—	**(4)**	—
Interest on long-term debt, excluding lease liabilities		**157**	151	**307**	295
Interest on lease liabilities		**16**	—	**32**	—
Interest on short-term borrowings and other		**3**	(1)	**8**	1
Interest accretion on provisions	*25*	**5**	6	**11**	10
		181	156	**358**	306
Employee defined benefit plans net interest	*15*	**—**	3	**—**	7
Foreign exchange		**11**	(6)	**4**	(2)
		192	153	**362**	311
Interest income		**(3)**	(3)	**(5)**	(5)
		$ 189	$ 150	**$ 357**	$ 306

1 Long-term debt, excluding lease liabilities, interest at a composite rate of 4.33% was capitalized to intangible assets with indefinite lives in the period.

10 income taxes

Periods ended June 30 (millions)	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Current income tax expense				
For the current reporting period	**$ 71**	$ 139	**$ 197**	$ 283
Adjustments recognized in the current period for income taxes of prior periods	**(1)**	(8)	**(1)**	(8)
	70	131	**196**	275
Deferred income tax expense				
Arising from the origination and reversal of temporary differences	**83**	6	**114**	13
Revaluation of deferred income tax liability to reflect future income tax rates	**(121)**	—	**(121)**	—
Adjustments recognized in the current period for income taxes of prior periods	**(1)**	8	**(1)**	8
	(39)	14	**(8)**	21
	$ 31	$ 145	**$ 188**	$ 296

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

Three-month periods ended June 30 ($ in millions)		**2019**			2018	
Income taxes computed at applicable statutory rates	**$**	**147**	**26.7%**	$	147	27.2%
Revaluation of deferred income tax liability to reflect future income tax rates		**(121)**	**(22.0)**		—	—
Adjustments recognized in the current period for income taxes of prior periods		**(2)**	**(0.3)**		—	—
Other		**7**	**1.2**		(2)	(0.5)
Income tax expense per Consolidated statements of income and other comprehensive income	**$**	**31**	**5.6%**	$	145	26.7%

Six-month periods ended June 30 ($ in millions)		**2019**			2018	
Income taxes computed at applicable statutory rates	**$**	**308**	**26.9%**	$	299	27.1%
Revaluation of deferred income tax liability to reflect future income tax rates		**(121)**	**(10.6)**		—	—
Adjustments recognized in the current period for income taxes of prior periods		**(2)**	**(0.2)**		—	—
Other		**3**	**0.3**		(3)	(0.4)
Income tax expense per Consolidated statements of income and other comprehensive income	**$**	**188**	**16.4%**	$	296	26.7%

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(e)*)											
	Derivatives used to manage currency risk			Derivatives used to manage other market risks								
Periods ended June 30 (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-measure-ments	Other comp. income
THREE-MONTH												
Accumulated balance as at April 1, 2018			$ (12)			$ 4	$ (8)	$ 49	$ 1	$ 42		
Other comprehensive income (loss)												
Amount arising	$ 21	$ (52)	(31)	$ 8	$ (5)	3	(28)	(17)	—	(45)	$ 143	$ 98
Income taxes	$ —	$ (7)	(7)	$ 2	$ (1)	1	(6)	—	—	(6)	38	32
Net			(24)			2	(22)	(17)	—	(39)	$ 105	$ 66
Accumulated balance as at June 30, 2018			$ (36)			$ 6	$ (30)	$ 32	$ 1	$ 3		
Accumulated balance as at April 1, 2019			**$ (70)**			**$ 2**	**$ (68)**	**$ 28**	**$ —**	**$ (40)**		
Other comprehensive income (loss)												
Amount arising	**$ (36)**	**$ 54**	**18**	**$ (5)**	**$ 1**	**(4)**	**14**	**11**	**—**	**25**	**$ 16**	**$ 41**
Income taxes	**$ (4)**	**$ 9**	**5**	**$ (2)**	**$ 1**	**(1)**	**4**	**—**	**—**	**4**	**8**	**12**
Net			**13**			**(3)**	**10**	**11**	**—**	**21**	**$ 8**	**$ 29**
Accumulated balance as at June 30, 2019			**$ (57)**			**$ (1)**	**$ (58)**	**$ 39**	**$ —**	**$ (19)**		

Periods ended June 30 (millions)	Items that may subsequently be reclassified to income: Change in unrealized fair value of derivatives designated as cash flow hedges in current period (*Note 4(e)*): Derivatives used to manage currency risk: Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Derivatives used to manage other market risks: Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Total	Cumulative foreign currency translation adjustment	Item never reclassified to income: Change in measurement of investment financial assets	Accumulated other comp. income	Item never reclassified to income: Employee defined benefit plan re-measure-ments	Other comp. income
SIX-MONTH												
Accumulated balance as at January 1, 2018			$ (9)			$ 8	$ (1)	$ 53	$ 1	$ 53		
Other comprehensive income (loss)												
Amount arising	$ 77	$ (114)	(37)	$ (1)	$ (2)	(3)	(40)	(21)	—	(61)	$ 81	$ 20
Income taxes	$ 10	$ (20)	(10)	$ (1)	$ —	(1)	(11)	—	—	(11)	19	8
Net			(27)			(2)	(29)	(21)	—	(50)	$ 62	$ 12
Accumulated balance as at June 30, 2018			$ (36)			$ 6	$ (30)	$ 32	$ 1	$ 3		
Accumulated balance as at January 1, 2019												
As previously reported			$ (19)			$ —	$ (19)	$ 23	$ —	$ 4		
IFRS 16, *Leases* transitional amount (*Note 2(c)*)			—			—	—	(1)	—	(1)		
As adjusted			(19)			—	(19)	22	—	3		
Other comprehensive income (loss)												
Amount arising	**$ (166)**	**$ 114**	**(52)**	**$ 5**	**$ (6)**	**(1)**	**(53)**	**17**	**—**	**(36)**	**$ 49**	**$ 13**
Income taxes	**$ (32)**	**$ 18**	**(14)**	**$ 1**	**$ (1)**	**—**	**(14)**	**—**	**—**	**(14)**	**17**	**3**
Net			**(38)**			**(1)**	**(39)**	**17**	**—**	**(22)**	**$ 32**	**$ 10**
Accumulated balance as at June 30, 2019			**$ (57)**			**$ (1)**	**$ (58)**	**$ 39**	**$ —**	**$ (19)**		
Attributable to:												
Common Shares										**$ (17)**		
Non-controlling interests										**(2)**		
										$ (19)		

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 units.

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.

Periods ended June 30 (millions)	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Basic total weighted average number of Common Shares outstanding	**601**	596	**601**	595
Effect of dilutive securities				
Share option awards	**—**	—	**—**	—
Diluted total weighted average number of Common Shares outstanding	**601**	596	**601**	595

For the three-month and six-month periods ended June 30, 2019 and 2018, no outstanding TELUS Corporation share option awards were excluded in the calculation of diluted net income per Common Share.

13 dividends per share

(a) Dividends declared

Six-month periods ended June 30 (millions except per share amounts)	2019				2018			
	Declared		Paid to		Declared		Paid to	
Common Share dividends	Effective	Per share	shareholders	Total	Effective	Per share	shareholders	Total
Quarter 1 dividend	**Mar. 11, 2019**	**$ 0.5450**	**Apr. 1, 2019**	**$ 329**	Mar. 9, 2018	$ 0.5050	Apr. 2, 2018	$ 299
Quarter 2 dividend	**Jun. 10, 2019**	**0.5625**	**Jul. 2, 2019**	**339**	Jun. 8, 2018	0.5250	Jul. 3, 2018	315
		$ 1.1075		**$ 668**		$ 1.0300		$ 614

On August 1, 2019, the Board of Directors declared a quarterly dividend of $0.5625 per share on our issued and outstanding Common Shares payable on October 1, 2019, to holders of record at the close of business on September 10, 2019. The final amount of the dividend payment depends upon the number of Common Shares issued and outstanding at the close of business on September 10, 2019.

