

TELUS CORPORATION
Management's discussion and analysis
2023 Q2

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 expectations regarding trends in the telecommunications industry (including demand for data and ongoing subscriber base growth), and our financing plans (including 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 other events may differ materially from expectations expressed in or implied by the forward-looking statements. Updates to the assumptions on which our 2023 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 other 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 matters** including: changes to our regulatory regime (the timing of announcement or implementation of which are uncertain) or the outcomes of proceedings, cases or inquiries relating to its application, including but not limited to those set out in *Section 9.1 Communications industry regulatory developments and proceedings* in this MD&A, such as the potential for government to allow consolidation of competitors in our industry or conversely for government to intervene with the intent of further increasing competition, for example, through mandated wholesale access; the potential for additional government intervention on pricing, including internet overage charges and roaming fees; federal and provincial consumer protection legislation; the introduction in Parliament of new federal privacy legislation that could materially expand or alter the scope of consumer privacy rights, include significant administrative monetary penalties and a privacy right of action, and implement a new regulatory regime for the use of artificial intelligence (AI) in the private sector, with significant enforcement powers; amendments to existing federal legislation; potential threats to unitary federal regulatory authority over communications in Canada; potential threats to the CRTC’s ability to enforce competitive safeguards such as the Standstill Rule and the *Wholesale Code*, which aim to ensure the fair treatment by vertically integrated firms of rival competitors operating as both broadcasting distributors and programming services; regulatory action by the Competition Bureau or other regulatory agencies; spectrum allocation and compliance with licences, including our compliance with licence conditions, changes to spectrum licence fees, spectrum policy determinations such as restrictions on the purchase, sale, subordination, use and transfer of spectrum licences, the cost and availability of spectrum and timing of spectrum allocation, and ongoing and future consultations and decisions on spectrum licensing and policy frameworks, auctions and allocation; draft legislation permitting the government to restrict the use in telecommunications networks of equipment made by specified companies, including Huawei and ZTE; draft legislation imposing new cybersecurity reporting requirements; the request by the Minister of Innovation, Science and Industry to telecommunications service providers, including TELUS, to improve network resiliency, along with CRTC proceedings to investigate network reliability and resiliency; potential limitations on international roaming fees and ancillary service fees; restrictions on non-Canadian ownership and control of the common shares of TELUS Corporation (Common Shares) and the ongoing monitoring of, and compliance with, such restrictions; unanticipated changes to the current copyright regime, which could impact obligations for internet service providers or broadcasting undertakings; our ability to comply with complex and changing regulation of the healthcare, virtual care, and medical devices industries in the jurisdictions in which we operate, including as an operator of health clinics; and risks related to the quality of care and provision of insured/uninsured services. The jurisdictions in which we operate, as well as the contracts that we enter into (particularly contracts entered into by TELUS International (Cda) Inc. (TELUS International or TI)), require us to comply with, or facilitate our clients’ compliance with, numerous, complex and sometimes conflicting legal regimes, both domestically and internationally. See *TELUS International’s financial performance which impacts our financial performance* below.
- Competitive environment** including: our ability to continue to retain customers through an enhanced customer service experience that is differentiated from our competitors, including through the deployment and operation of evolving network infrastructure; intense competition, including the ability of industry competitors to successfully combine a mix of new service offerings, in some cases under one bundled and/or discounted monthly rate, along with their existing services; the success of new products, services and supporting systems, such as home automation, security and Internet of Things (IoT) services for internet-connected devices; continued intense competition across all services among telecommunications companies, cable companies, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on current and future average revenue per subscriber per month (ARPU), cost of acquisition, cost of retention and churn rates for all services, as do market conditions, government actions, 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; consolidation, mergers and acquisitions of industry competitors (including the acquisition of Shaw by Rogers and associated assets divested to Videotron) as well as any related regulatory actions; subscriber additions, losses and retention volumes; our ability to obtain and offer content on a timely basis across multiple devices on mobile and TV platforms at a reasonable cost as content costs per unit continue to grow; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services, and timely and