(b) Dividend Reinvestment and Share Purchase Plan

We have a Dividend Reinvestment and Share Purchase Plan under which eligible holders of Common Shares may acquire additional Common Shares by reinvesting dividends and by making additional optional cash payments to the trustee. Under this Plan, we have the option of offering Common Shares from Treasury or having the trustee acquire 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. Through August 2, 2019, we opted to have the trustee acquire the Common Shares in the stock market with no discount offered; effective with the dividend to be paid October 1, 2019, we will offer Common Shares from Treasury at a discount of 2%. In respect of Common Shares whose eligible shareholders have elected to participate in the plan, dividends declared during the three-month and six-month periods ended June 30, 2019, of $15 million (2018 – $14 million) and $28 million (2018 – $27 million), respectively, were to be reinvested in Common Shares acquired by the trustee from Treasury, with no discount applicable.

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:

Periods ended June 30 (millions)		2019			2018		
	Note	Employee benefits expense	Associated operating cash outflows	Statement of cash flows adjustment	Employe e benefits expense	Associated operating cash outflows	Statement of cash flows adjustment
THREE-MONTH							
Restricted share units	*(b)*	**$ 17**	**$ (1)**	**$ 16**	$ 34	$ 1	$ 35
Employee share purchase plan	*(c)*	**9**	**(9)**	**—**	9	(9)	—
Share option awards	*(d)*	**4**	**—**	**4**	—	—	—
		$ 30	**$ (10)**	**$ 20**	$ 43	$ (8)	$ 35

Periods ended June 30 (millions)		**2019**			2018		
	Note	Employee benefits expense	Associated operating cash outflows	Statement of cash flows adjustment	Employe e benefits expense	Associated operating cash outflows	Statement of cash flows adjustment
SIX-MONTH							
Restricted share units	*(b)*	**$ 40**	**$ (7)**	**$ 33**	$ 52	$ 1	$ 53
Employee share purchase plan	*(c)*	**18**	**(18)**	**—**	18	(18)	—
Share option awards	*(d)*	**6**	**—**	**6**	—	—	—
		$ 64	**$ (25)**	**$ 39**	$ 70	$ (17)	$ 53

For the three-month and six-month periods ended June 30, 2019, the associated operating cash outflows in respect of restricted share units were net of cash inflows arising from cash-settled equity forward agreements of $2 million (2018 – $2 million) and $3 million (2018 – $4 million), respectively. For the three-month and six-month periods ended June 30, 2019, the income tax benefit arising from share-based compensation was $8 million (2018 – $11 million) and $17 million (2018 – $18 million), respectively.

(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. 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 their expected manner of settlement when they are granted. Grants of restricted share units prior to fiscal 2019 are accounted for as liabilities as their 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 our 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 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.

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

Number of non-vested restricted share units as at	**June 30, 2019**	December 31, 2018
Restricted share units without market performance conditions		
Restricted share units with only service conditions	**2,920,895**	3,037,881
Notional subset affected by total customer connections performance condition	**159,264**	155,639
	3,080,159	3,193,520
Restricted share units with market performance conditions		
Notional subset affected by relative total shareholder return performance condition	**477,791**	466,917
	3,557,950	3,660,437

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

Periods ended June 30, 2019	Three months			Six months		
	Number of restricted share units [1]		Weighted average grant-date fair value	Number of restricted share units [1]		Weighted average grant-date fair value
	Non-vested	Vested		Non-vested	Vested	
Outstanding, beginning of period						
Non-vested	3,096,260	—	$ 44.86	3,193,520	—	$ 44.85
Vested	—	6,472	$ 44.45	—	63,383	$ 44.89
Issued						
Initial award [2]	—	—	$ —	2,222	—	$ 45.03
In lieu of dividends	34,109	68	$ 49.31	73,189	148	$ 47.02
Vested	(9,513)	9,513	$ 44.64	(104,800)	104,800	$ 43.98
Settled in cash	—	(9,900)	$ 44.63	—	(162,178)	$ 44.02
Forfeited and cancelled	(40,697)	—	$ 44.89	(83,972)	—	$ 44.87
Outstanding, end of period						
Non-vested	3,080,159	—	$ 44.86	3,080,159	—	$ 44.86
Vested	—	6,153	$ 44.47	—	6,153	$ 44.47

1 Excluding the notional subset of restricted share units affected by the relative total shareholder return performance condition.
2 Awards in 2019 are largely expected to be made during the three-month period ending September 30, 2019.

With respect to certain issuances of TELUS Corporation restricted share units, we have entered into cash-settled equity forward agreements that fix our cost; that information, as well as a schedule of non-vested TELUS Corporation restricted share units outstanding as at June 30, 2019, is set out in the following table.

Vesting in years ending December 31	Number of fixed-cost restricted share units	Our fixed cost per restricted share unit	Number of variable-cost restricted share units	Total number of non-vested restricted share units [1]
2019	1,439,418	$ 45.53	130,211	1,569,629
2020	1,369,272	$ 48.71	350,364	1,719,636
	2,808,690		480,575	3,289,265

1 Excluding the notional subset of restricted share units affected by the relative total shareholder return performance condition vesting in the years ending December 31, 2019.

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.

Periods ended June 30, 2019	Three months				Six months			
	US$ denominated		Canadian $ denominated		US$ denominated		Canadian $ denominated	
	Number of non-vested restricted share units	Weighted average grant-date fair value	Number of vested restricted share units	Weighted average grant-date fair value	Number of non-vested restricted share units	Weighted average grant-date fair value	Number of vested restricted share units	Weighted average grant-date fair value
Outstanding, beginning of period								
Non-vested	554,625	US$ 25.67	—	$ —	561,712	US$ 25.68	—	$ —
Vested	—	US$ —	—	$ —	—	US$ —	32,299	$ 21.36
Issued	92,355	US$ 27.81	—	$ —	92,355	US$ 27.81	—	$ —
Exercised	—	US$ —	—	$ —	—	US$ —	(32,299)	$ 21.36
Forfeited and cancelled	(1,387)	US$ 26.34	—	$ —	(8,474)	US$ 26.51	—	$ —
Outstanding, end of period	645,593	US$ 25.98	—	$ —	645,593	US$ 25.98	—	$ —

(c) Employee share purchase plan

We have an employee share purchase plan under which eligible employees up to a certain job classification can purchase our Common Shares through regular payroll deductions. In respect of Common Shares held within the employee share purchase plan, Common Share dividends declared during the three-month and six-month periods ended June 30, 2019, of $8 million (2018 – $9 million) and $17 million (2018 – $17 million), respectively, were to be reinvested in Common Shares acquired by the trustee from Treasury, with no discount applicable.

(d) Share option awards

TELUS Corporation share options

Employees may receive options to purchase 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. No share option awards were granted in fiscal 2019 or 2018.

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.

Periods ended June 30, 2019	Three months		Six months	
	Number of share options	Weighted average share option price	Number of share options	Weighted average share option price
Outstanding, beginning of period	196,800	$ 29.21	326,164	$ 29.22
Exercised [1]	**(191,822)**	**$ 29.17**	**(320,958)**	**$ 29.20**
Forfeited	**(228)**	**$ 29.18**	**(456)**	**$ 29.18**
Expired	**(2,260)**	**$ 29.18**	**(2,260)**	**$ 29.18**
Outstanding, end of period [2]	**2,490**	**$ 31.69**	**2,490**	**$ 31.69**

1 The total intrinsic value of share option awards exercised for the three-month and six-month periods ended June 30, 2019, was $4 million and $6 million, respectively, reflecting weighted average prices at the dates of exercise of $49.59 per share and $48.89 per share, respectively. The difference between the number of share options exercised and the number of Common Shares issued (as reflected in the Consolidated statements of changes in owners' equity) is the effect of our choosing to settle share option award exercises using the net-equity settlement feature.

2 All outstanding TELUS Corporation share options are vested, their price is $31.69 per share and their weighted average remaining contractual life is 0.1 year.

TELUS International (Cda) Inc. share options

Employees may receive equity share options (equity-settled) to purchase TELUS International (Cda) Inc. common 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. common 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.

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

Periods ended June 30, 2019	Three months				Six months			
	US$ denominated		Canadian $ denominated		US$ denominated		Canadian $ denominated	
	Number of share options	Weighted average share option price [1]	Number of share options	Share option price [2]	Number of share options	Weighted average share option price [1]	Number of share options	Share option price [2]
Outstanding, beginning and end of period	858,735	US$29.83	53,832	$ 21.36	858,735	US$29.83	53,832	$ 21.36

1 The range of share option prices is US$21.90 – US$40.26 per TELUS International (Cda) Inc. equity share and the weighted average remaining contractual life is 7.9 years.

2 The weighted average remaining contractual life is 7.1 years.

15 employee future benefits

(a) Defined benefit pension plans – details

Our defined benefit pension plan expense (recovery) was as follows:

Three-month periods ended June 30 (millions)	**2019**				2018			
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	**$ 18**	**$ —**	**$ —**	**$ 18**	$ 23	$ —	$ —	$ 23
Past service costs	**—**	**—**	**—**	**—**	—	—	—	—
Net interest; return on plan assets								
Interest expense arising from defined benefit obligations accrued	**—**	**83**	**—**	**83**	—	79	—	79
Return, including interest income, on plan assets [1]	**—**	**(86)**	**(131)**	**(217)**	—	(77)	(152)	(229)
Interest effect on asset ceiling limit	**—**	**3**	**—**	**3**	—	1	—	1
	—	**—**	**(131)**	**(131)**	—	3	(152)	(149)
Administrative fees	**1**	**—**	**—**	**1**	1	—	—	1
Changes in the effect of limiting net defined benefit assets to the asset ceiling	**—**	**—**	**115**	**115**	—	—	9	9
	$ 19	**$ —**	**$ (16)**	**$ 3**	$ 24	$ 3	$ (143)	$ (116)

Six-month periods ended June 30 (millions)	**2019**				2018			
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	**$ 36**	**$ —**	**$ —**	**$ 36**	$ 45	$ —	$ —	$ 45
Past service costs	**—**	**—**	**—**	**—**	1	—	—	1
Net interest; return on plan assets								
Interest expense arising from defined benefit obligations accrued	**—**	**167**	**—**	**167**	—	158	—	158
Return, including interest income, on plan assets [1]	**—**	**(172)**	**(490)**	**(662)**	—	(153)	(90)	(243)
Interest effect on asset ceiling limit	**—**	**5**	**—**	**5**	—	2	—	2
	—	**—**	**(490)**	**(490)**	—	7	(90)	(83)
Administrative fees	**3**	**—**	**—**	**3**	3	—	—	3
Changes in the effect of limiting net defined benefit assets to the asset ceiling	**—**	**—**	**441**	**441**	—	—	9	9
	$ 39	**$ —**	**$ (49)**	**$ (10)**	$ 49	$ 7	$ (81)	$ (25)

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.

(b) Defined contribution plans – expense

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

Periods ended June 30 (millions)	Three months **2019**	Three months 2018	Six months **2019**	Six months 2018
Union pension plan and public service pension plan contributions	**$ 5**	$ 5	**$ 11**	$ 11
Other defined contribution pension plans	**15**	15	**32**	33
	$ 20	$ 20	**$ 43**	$ 44

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, as well as significant litigation costs, in the context of losses or settlements, and adverse retrospective regulatory decisions.

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	
Periods ended June 30 (millions)	**2019**	2018	**2019**	2018	**2019**	2018
THREE-MONTH						
Goods and services purchased	**$ 7**	$ 7	**$ 1**	$ 3	**$ 8**	$ 10
Employee benefits expense	**19**	23	**2**	2	**21**	25
	$ 26	$ 30	**$ 3**	$ 5	**$ 29**	$ 35
SIX-MONTH						
Goods and services purchased	**$ 19**	$ 11	**$ 7**	$ 4	**$ 26**	$ 15
Employee benefits expense	**34**	51	**5**	3	**39**	54
	$ 53	$ 62	**$ 12**	$ 7	**$ 65**	$ 69

(b) Restructuring provisions

Employee-related provisions and other provisions, as presented in *Note 25,* include amounts in respect of restructuring activities. In 2019, restructuring activities included ongoing and incremental efficiency initiatives, including 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 three-month and six-month periods ended June 30, 2019, 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.

17 property, plant and equipment

		Owned assets						Right-of-use lease assets (*Note 19*)				
(millions)	Note	Network assets	Buildings and leasehold improvements	Other	Land	Assets under construction	Total	Network assets	Real estate	Other	Total	Total
AT COST												
As at January 1, 2019												
As previously reported		$ 29,956	$ 3,273	$ 1,174	$ 48	$ 779	$ 35,230	$ —	$ —	$ —	$ —	$ 35,230
IFRS 16, *Leases* transitional amount	2(c)	—	—	—	—	—	—	—	1,011	30	1,041	1,041
Reclassification arising from implementation of IFRS 16		(101)	—	(1)	—	—	(102)	101	—	1	102	—
As adjusted		29,855	3,273	1,173	48	779	35,128	101	1,011	31	1,143	36,271
Additions		**445**	**15**	**67**	**—**	**598**	**1,125**	**71**	**156**	**5**	**232**	**1,357**
Additions arising from business acquisitions	18(b)	**36**	**—**	**3**	**—**	**—**	**39**	**—**	**4**	**—**	**4**	**43**
Dispositions, retirements and other		**(447)**	**(91)**	**(40)**	**—**	**—**	**(578)**	**(1)**	**(5)**	**—**	**(6)**	**(584)**
Assets under construction put into service		**517**	**44**	**50**	**—**	**(611)**	**—**	**—**	**—**	**—**	**—**	**—**
Net foreign exchange differences		**—**	**—**	**—**	**—**	**—**	**—**	**—**	**(8)**	**—**	**(8)**	**(8)**
As at June 30, 2019		**$ 30,406**	**$ 3,241**	**$ 1,253**	**$ 48**	**$ 766**	**$ 35,714**	**$ 171**	**$ 1,158**	**$ 36**	**$ 1,365**	**$ 37,079**
ACCUMULATED DEPRECIATION												
As at January 1, 2019												
As previously reported		$ 20,300	$ 2,050	$ 789	$ —	$ —	$ 23,139	$ —	$ —	$ —	$ —	$ 23,139
Reclassification arising from implementation of IFRS 16		(1)	—	—	—	—	(1)	1	—	—	1	—
As adjusted		20,299	2,050	789	—	—	23,138	1	—	—	1	23,139
Depreciation [1]		**721**	**59**	**62**	**—**	**—**	**842**	**4**	**89**	**5**	**98**	**940**
Dispositions, retirements and other		**(436)**	**(88)**	**(29)**	**—**	**—**	**(553)**	**—**	**—**	**4**	**4**	**(549)**
As at June 30, 2019		**$ 20,584**	**$ 2,021**	**$ 822**	**$ —**	**$ —**	**$ 23,427**	**$ 5**	**$ 89**	**$ 9**	**$ 103**	**$ 23,530**
NET BOOK VALUE												
As at December 31, 2018		$ 9,656	$ 1,223	$ 385	$ 48	$ 779	$ 12,091	$ —	$ —	$ —	$ —	$ 12,091
As at June 30, 2019		**$ 9,822**	**$ 1,220**	**$ 431**	**$ 48**	**$ 766**	**$ 12,287**	**$ 166**	**$ 1,069**	**$ 27**	**$ 1,262**	**$ 13,549**

1 For the six-month period ended June 30, 2019, deprecation includes $5 in respect of impairment of real estate right-of-use lease assets.

As at June 30, 2019, our contractual commitments for the acquisition of property, plant and equipment totalled $165 million over a period ending December 31, 2022 (December 31, 2018 – $177 million over a period ending December 31, 2022).