effective enforcement of related regulatory safeguards; TI’s ability to compete with professional services companies that offer consulting services, information technology companies with digital capabilities, and traditional contact centre and business process outsourcing companies that are expanding their capabilities to offer higher-margin and higher-growth digital services; in our TELUS Health business, our ability to compete with other providers of employee and family assistance programs, benefits administration, electronic medical records and pharmacy management products, claims adjudicators, systems integrators and health service providers, including competitors with a vertically integrated mix of health services delivery, IT solutions and related services, global providers that could achieve expanded Canadian footprints, and providers of virtual healthcare services, preventative health services and personal emergency response services; and in our TELUS Agriculture & Consumer Goods business, our ability to compete with focused software and IoT competitors.

- **Technology** including: reduced utilization and increased commoditization of traditional fixed voice services (local and long distance) resulting from impacts of OTT applications and mobile substitution; a declining overall market for TV services, resulting in part from content piracy and signal theft, a rise in OTT direct-to-consumer video offerings and virtual multichannel video programming distribution platforms; the increasing number of households with only mobile and/or internet-based telephone services; potential decline in ARPU as a result of, among other factors, substitution by messaging and OTT applications; substitution by increasingly available Wi-Fi services; and disruptive technologies, such as OTT IP services, including software-defined networks in the business market that may displace or cause us to reprice our existing data services, and self-installed technology solutions.

Challenges to our ability to deploy technology including: high subscriber demand for data that challenges wireless networks and spectrum capacity levels and may be accompanied by increases in delivery cost; our reliance on information technology and our ability to continually streamline our legacy systems; the roll-out, anticipated benefits and efficiencies, and ongoing 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 and 5G wireless); availability of resources and our ability to build out adequate broadband capacity; our reliance on wireless network access agreements, which have facilitated our deployment of mobile technologies; our choice of suppliers and those suppliers’ ability to maintain and service their product lines, which could affect the success of upgrades to, and evolution of, technology that we offer; supplier limitations and concentration and market power for products such as network equipment, TELUS TV® and mobile handsets; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data, and our ability to utilize spectrum we acquire; deployment and operation of new fixed broadband network technologies at a reasonable cost and the availability and success of new products and services to be rolled out using such network technologies; network reliability and change management; and our deployment of self-learning tools and automation, which may change the way we interact with customers.

Capital expenditure levels and potential outlays for spectrum licences in auctions or purchases from third parties affect and are affected by: our broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing deployment of newer mobile technologies, including wireless small cells that can improve coverage and capacity; investments in network technology required to comply with laws and regulations relating to the security of cyber systems, including bans on the products and services of certain vendors; investments in network resiliency and reliability; the allocation of resources to acquisitions and future spectrum auctions held by Innovation, Science and Economic Development Canada (ISED), including the announcement of a second consultation on the auctioning of the 3800 MHz spectrum, which the Minister of Innovation, Science and Industry stated is expected to take place in 2023, and the millimetre wave spectrum auction, which is expected to commence in 2024. Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results or if there are changes to our regulatory environment.

- **Operational performance and business combination risks** including: our reliance on legacy systems and our ability to implement and support new products and services and business operations in a timely manner; our ability to manage the requirements of large enterprise deals; our ability to implement effective change management for system replacements and upgrades, process redesigns, cost efficiency programs and business integrations (such as our ability in a timely manner to successfully complete and integrate acquisitions into our operations and culture, complete divestitures or establish partnerships and realize expected strategic benefits, including those following compliance with any regulatory orders); our ability to identify and manage new risks inherent in new service offerings that we may provide, including as a result of acquisitions, which could result in damage to our brand, our business in the relevant area or as a whole, and additional exposure to litigation or regulatory proceedings; our ability to effectively manage the growth of our infrastructure and integrate new team members; and our reliance on third-party cloud-based computing services to deliver our IT services.
- **Security and data protection** including risks that malfunctions or unlawful acts could result in unauthorized access or change to, or loss or distribution of, data that may compromise the privacy of individuals and could result in financial loss and harm to our reputation and brand.

Security threats including intentional damage, unauthorized access or attempted access to our physical assets or our IT systems and network, or those of our customers or vendors, which could prevent us from providing reliable service or result in unauthorized access to our information or that of our customers.