18 intangible assets and goodwill

(a) Intangible assets and goodwill, net

	Intangible assets subject to amortization					Intangible assets with indefinite lives			
(millions)	Customer contracts, related customer relationships and subscriber base [1]	Software	Access to rights-of-way and other	Assets under construction	Total	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	**—**	**27**	**6**	**266**	**299**	**931**	**1,230**	**—**	**1,230**
Additions arising from business acquisitions *(b)*	**62**	**49**	**—**	**—**	**111**	**—**	**111**	**170**	**281**
Dispositions, retirements and other (including capitalized interest (see *Note 9*))	**(5)**	**(126)**	**(1)**	**—**	**(132)**	**4**	**(128)**	**(3)**	**(131)**
Assets under construction put into service	**—**	**334**	**—**	**(334)**	**—**	**—**	**—**	**—**	**—**
Net foreign exchange differences	**(6)**	**—**	**—**	**—**	**(6)**	**—**	**(6)**	**(26)**	**(32)**
As at June 30, 2019	**$ 667**	**$ 5,376**	**$ 108**	**$ 273**	**$ 6,424**	**$ 9,629**	**$ 16,053**	**$ 5,252**	**$ 21,305**
ACCUMULATED AMORTIZATION									
As at January 1, 2019	$ 226	$ 3,621	$ 65	$ —	$ 3,912	$ —	$ 3,912	$ 364	$ 4,276
Amortization	**28**	**280**	**2**	**—**	**310**	**—**	**310**	**—**	**310**
Dispositions, retirements and other	**(8)**	**(125)**	**(1)**	**—**	**(134)**	**—**	**(134)**	**—**	**(134)**
As at June 30, 2019	**$ 246**	**$ 3,776**	**$ 66**	**$ —**	**$ 4,088**	**$ —**	**$ 4,088**	**$ 364**	**$ 4,452**
NET BOOK VALUE									
As at December 31, 2018	$ 390	$ 1,471	$ 38	$ 341	$ 2,240	$ 8,694	$ 10,934	$ 4,747	$ 15,681
As at June 30, 2019	**$ 421**	**$ 1,600**	**$ 42**	**$ 273**	**$ 2,336**	**$ 9,629**	**$ 11,965**	**$ 4,888**	**$ 16,853**

1 The opening balances of customer contracts, related customer relationships and subscriber base, and goodwill, 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 June 30, 2019, our contractual commitments for the acquisition of intangible assets totalled $28 million over a period ending December 31, 2021 (December 31, 2018 – $59 million over a period ending December 31, 2021).

Innovation, Science and Economic Development Canada's 600 MHz auction occurred during the period from March 14, 2019, through April 4, 2019. We were the successful auction participant on 12 spectrum licences for a total purchase price of $931 million.

TELUS

(b) Business acquisitions

See *Note 2(b)* for changes to IFRS-IASB which are not yet effective and have not yet been applied.

Telecommunications business

On January 14, 2019, we acquired a telecommunications business complementary to our existing lines of business, for consideration consisting of cash and accounts payable and accrued liabilities of $74 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.

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 is expected to be deductible for income tax purposes.

Individually immaterial transactions

During the six-month period ended June 30, 2019, 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:

	Telecommunications business	Individually immaterial transactions	Total [1]
Assets			
Current assets			
Cash	$ 2	$ 4	$ 6
Accounts receivable [2]	5	7	12
Other	1	3	4
	8	14	22
Non-current assets			
Property, plant and equipment			
Owned assets	6	33	39
Right-of-use lease assets	2	2	4
Intangible assets subject to amortization [3]	35	76	111
	43	111	154
Total identifiable assets acquired	51	125	176
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	19	9	28
Advance billings and customer deposits	4	2	6
	23	11	34
Non-current liabilities			
Long-term debt	2	2	4
Deferred income taxes	5	5	10
	7	7	14
Total liabilities assumed	30	18	48
Net identifiable assets acquired	21	107	128
Goodwill	91	79	170
Net assets acquired	$ 112	$ 186	$ 298
Acquisition effected by way of:			
Cash consideration	$ 62	$ 129	$ 191
Accounts payable and accrued liabilities	12	13	25
Issue of TELUS Corporation Common Shares	38	34	72
Pre-existing relationship effectively settled	—	10	10
	$ 112	$ 186	$ 298

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 years; software is expected to be amortized over a period of 5 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 2019 year.

	Three months		Six months	
Periods ended June 30, 2019 (millions except per share amounts)	As reported [1]	Pro forma [2]	As reported [1]	Pro forma [2]
Operating revenues	$ 3,597	$ 3,599	$ 7,103	$ 7,117
Net income	$ 520	$ 520	$ 957	$ 953
Net income per Common Share				
Basic	$ 0.86	$ 0.86	$ 1.57	$ 1.57
Diluted	$ 0.86	$ 0.86	$ 1.57	$ 1.57

1 Operating revenues and net income for the three-month period ended June 30, 2019, include $10 and $2, respectively, in respect of the telecommunications business. Operating revenues and net income for the six-month period ended June 30, 2019, include $19 and $4, respectively, in respect of the telecommunications business.
2 Pro forma amounts for the three-month and six-month periods ended June 30, 2019, 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 periods 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 acquisition – prior period

In 2018, we acquired Medisys Health Group Inc., a business complementary to our existing lines of healthcare business. As at December 31, 2018, the purchase price allocation had not been finalized. During the six-month period ended June 30, 2019, preliminary acquisition-date values assigned for customer relationships, goodwill, advance billings and customer deposits, other long-term liabilities and deferred incomes taxes were increased (decreased) by $(22 million), $14 million, $3 million, $(7 million) and $(4 million), respectively; as required by IFRS-IASB, comparative amounts have been adjusted so as to reflect those increases effective the acquisition date.

19 leases

See *Note 2(a)* for details of significant changes to IFRS-IASB which have been applied effective January 1, 2019.

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 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 to 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 currently represent our variable lease payments. As well, we routinely and necessarily will commit to leases which 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 which we, as lessor, account for as operating leases.

Maturity analyses of lease liabilities are set out in *Note 4(b)* and *Note 26(g)*; the period interest expense in respect thereof is set out in *Note 9*. The additions to, the depreciation charges for, and the carrying amount 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.

Periods ended June 30 (millions)	Three months **2019**	Three months 2018	Six months **2019**	Six months 2018
Income from subleasing right-of-use lease assets				
Co-location sublet revenue included in operating service revenues	**$ 4**	$ 4	**$ 9**	$ 9
Lease payments	**$ 81**	$ 68	**$ 184**	$ 136

20 other long-term assets

As at (millions)	*Note*	**June 30, 2019**	December 31, 2018
Pension assets		**$ 503**	$ 503
Costs incurred to obtain or fulfill a contract with a customer		**105**	110
Portfolio investments [1]		**70**	70
Prepaid maintenance		**45**	55
Real estate joint venture advances	*21(c)*	**86**	69
Real estate joint ventures	*21(c)*	**5**	5
Derivative assets	*4(d)*	**2**	54
Other		**103**	120
		$ 919	$ 986

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:

Periods ended June 30, 2019 (millions)	Three months			Six months		
	Costs incurred to			Costs incurred to		
	Obtain contracts with customers	Fulfill contracts with customers	Total	Obtain contracts with customers	Fulfill contracts with customers	Total
Balance, beginning of period	$ 342	$ 15	$ 357	$ 356	$ 15	$ 371
Additions	70	1	71	131	2	133
Amortization	(75)	(1)	(76)	(150)	(2)	(152)
Balance, end of period	$ 337	$ 15	$ 352	$ 337	$ 15	$ 352
Current [1]				$ 242	$ 5	$ 247
Non-current				95	10	105
				$ 337	$ 15	$ 352

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

21 real estate joint ventures

(a) General

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, scheduled for completion in 2019, is to be built to the LEED Platinum standard.

In 2011, we partnered, as equals, with an arm's-length party in a residential condominium, retail and commercial real estate redevelopment project, TELUS Garden, in Vancouver, British Columbia. TELUS is a tenant in TELUS Garden, which is now our global headquarters. During the year ended December 31, 2018, the real estate joint venture sold the income-producing properties and the related net assets.

(b) Real estate joint ventures – summarized financial information

As at (millions)	June 30, 2019	December 31, 2018
ASSETS		
Current assets		
Cash and temporary investments, net	$ **5**	$ 11
Escrowed deposits	**—**	4
Other	**5**	2
	10	17
Non-current assets		
Investment property under development	**306**	256
	$ **316**	$ 273

As at (millions)	June 30, 2019	December 31, 2018
LIABILITIES AND OWNERS' EQUITY		
Current liabilities		
Accounts payable and accrued liabilities	$ **12**	$ 19
Construction holdback liabilities	**14**	15
Construction credit facilities	**258**	—
	284	34
Non-current liabilities		
Construction credit facilities	**—**	207
	—	241
Owners' equity		
TELUS [1]	**13**	13
Other partners	**19**	19
	32	32
	$ **316**	$ 273

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.

Periods ended June 30 (millions)	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Revenue – from investment property	$ **—**	$ 8	$ **—**	$ 16
Depreciation and amortization	$ **—**	$ 2	$ **—**	$ 4
Interest expense [1]	$ **—**	$ 2	$ **—**	$ 4
Net income and comprehensive income [2]	$ **—**	$ (3)	$ **(1)**	$ (2)

1 During the three-month and six-month periods ended June 30, 2019, the real estate joint ventures capitalized $3 (2018 – $2) and $6 (2018 – $4), respectively, 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.

(c) Our real estate joint ventures activity

Our real estate joint ventures investment activity is set out in the following table.

Three-month periods ended June 30 (millions)	2019 Loans and receivables [1]	2019 Equity [2]	2019 Total	2018 Loans and receivables [1]	2018 Equity [2]	2018 Total
Related to real estate joint ventures' statements of income and other comprehensive income						
Comprehensive income attributable to us	$ **—**	$ **—**	$ **—**	$ —	$ (1)	$ (1)
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 and other *(Note 7)*	**1**	**—**	**1**	—	—	—
Cash flows in the current reporting period						
Construction credit facilities						
Amounts advanced	**9**	**—**	**9**	7	—	7
Financing costs paid to us	**(1)**	**—**	**(1)**	—	—	—
Funds repaid to us and earnings distributed	**—**	**—**	**—**	—	(1)	(1)
Net increase	**9**	**—**	**9**	7	(2)	5
Real estate joint ventures carrying amounts						
Balance, beginning of period	**77**	**5**	**82**	53	15	68
Balance, end of period	$ **86**	$ **5**	$ **91**	$ 60	$ 13	$ 73

TELUS

Six-month periods ended June 30 (millions)	2019			2018		
	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 attributable to us	**$ —**	**$ —**	**$ —**	$ —	$ (1)	$ (1)
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 and other *(Note 7)*	**2**	**—**	**2**	1	—	1
Cash flows in the current reporting period						
Construction credit facilities						
Amounts advanced	**17**	**—**	**17**	13	—	13
Financing costs paid to us	**(2)**	**—**	**(2)**	(1)	—	(1)
Funds repaid to us and earnings distributed	**—**	**—**	**—**	—	(1)	(1)
Net increase	**17**	**—**	**17**	13	(2)	11
Real estate joint ventures carrying amounts						
Balance, beginning of period	**69**	**5**	**74**	47	15	62
Balance, end of period	**$ 86**	**$ 5**	**$ 91**	$ 60	$ 13	$ 73

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 (see *(d)*).
2 We account for our interests in the real estate joint ventures using the equity method of accounting.

Prior to the sale of the TELUS Garden income-producing properties, during the three-month and six-month periods ended June 30, 2018, the TELUS Garden real estate joint venture recognized $3 million and $6 million, respectively, of revenue from our TELUS Garden office tenancy; of this amount, one-half was due to our economic interest in the real estate joint venture and one-half was due to our partner's economic interest in the real estate joint venture. 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.

(d) Commitments and contingent liabilities

Construction commitments

The TELUS Sky real estate joint venture is expected to spend a total of approximately $450 million (December 31, 2018 – $400 million) on the construction of a mixed-use tower. As at June 30, 2019, the real estate joint venture's construction-related contractual commitments were approximately $25 million through to 2020 (December 31, 2018 – $35 million through to 2019).

Construction credit facilities

The TELUS Sky real estate joint venture has a credit agreement, maturing August 31, 2019, with three 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 credit agreement is expected to be extended in August 2019 for an amount not materially more than that currently advanced. 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 (millions)	Note	June 30, 2019	December 31, 2018
Construction credit facilities commitment – TELUS Corporation			
Undrawn	*4(b)*	**$ 28**	$ 45
Advances		**86**	69
		114	114
Construction credit facilities commitment – other		**228**	228
		$ 342	$ 342

TELUS

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 (December 31, 2018 – $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 (December 31, 2018 – 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 June 30, 2019, we had sold to the trust (but continued to recognize) trade receivables of $126 million (December 31, 2018 – $120 million). Short-term borrowings of $100 million (December 31, 2018 – $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 (millions)	**June 30, 2019**	December 31, 2018
Accrued liabilities	**$ 1,111**	$ 1,159
Payroll and other employee-related liabilities	**404**	429
Restricted share units liability	**94**	72
	1,609	1,660
Trade accounts payable	**933**	686
Interest payable	**167**	157
Other	**88**	67
	$ 2,797	$ 2,570

24 advance billings and customer deposits

As at (millions)	**June 30, 2019**	December 31, 2018
Advance billings	**$ 550**	$ 538
Deferred customer activation and connection fees	**9**	10
Customer deposits	**13**	13
Contract liabilities	**572**	561
Other	**93**	95
	$ 665	$ 656

Contract liabilities represent our future performance obligations to customers in respect of services and/or equipment and 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:

Periods ended June 30 (millions)	Note	Three months 2019	Three months 2018	Six months 2019	Six months 2018
Balance, beginning of period		**$ 814**	$ 788	**$ 811**	$ 780
Revenue deferred in previous period and recognized in current period		**(642)**	(637)	**(647)**	(689)
Net additions arising from operations		**638**	628	**641**	686
Additions arising from business acquisitions	*18(b)*	**1**	1	**6**	3
Balance, end of period		**$ 811**	$ 780	**$ 811**	$ 780
Current				**$ 732**	$ 691
Non-current	*27*				
Deferred revenues				**65**	72
Deferred customer activation and connection fees				**14**	17
				$ 811	$ 780
Reconciliation of contract liabilities presented in the consolidated statements of financial position – current					
Gross contract liabilities				**$ 732**	$ 691
Reclassification to contract assets for contracts with contract liabilities less than contract assets				**(155)**	(142)
Reclassification from contract assets for contracts with contract assets less than contract liabilities				**(5)**	(5)
				$ 572	$ 544

25 provisions

(millions)	Note	Asset retirement obligation	Employee-related	Written put options	Other	Total
As at April 1, 2019		$ 338	$ 57	$ 277	$ 91	$ 763
Additions		**—**	**19**	**—**	**24**	**43**
Reversal		**—**	**—**	**(1)**	**—**	**(1)**
Use		**(1)**	**(15)**	**—**	**(7)**	**(23)**
Interest effect		**2**	**—**	**3**	**—**	**5**
Effects of foreign exchange, net		**—**	**—**	**(4)**	**—**	**(4)**
As at June 30, 2019		**$ 339**	**$ 61**	**$ 275**	**$ 108**	**$ 783**
As at January 1, 2019						
As previously reported		$ 336	$ 88	$ 290	$ 143	$ 857
IFRS 16, *Leases* transitional amount	*2(c)*	—	—	—	(57)	(57)
As adjusted		336	88	290	86	800
Additions		**—**	**35**	**—**	**45**	**80**
Reversal		**—**	**—**	**(3)**	**(1)**	**(4)**
Use		**(2)**	**(62)**	**(7)**	**(22)**	**(93)**
Interest effect		**5**	**—**	**6**	**—**	**11**
Effects of foreign exchange, net		**—**	**—**	**(11)**	**—**	**(11)**
As at June 30, 2019		**$ 339**	**$ 61**	**$ 275**	**$ 108**	**$ 783**
Current		**$ 6**	**$ 56**	**$ —**	**$ 31**	**$ 93**
Non-current		**333**	**5**	**275**	**77**	**690**
As at June 30, 2019		**$ 339**	**$ 61**	**$ 275**	**$ 108**	**$ 783**

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

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. No cash outflows for the written put options are expected prior to their initial exercisability in 2020.