Business continuity events including: our ability to maintain customer service and operate our network in the event of human error or human-caused threats, such as cyberattacks and equipment failures that could cause various degrees of network outages; technical disruptions and infrastructure breakdowns; supply chain disruptions, delays and rising costs, including as a result of government restrictions or trade actions; natural disaster threats; extreme weather events; epidemics; pandemics (including the COVID-19 pandemic); political instability in certain international locations, including

war and other geopolitical developments; information security and privacy breaches, including loss or theft of data; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.

- Our team including: recruitment, retention and appropriate training in a highly competitive industry (including retention of team members leading recent acquired businesses in emerging areas of our business), the level of our employee engagement and impact on engagement or other aspects of our business or any unresolved collective agreements, our ability to maintain our unique culture as we grow, the risk that certain independent contractors in our business could be classified as employees, and the physical and mental health of our team, which are critical to engagement and productivity.
- Environment, health and safety including: loss of employee work time as a result of illness or injury; public concerns related to radio frequency emissions; environmental issues including climate-related risks (such as extreme weather events and other natural hazards), waste and waste recycling, risks relating to fuel systems on our properties and the environmental impact of our network including legacy network equipment, changing government and public expectations regarding environmental matters and our responses; and challenges associated with epidemics or pandemics, including the COVID-19 pandemic and our response to it, which may add to or accentuate these factors.

Energy use including: our ability to identify, procure and implement solutions to reduce energy consumption and adopt cleaner sources of energy; our ability to identify and make suitable investments in renewable energy, including in the form of virtual power purchase agreements; our ability to continue to realize significant absolute reductions in energy use and the resulting greenhouse gas (GHG) emissions in our operations (in part as a result of programs and initiatives focused on our buildings and network); and other risks associated with achieving our goals to achieve carbon neutrality and reduce our GHG emissions by 2030.

- Real estate matters including risks associated with our real estate investments, such as financing risks and uncertain future demand, occupancy and rental rates, especially as a result of the COVID-19 pandemic.
- Financing, debt and dividend requirements including: our ability to carry out financing activities, refinance our maturing debt, lower our net debt to EBITDA ratio to our objective range given the cash demands of spectrum auctions, and/or our ability to maintain investment-grade credit ratings. Our business plans and growth could be negatively affected if existing financing is not sufficient to cover our funding requirements.

Lower than planned free cash flow could constrain our ability to invest in operations, reduce leverage or return capital to shareholders, and could affect our ability to sustain our dividend growth program through 2025 and any further dividend growth programs. This program may be affected by factors such as the competitive environment, fluctuations in the Canadian economy or the global economy, our earnings and free cash flow (which may be affected by restructuring and other costs resulting from initiatives such as post-acquisition integration and cost efficiency programs), our levels of capital expenditures and spectrum licence purchases, acquisitions, the management of our capital structure, regulatory decisions and developments, and business continuity events. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors based on our financial position and outlook. There can be no assurance that our dividend growth program will be maintained, unchanged and/or completed.

- Tax 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 depreciation and operating expenses; tax credits or other attributes; changes in tax laws, including tax rates; tax expenses that are materially different than anticipated, including the taxability of income and deductibility of tax attributes or retroactive application of new legislation; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and changes to the interpretation of tax laws, including those resulting from changes to applicable accounting standards or the adoption of more aggressive auditing practices by tax authorities, tax reassessments or adverse court decisions impacting the tax payable by us.
- The economy including: the state of the economy in Canada, which may be influenced by economic and other developments outside of Canada, including potential outcomes of future policies and actions of foreign governments, as well as public and private sector, responses to pandemics; expectations regarding future interest rates; inflation; unemployment levels; immigration levels; effects of volatility in oil prices; effects of low business spending (such as reducing investments and cost structure); pension investment returns and factors affecting pension benefit obligations, funding and solvency discount rates; fluctuations in exchange rates of the currencies of various countries in which we operate; sovereign credit ratings and effects on the cost of borrowing; the impact of tariffs on trade between Canada and the United States; and global implications of the dynamics of trade relationships among major world economies.