Other
The provisions for other include: legal claims; non-employee-related restructuring activities; and contract termination costs and onerous contracts related to business acquisitions. 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 (millions)	*Note*	**June 30, 2019**	December 31, 2018
TELUS Corporation notes	*(b)*	**$ 13,715**	$ 12,186
TELUS Corporation commercial paper	*(c)*	**293**	774
TELUS Communications Inc. debentures		**621**	620
TELUS International (Cda) Inc. credit facility	*(e)*	**396**	419
		15,025	13,999
Lease liabilities	*(f)*	**1,554**	102
Long-term debt		**$ 16,579**	$ 14,101
Current		**$ 1,564**	$ 836
Non-current		**15,015**	13,265
Long-term debt		**$ 16,579**	$ 14,101

(b) TELUS Corporation 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.

					Principal face amount		Redemption present value spread	
Series [1]	Issued	Maturity	Issue price	Effective interest rate [2]	Originally issued	Outstanding at financial statement date	Basis points	Cessation date
5.05% Notes, Series CH	July 2010	July 2020 [3]	$997.44	5.08%	$1.0 billion	$1.0 billion	47 [4]	N/A
3.35% Notes, Series CJ	December 2012	March 2023	$998.83	3.36%	$500 million	$500 million	40 [5]	Dec. 15, 2022
3.35% Notes, Series CK	April 2013	April 2024	$994.35	3.41%	$1.1 billion	$1.1 billion	36 [5]	Jan. 2, 2024
4.40% Notes, Series CL	April 2013	April 2043	$997.68	4.41%	$600 million	$600 million	47 [5]	Oct. 1, 2042
3.60% Notes, Series CM	November 2013	January 2021	$997.15	3.65%	$400 million	$400 million	35 [5]	N/A
5.15% Notes, Series CN	November 2013	November 2043	$995.00	5.18%	$400 million	$400 million	50 [5]	May 26, 2043
3.20% Notes, Series CO	April 2014	April 2021	$997.39	3.24%	$500 million	$500 million	30 [5]	Mar. 5, 2021
4.85% Notes, Series CP	Multiple [6]	April 2044	$987.91 [6]	4.93% [6]	$500 million [6]	$900 million [6]	46 [5]	Oct. 5, 2043
3.75% Notes, Series CQ	September 2014	January 2025	$997.75	3.78%	$800 million	$800 million	38.5 [5]	Oct. 17, 2024
4.75% Notes, Series CR	September 2014	January 2045	$992.91	4.80%	$400 million	$400 million	51.5 [5]	July 17, 2044
2.35% Notes, Series CT	March 2015	March 2022	$997.31	2.39%	$1.0 billion	$1.0 billion	35.5 [5]	Feb. 28, 2022
4.40% Notes, Series CU	March 2015	January 2046	$999.72	4.40%	$500 million	$500 million	60.5 [5]	July 29, 2045
3.75% Notes, Series CV	December 2015	March 2026	$992.14	3.84%	$600 million	$600 million	53.5 [5]	Dec. 10, 2025
2.80% U.S. Dollar Notes [7]	September 2016	February 2027	US$991.89	2.89%	US$600 million	US$600 million	20 [8]	Nov. 16, 2026
3.70% U.S. Dollar Notes [9]	March 2017	September 2027	US$998.95	3.71%	US$500 million	US$500 million	20 [8]	June 15, 2027
4.70% Notes, Series CW	Multiple [10]	March 2048	$998.06 [10]	4.71% [10]	$325 million [10]	$475 million [10]	58.5 [5]	Sept. 6, 2047
3.625% Notes, Series CX	February 2018	March 2028	$989.49	3.75%	$600 million	$600 million	37 [5]	Dec. 1, 2027
4.60% U.S. Dollar Notes [11]	June 2018	November 2048	US$987.60	4.68%	US$750 million	US$750 million	25 [8]	May 16, 2048

					Principal face amount		Redemption present value spread	
Series [1]	Issued	Maturity	Issue price	Effective interest rate [2]	Originally issued	Outstanding at financial statement date	Basis points	Cessation date
3.30% Notes, Series CY	April 2019	May 2029	$991.75	3.40%	$1.0 billion	$1.0 billion	43.5 [5]	Feb. 2, 2029
4.30% U.S. Dollar Notes [12]	May 2019	June 2049	US$990.48	4.36%	US$500 million	US$500 million	25 [8]	Dec. 15, 2048
2.75% Notes, Series CZ	July 2019 [13]	July 2026	$998.73	2.77%	$800 million	$NIL	33 [5]	May 8, 2026

1 Interest is payable semi-annually. The notes require us to make an offer to repurchase the notes 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.
2 The effective interest rate is that which the notes would yield to an initial debt holder if held to maturity.
3 On May 31, 2019, we exercised our right to early redeem, on July 23, 2019, $650 million of our 5.05% Notes, Series CH. On July 3, 2019, we exercised our right to early redeem, on August 7, 2019, the remaining $350 million not called for redemption on May 31, 2019. The long-term debt prepayment premium will be recorded in the three-month period ended September 30, 2019, and is estimated to be approximately $30 million before income taxes.
4 The notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 and not more than 60 days' prior notice. 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, 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.
5 At any time prior to the respective maturity dates set out in the table, the notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 and not more than 60 days' prior notice. 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 and Series CZ 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. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption. On or after the respective redemption present value spread cessation dates set out in the table, the notes are redeemable at our option, in whole but not in part, on not fewer than 30 and not more than 60 days' prior notice, at redemption prices equal to 100% of the principal amounts 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 We have entered into a foreign exchange derivative (a cross currency interest rate exchange agreement) that effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 2.95% and an issued and outstanding amount of $792 million (reflecting a fixed exchange rate of $1.3205).
8 At any time prior to the respective maturity dates set out in the table, the notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 and not more than 60 days' prior notice. 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. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption. On or after the respective redemption present value spread cessation dates set out in the table, the notes are redeemable at our option, in whole but not in part, on not fewer than 30 and not more than 60 days' prior notice, at redemption prices equal to 100% of the principal amounts thereof.
9 We have entered into a foreign exchange derivative (a cross currency interest rate exchange agreement) that effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 3.41% and an issued and outstanding amount of $667 million (reflecting a fixed exchange rate of $1.3348).
10 $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%.
11 We have entered into a foreign exchange derivative (a cross currency interest rate exchange agreement) that effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 4.41% and an issued and outstanding amount of $974 million (reflecting a fixed exchange rate of $1.2985).
12 We have entered into a foreign exchange derivative (a cross currency interest rate exchange agreement) that effectively converted the principal payments and interest obligations to Canadian dollar obligations with a fixed interest rate of 4.27% and an issued and outstanding amount of $672 million (reflecting a fixed exchange rate of $1.3435).
13 Issued subsequent to the statement of financial position date and prior to the date of issuance of these condensed interim consolidated financial statements.

(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 (December 31, 2018 – $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 June 30, 2019, we had $293 million of commercial paper outstanding, all of which was denominated in U.S. dollars (US$224 million), with an effective weighted average interest rate of 2.80%, maturing through October 2019.

(d) TELUS Corporation credit facility

As at June 30, 2019, TELUS Corporation had an unsecured revolving $2.25 billion bank credit facility, expiring on May 31, 2023 (December 31, 2018 – 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.

TELUS Corporation's 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. These tests are that our net debt to operating cash flow ratio must not exceed 4.00:1.00 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 TELUS Corporation's credit facility is not contingent upon TELUS Corporation maintaining a specific credit rating.

As at (millions)	**June 30, 2019**	December 31, 2018
Net available	**$ 1,957**	$ 1,476
Backstop of commercial paper	**293**	774
Gross available	**$ 2,250**	$ 2,250

We had $182 million of letters of credit outstanding as at June 30, 2019 (December 31, 2018 – $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. We had arranged $880 million of incremental letters of credit to allow us to participate in Innovation, Science and Economic Development Canada's 600 MHz wireless spectrum auction that was held in March-April 2019, as discussed further in *Note 18(a)*. Concurrent with funding the purchase of the spectrum licences these incremental letters of credit were extinguished.

(e) TELUS International (Cda) Inc. credit facility

As at June 30, 2019, TELUS International (Cda) Inc. had a bank credit facility, secured by its assets, expiring on December 20, 2022, with a syndicate of financial institutions. The credit facility is comprised of a US$350 million (December 31, 2018 – US$350 million) revolving component and an amortizing US$120 million (December 31, 2018 – US$120 million) term loan component. The credit facility is non-recourse to TELUS Corporation. The outstanding revolving component had a weighted average interest rate of 3.83% as at June 30, 2019.