Ability to successfully implement cost reduction initiatives and realize planned savings, net of restructuring and other costs, without losing customer service focus or negatively affecting business operations. Examples of these initiatives are: our operating efficiency and effectiveness program to drive improvements in financial results; business integrations; business product simplification; business process automation and outsourcing; offshoring and reorganizations; procurement initiatives; and real estate rationalization.

- 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 exercise 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.
- Foreign operations and our ability to successfully manage operations in foreign jurisdictions, including managing risks such as currency fluctuations and exposure to various economic, international trade, political and other risks of doing business

globally. See also *Section 10.3 Regulatory matters* and *TELUS International’s financial performance which impacts our financial performance* in our 2022 annual MD&A.

- **TELUS International’s financial performance which impacts our financial performance.** Factors that may affect TI’s financial performance are described in TI’s public filings available on SEDAR+ and EDGAR and may include: intense competition from companies offering similar services; attracting and retaining qualified team members to support its operations; the inelasticity of TI’s labour costs relative to short-term movements in client demand could have adverse impacts on the business; TI’s ability to grow and maintain profitability if changes in technology or client expectations outpace service offerings and internal tools and processes; the timing and success of TI’s cost efficiency programs; TI maintaining its culture as it grows; the effects of global economic and geopolitical conditions on TI and its clients’ businesses and demand for its services; TI’s ability to respond to reductions in client demand in a timely and cost-effective manner whether due to labour and employment laws or otherwise; the significant portion of TI’s revenue that is dependent on a limited number of large clients, two of which (excluding TELUS) each accounted for more than 10% of our digitally-led customer experiences – TELUS International (DLCX) revenue; continued consolidation in many of the verticals in which TI offers services resulting in potential client loss; the adverse impact on TI’s business if certain independent contractors were classified as employees, and the costs associated with defending, settling or resolving any future lawsuits (including demands for arbitration) relating to the independent contractor classification; TI’s ability to successfully identify, complete, integrate and realize the benefits of acquisitions and manage associated risks; cyberattacks or unauthorized disclosure resulting in access to sensitive or confidential information and data of its clients or their end customers, which could have a negative impact on its reputation and client confidence; TI’s business not developing in ways it currently anticipates due to negative public reaction to offshore outsourcing, proposed legislation or otherwise; ability to meet client expectations regarding its content moderation services being adversely impacted due to factors beyond its control and its content moderation team members suffering adverse emotional or cognitive effects in the course of performing their work; and TI’s short history operating as a separate, publicly traded company. TELUS International’s primary functional and reporting currency is the U.S. dollar and the contribution to our consolidated results of positive results in our DLCX segment may be offset by any strengthening of the Canadian dollar (our reporting currency) compared to the U.S. dollar, the European euro, the Philippine peso and the currencies of other countries in which TI operates. The trading price of the subordinate voting shares of TI (TI Subordinate Voting Shares) may be volatile and is likely to fluctuate due to a number of factors beyond its control, including actual or anticipated changes in profitability; general economic, social or political developments; changes in industry conditions; changes in governance regulation; inflation; low trading volume; the general state of the securities markets; and other material events. TI may choose to publicize targets or provide other guidance regarding its business and it may not achieve such targets. Failure to do so could also result in a decline in the trading price of the TI Subordinate Voting Shares. A decline in the trading price of the TI Subordinate Voting Shares due to these or other factors could result in a decrease in the fair value of TI multiple voting shares held by TELUS.

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 2022 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 outside of our current expectations or knowledge. Additional risks and uncertainties that are not currently known to us or that we currently deem to be immaterial may also have a material adverse effect on our financial position, financial performance, cash flows, business or reputation. Except as otherwise indicated in this document, the forward-looking statements made herein do not reflect the potential impact of any non-recurring or special items or any mergers, acquisitions, dispositions or other business combinations or transactions that may be announced or that may occur after the date of this document.

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

This cautionary statement qualifies all of the forward-looking statements in this MD&A.

Management’s discussion and analysis (MD&A)

August 4, 2023

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 2023	
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 and limitations on scope of design
5. Discussion of operations	5.1 General 5.2 Summary of consolidated quarterly results and trends 5.3 Consolidated operations 5.4 TELUS technology solutions segment 5.5 Digitally-led customer experiences – TELUS International 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 provided (used) 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 specified financial measures 11.2 Operating indicators

© 2023 TELUS Corporation. All rights reserved. The symbols [™] and [®] indicate trademarks owned by TELUS Corporation or its subsidiaries used under license. All other trademarks are the property of their respective owners.

1. Introduction

The forward-looking statements in this section, including, for example, estimates regarding economic growth, inflation, unemployment and housing starts, 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, 2023, and should be read together with our June 30, 2023 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) and Canadian GAAP. In this MD&A, the term IFRS refers to these standards. In our discussion, we also use certain non-GAAP and other specified 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, as required by National Instrument 52-112, *Non-GAAP and Other Financial Measures Disclosure*, 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+ ([sedarplus.com](https://www.sedarplus.com)). Our information filed with or furnished to the Securities and Exchange Commission in the United States, including Form 40-F, is available on EDGAR ([sec.gov](https://www.sec.gov)). Additional information about our TELUS International (Cda) Inc. (TELUS International or TI) subsidiary, including discussion of its business and results, can be found in its public filings available on SEDAR+ and EDGAR.

Our disclosure controls and procedures are designed to provide reasonable assurance that all relevant information is gathered and reported to senior management on a timely basis, so that appropriate decisions can be made regarding public disclosure. This MD&A and the interim consolidated financial statements were reviewed by our Audit Committee and authorized by our Board of Directors (Board) for issuance on August 4, 2023.

In this MD&A, unless otherwise indicated, results for the second quarter of 2023 (three-month period ended June 30, 2023) and the six-month period ended June 30, 2023 are compared with results for the second quarter of 2022 (three-month period ended June 30, 2022) and the six-month period ended June 30, 2022.

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 business operations.

TELUS technology solutions (TTech)

Across TTech, we are leveraging our leading technology and compassion to enable remarkable human outcomes. Our long-standing commitment to putting our customers first across the full range of our solutions spanning mobile, data, IP, voice, television, entertainment, video and security, delivered over our award-winning networks, has made us a distinct leader in customer service excellence and loyalty. The accolades we have earned over the years from independent, industry-leading network insight firms highlight the speed, reliability and expansiveness of our leading networks, reinforcing our commitment to provide Canadians with access to superior technology that connects us to the people, resources and information that matter most. The healthcare industry continues to move toward digitization of everyday functions within the healthcare ecosystem. We are helping Canadians and others live healthier lives by leveraging technology that enables access to health information and delivers improved health outcomes with solutions such as employer-focused healthcare. We are also developing innovative technology solutions to help feed the world, putting data to work for customers in the agriculture, food and consumer goods sectors. This efficient and effective collaboration helps ensure the quality and safety of food and consumer goods.

Digitally-led customer experiences – TELUS International (DLCX)

Technology is transforming the way businesses interact with their customers at an accelerating pace and scale and, across industries, customer experience has become a critically important competitive differentiator. DLCX clients and their customers have more information and more choices than ever before, and their expectations surrounding brand experiences and the speed at which companies must process and respond to customer interactions are changing rapidly. The proliferation of mobile devices, social media platforms and other methods of digital interaction has enabled customers to access information 24/7 and engage with companies through multiple digital channels. The COVID-19

pandemic had further accelerated the use of digital channels as the first, and sometimes only, point of customer interaction. Customers value a consistent and personalized experience across every channel when interacting with the companies that serve them. Businesses face pressure to engage with their customers across digital and human channels, and seek to do so by combining technology with an authentic human experience that demonstrates a genuine commitment to customer satisfaction.

Economic estimates

Our estimates regarding our economic and operational environment, including economic growth, inflation, unemployment and housing starts, serve as important inputs for the assumptions on which our targets are based. The extent of the impact these estimates will have on us, and the timing of that impact, will depend upon the actual outcomes in specific sectors of the Canadian economy.