As at (millions)	**June 30, 2019**			December 31, 2018		
	Revolving component	Term loan component [1]	Total	Revolving component	Term loan component	Total
Available	**US$ 153**	**US$ N/A**	**US$ 153**	US$ 150	US$ N/A	US$ 150
Outstanding	**197**	**110**	**307**	200	113	313
	US$ 350	**US$ 110**	**US$ 460**	US$ 350	US$ 113	US$ 463

1 We have entered into a receive-floating interest rate, pay-fixed interest rate exchange agreement that effectively converts our interest obligations on the debt to a fixed rate of 2.64%.

TELUS International (Cda) Inc.'s 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. These tests are that TELUS International (Cda) Inc.'s net debt to operating cash flow ratio must not exceed 3.25:1.00 and its 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 is 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.

(f) Lease liabilities

See *Note 2(a)* for details of significant changes to IFRS-IASB which have been applied effective January 1, 2019.

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 4.59% as at June 30, 2019.

(g) Long-term debt maturities

Anticipated requirements to meet long-term debt repayments, calculated upon such long-term debts owing as at June 30, 2019, are as follows:

Composite long-term debt denominated in	Canadian dollars			U.S. dollars					Other currencies	
						Currency swap agreement amounts to be exchanged				
Years ending December 31 (millions)	Long-term debt, excluding leases	Leases *(Note 19)*	Total	Long-term debt, excluding leases	Leases *(Note 19)*	(Receive) [1]	Pay	Total	Leases *(Note 19)*	Total
2019 (remainder of year)	**$ 1,000**	**$ 118**	**$ 1,118**	**$ 297**	**$ 8**	**$ (295)**	**$ 296**	**$ 306**	**$ 13**	**$ 1,437**
2020	**—**	**225**	**225**	**8**	**16**	**—**	**—**	**24**	**29**	**278**
2021	**1,075**	**146**	**1,221**	**8**	**16**	**—**	**—**	**24**	**27**	**1,272**
2022	**1,249**	**115**	**1,364**	**381**	**15**	**—**	**—**	**396**	**19**	**1,779**
2023	**500**	**103**	**603**	**—**	**14**	**—**	**—**	**14**	**19**	**636**
2024-2028	**3,301**	**305**	**3,606**	**1,439**	**3**	**(1,439)**	**1,459**	**1,462**	**52**	**5,120**
Thereafter	**4,275**	**290**	**4,565**	**1,636**	**—**	**(1,636)**	**1,646**	**1,646**	**20**	**6,231**
Future cash outflows in respect of composite long-term debt principal repayments	**11,400**	**1,302**	**12,702**	**3,769**	**72**	**(3,370)**	**3,401**	**3,872**	**179**	**16,753**
Future cash outflows in respect of associated interest and like carrying costs [2]	**5,463**	**397**	**5,860**	**2,615**	**14**	**(2,558)**	**2,510**	**2,581**	**54**	**8,495**
Undiscounted contractual maturities (*Note 4(b)*)	**$ 16,863**	**$ 1,699**	**$ 18,562**	**$ 6,384**	**$ 86**	**$ (5,928)**	**$ 5,911**	**$ 6,453**	**$ 233**	**$ 25,248**

1 Where applicable cash flows reflect foreign exchange rates as at June 30, 2019.

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 June 30, 2019.

27 other long-term liabilities

As at (millions)	*Note*	**June 30, 2019**	December 31, 2018
Contract liabilities	*24*	**$ 65**	$ 78
Other		**8**	7
Deferred revenues		**73**	85
Pension benefit liabilities		**408**	446
Other post-employment benefit liabilities		**47**	45
Restricted share unit and deferred share unit liabilities		**85**	63
Derivative liabilities	*4(d)*	**94**	6
Other		**17**	71
		724	716
Deferred customer activation and connection fees	*24*	**14**	15
		$ 738	$ 731

28 Common Share capital

(a) General

Our authorized share capital is as follows:

As at	**June 30, 2019**	December 31, 2018
First Preferred Shares	**1 billion**	1 billion
Second Preferred Shares	**1 billion**	1 billion
Common Shares	**2 billion**	2 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 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 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.

As at June 30, 2019, approximately 12 million Common Shares were reserved for issuance, from Treasury, under a restricted share unit plan (see *Note 14(b)*) and approximately 47 million Common Shares were reserved for issuance, from Treasury, under a share option plan (see *Note 14(d)*).

(b) Purchase of 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 2018, we received approval for a normal course issuer bid to purchase and cancel up to 8 million of our Common Shares (up to a maximum amount of $250 million) from January 2, 2019, to January 1, 2020.

29 contingent liabilities

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.

Electromagnetic field radiation class action
In 2013 a class action was brought in British Columbia against us, other telecommunications carriers, and cellular telephone manufacturers alleging that prolonged usage of cellular telephones causes adverse health effects. The British Columbia class action alleges: strict liability; negligence; failure to warn; breach of warranty; breach of competition, consumer protection and trade practices legislation; negligent misrepresentation; breach of a duty not to market the products in question; and waiver of tort. Certification of a national class is sought. On March 18, 2019, pursuant to terms of settlement, the Plaintiffs filed a Notice of Discontinuance discontinuing their claim against all defendants.

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 thirty days to appeal.

Intellectual property infringement claims
Claims and possible claims received by us include:

4G LTE network patent infringement claim
A patent infringement claim was filed in Ontario in 2016 alleging that communications between devices, including cellular telephones, and base stations on our 4G LTE network infringe three third-party patents. The Plaintiff has since abandoned its claims in respect of two of the three patents. The claims based on the third patent are set to be tried in the fourth quarter of 2019.

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.

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.

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:

	Three months		Six months	
Periods ended June 30 (millions)	**2019**	2018	**2019**	2018
Short-term benefits	**$ 2**	$ 3	**$ 5**	$ 6
Post-employment pension [1] and other benefits	**1**	3	**2**	4
Share-based compensation [2]	**5**	21	**20**	24
	$ 8	$ 27	**$ 27**	$ 34

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 For the three-month and six-month periods ended June 30, 2019, share-based compensation expense is net of $NIL (2018 – $1) and $2 (2018 – $NIL) , respectively, of the effects of derivatives used to manage share-based compensation costs (*Note 14(b)*).

As disclosed in *Note 14*, we made initial awards of share-based compensation in 2018, including, as set out in the following table, to our key management personnel; awards in 2019 are expected to be made during the three-month period ending September 30, 2019. 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 2018 initial awards are included in the amounts in the table above.

Six-month periods ended June 30	**2019**			2018		
($ 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	**—**	**$ —**	**$ —**	608,849	$ 28	$ 36

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)*).

The liability amounts accrued for share-based compensation awards to key management personnel are as follows:

As at (millions)	**June 30, 2019**	December 31, 2018
Restricted share units	**$ 56**	$ 41
Deferred share units [1]	**22**	21
	$ 78	$ 62

1 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, Common Shares or cash. Deferred share units entitle directors to a specified number of, or a cash payment based on the value of, our Common Shares. Deferred share units are paid out when a director ceases to be a director, for any reason, at a time elected by the director in accordance with the *Directors' Deferred Share Unit Plan*; during the three-month and six-month periods ended June 30, 2019, $3 (2018 – $6) and $3 (2018 – $6), respectively, 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 three-month and six-month periods ended June 30, 2019, 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 $2 million (2018 – $2 million) and $3 million (2018 – $3 million), respectively.

(c) Transactions with real estate joint ventures

During the three-month periods ended June 30, 2019 and 2018, we had transactions with the real estate joint ventures, which are related parties, as set out in *Note 21*. As at June 30, 2019, we had recorded lease liabilities of $78 million in respect of our TELUS Sky lease; one-third of this amount 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, investing activities and financing activities

		Three months		Six months	
Periods ended June 30 (millions)	*Note*	**2019**	2018	**2019**	2018
OPERATING ACTIVITIES					
Net change in non-cash operating working capital					
Accounts receivable		**$ (197)**	$ (34)	**$ (223)**	$ 169
Inventories		**25**	17	**42**	50
Contract assets		**3**	(3)	**1**	(3)
Prepaid expenses		**(26)**	(26)	**(110)**	(147)
Accounts payable and accrued liabilities		**253**	194	**190**	(164)
Income and other taxes receivable and payable, net		**(53)**	87	**(269)**	172
Advance billings and customer deposits		**(3)**	(7)	**3**	(16)
Provisions		**14**	13	**(36)**	4
		$ 16	$ 241	**$ (402)**	$ 65
INVESTING ACTIVITIES					
Cash payments for capital assets, excluding spectrum licences					
Capital asset additions					
Gross capital expenditures					
Property, plant and equipment	*17*	**$ (718)**	$ (639)	**$ (1,357)**	$ (1,160)
Intangible assets	*18*	**(166)**	(158)	**(299)**	(295)
		(884)	(797)	**(1,656)**	(1,455)
Additions arising from leases	*17*	**110**	—	**232**	—
Additions arising from non-monetary transactions		**4**	6	**8**	14
Capital expenditures	*5*	**(770)**	(791)	**(1,416)**	(1,441)
Change in associated non-cash investing working capital		**125**	56	**(22)**	(32)
		$ (645)	$ (735)	**$ (1,438)**	$ (1,473)
FINANCING ACTIVITIES					
Issue of shares by subsidiary to non-controlling interests					
Issue of shares		**$ —**	$ —	**$ —**	$ 43
Non-monetary issue of shares in business combination		**—**	—	**—**	(19)
Cash proceeds on share issuance		**—**	—	**—**	24
Transaction costs and other		**—**	—	**—**	—
		$ —	$ —	**$ —**	$ 24

(b) Changes in liabilities arising from financing activities

(millions)	Beginning of period	Statement of cash flows: Issued or received	Statement of cash flows: Redemptions, repayments or payments	Non-cash changes: Foreign exchange movement (*Note 4(e)*)	Non-cash changes: Other	End of period
THREE-MONTH PERIOD ENDED JUNE 30, 2018						
Dividends paid to holders of Common Shares	$ 299	$ —	$ (299)	$ —	$ 315	$ 315
Dividends reinvested in shares from Treasury	—	—	21	—	(21)	—
	$ 299	$ —	$ (278)	$ —	$ 294	$ 315
Short-term borrowings	$ 100	$ 26	$ (13)	$ —	$ —	$ 113
Long-term debt						
TELUS Corporation notes	$ 12,094	$ 975	$ —	$ 43	$ (22)	$ 13,090
TELUS Corporation commercial paper	843	304	(1,154)	10	—	3
TELUS Communications Inc. debentures	620	—	—	—	—	620
TELUS International (Cda) Inc. credit facility	433	—	(11)	9	1	432
Derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt – liability	59	1,154	(1,136)	(53)	39	63
	14,049	2,433	(2,301)	9	18	14,208
To eliminate effect of gross settlement of derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt	—	(1,154)	1,154	—	—	—
	$ 14,049	$ 1,279	$ (1,147)	$ 9	$ 18	$ 14,208
THREE-MONTH PERIOD ENDED JUNE 30, 2019						
Dividends paid to holders of Common Shares	$ 329	**$ —**	**$ (329)**	**$ —**	**$ 339**	**$ 339**
Dividends reinvested in shares from Treasury	—	**—**	**22**	**—**	**(22)**	**—**
	$ 329	**$ —**	**$ (307)**	**$ —**	**$ 317**	**$ 339**
Short-term borrowings	$ 500	**$ —**	**$ (400)**	**$ —**	**$ —**	**$ 100**
Long-term debt						
TELUS Corporation notes	$ 12,136	**$ 1,674**	**$ —**	**$ (70)**	**$ (25)**	**$ 13,715**
TELUS Corporation commercial paper	1,105	**748**	**(1,554)**	**(6)**	**—**	**293**
TELUS Communications Inc. debentures	621	**—**	**—**	**—**	**—**	**621**
TELUS International (Cda) Inc. credit facility	405	**—**	**(2)**	**(8)**	**1**	**396**
Lease liabilities	1,508	**—**	**(64)**	**(8)**	**118**	**1,554**
Derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt – liability	41	**1,554**	**(1,551)**	**76**	**(28)**	**92**
	15,816	**3,976**	**(3,171)**	**(16)**	**66**	**16,671**
To eliminate effect of gross settlement of derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt	—	**(1,554)**	**1,554**	**—**	**—**	**—**
	$ 15,816	**$ 2,422**	**$ (1,617)**	**$ (16)**	**$ 66**	**$ 16,671**

(millions)	Beginning of period	Statement of cash flows: Issued or received	Statement of cash flows: Redemptions, repayments or payments	Non-cash changes: Foreign exchange movement (*Note 4(e)*)	Non-cash changes: Other	End of period
SIX-MONTH PERIOD ENDED JUNE 30, 2018						
Dividends paid to holders of Common Shares	$ 299	$ —	$ (598)	$ —	$ 614	$ 315
Dividends reinvested in shares from Treasury	—	—	41	—	(41)	—
	$ 299	$ —	$ (557)	$ —	$ 573	$ 315
Short-term borrowings	$ 100	$ 26	$ (19)	$ —	$ 6	$ 113
Long-term debt						
TELUS Corporation notes	$ 11,561	$ 1,725	$ (250)	$ 81	$ (27)	$ 13,090
TELUS Corporation commercial paper	1,140	1,618	(2,798)	43	—	3
TELUS Communications Inc. Debentures	620	—	—	—	—	620
TELUS International (Cda) Inc. credit facility	339	97	(22)	19	(1)	432
Derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt – liability	93	2,798	(2,770)	(124)	66	63
	13,753	6,238	(5,840)	19	38	14,208
To eliminate effect of gross settlement of derivatives used to manage currency risks arising from U.S. dollar denominated long-term debt	—	(2,798)	2,798	—	—	—
	$ 13,753	$ 3,440	$ (3,042)	$ 19	$ 38	$ 14,208

(millions)	Beginning of period: As previously reported	Beginning of period: IFRS 16, *Leases* transitional amount (*Note 2(c)*)	Beginning of period: As adjusted	Statement of cash flows: Issued or received	Statement of cash flows: Redemptions, repayments or payments	Non-cash changes: Foreign exchange movement (*Note 4(e)*)	Non-cash changes: Other	End of period
SIX-MONTH PERIOD ENDED JUNE 30, 2019								
Dividends payable to holders of Common Shares	$ 326	$ —	$ 326	**$ —**	**$ (655)**	**$ —**	**$ 668**	**$ 339**
Dividends reinvested in shares from Treasury	—	—	—	**—**	**45**	**—**	**(45)**	**—**
	$ 326	$ —	$ 326	**$ —**	**$ (610)**	**$ —**	**$ 623**	**$ 339**
Short-term borrowings	$ 100	$ —	$ 100	**$ 407**	**$ (407)**	**$ —**	**$ —**	**$ 100**
Long-term debt								
TELUS Corporation notes	$ 12,186	$ —	$ 12,186	**$ 1,674**	**$ —**	**$ (122)**	**$ (23)**	**$ 13,715**
TELUS Corporation commercial paper	774	—	774	**1,901**	**(2,363)**	**(19)**	**—**	**293**
TELUS Communications Inc. debentures	620	—	620	**—**	**—**	**—**	**1**	**621**
TELUS International (Cda) Inc. credit facility	419	—	419	**13**	**(21)**	**(17)**	**2**	**396**
Lease liabilities	102	1,381	1,483	**—**	**(152)**	**(13)**	**236**	**1,554**
Derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt – liability (asset)	(73)	—	(73)	**2,363**	**(2,361)**	**141**	**22**	**92**
	14,028	1,381	15,409	**5,951**	**(4,897)**	**(30)**	**238**	**16,671**
To eliminate effect of gross settlement of derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt	—	—	—	**(2,363)**	**2,363**	**—**	**—**	**—**
	$ 14,028	$ 1,381	$ 15,409	**$ 3,588**	**$ (2,534)**	**$ (30)**	**$ 238**	**$ 16,671**