	Economic growth (percentage points)		Inflation (percentage points)		Unemployment (percentage points)			Housing starts (thousands of units)		
	Estimated gross domestic product (GDP) growth rates	Our estimated GDP growth rates ¹	Estimated inflation rates	Our estimated annual inflation rates ¹	Unemployment rates		Our estimated annual unemployment rates ¹	Seasonally adjusted annual rate of housing starts ²		Our estimated annual rate of housing starts on an unadjusted basis ¹
					For the month of			For the month of		
	2023	2023	2023	2023	June 2023 ³	June 2022 ³	2023	June 2023	June 2022	2023
Canada	1.8 ⁴	0.9	3.7 ⁴	3.6	5.4	4.9	5.6	281	274	225
B.C.	0.4 ⁵	0.5	3.9 ⁵	3.6	5.6	4.6	5.2	66	56	42
Alberta	2.8 ⁵	1.9	3.3 ⁵	3.4	5.7	4.9	6.0	26	39	34
Ontario	0.2 ⁵	0.5	3.6 ⁵	3.5	5.7	5.1	5.8	121	95	80
Quebec	0.6 ⁵	0.4	3.5 ⁵	3.7	4.4	4.3	4.6	33	54	49

- 1 Assumptions are as of April 14, 2023 and are based on a composite of estimates from Canadian banks and other sources.
- 2 Source: Statistics Canada. Table 34-10-0158-01 Canada Mortgage and Housing Corporation, housing starts, all areas, Canada and provinces, seasonally adjusted at annual rates, monthly (x 1,000).
- 3 Source: Statistics Canada Labour Force Survey, June 2023 and June 2022, respectively.
- 4 Source: Bank of Canada Monetary Policy Report, July 2023.
- 5 Source: British Columbia Ministry of Finance, Budget and fiscal plan, 2023/24 – 2025/26, February 28, 2023; Alberta Ministry of Treasury Board and Finance, 2023 – 26 Fiscal Plan, February 28, 2023; Ontario Ministry of Finance, 2023 Budget: Building a Strong Ontario, March 2023; and Ministère des Finances du Québec, Budget 2023 – 2024, March 2023, respectively.

1.3 Consolidated highlights

Our Board of Directors

At our 2023 annual general meeting held on May 4, 2023, the nominees listed in the TELUS 2023 information circular were elected as directors of TELUS. The Honourable John P. Manley was appointed as the new Chair of the Board and succeeded Dick Auchinleck, who retired after 20 years of service on the Board, including eight years as Chair. We thank Dick for his outstanding contributions and service to TELUS.

Consolidated highlights

(\$ millions, except footnotes and unless noted otherwise)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Consolidated statements of income						
Operating revenues and other income	4,946	4,401	12.4%	9,910	8,683	14.1%
Operating income	582	762	(23.6)%	1,181	1,489	(20.7)%
Income before income taxes	259	665	(61.1)%	538	1,213	(55.6)%
Net income	196	498	(60.6)%	420	902	(53.4)%
Net income attributable to Common Shares	200	468	(57.3)%	417	853	(51.1)%
Adjusted Net income ¹	273	422	(35.3)%	659	837	(21.3)%
Earnings per share (EPS) (\$)						
Basic EPS	0.14	0.34	(58.8)%	0.29	0.62	(53.2)%
Adjusted basic EPS ¹	0.19	0.32	(40.6)%	0.46	0.61	(24.6)%
Diluted EPS	0.14	0.34	(58.8)%	0.29	0.62	(53.2)%
Dividends declared per Common Share (\$)	0.3636	0.3386	7.4%	0.7147	0.6660	7.3%
Basic weighted-average Common Shares outstanding (millions)	1,447	1,381	4.8%	1,443	1,378	4.7%
Consolidated statements of cash flows						
Cash provided by operating activities	1,117	1,250	(10.6)%	1,878	2,385	(21.3)%
Cash used by investing activities	(908)	(1,438)	(36.9)%	(3,241)	(2,637)	22.9%
Acquisitions	—	(353)	(100.0)%	(1,262)	(480)	n/m
Capital expenditures ²	(807)	(1,054)	(23.4)%	(1,520)	(1,887)	(19.4)%
Cash provided (used) by financing activities	(437)	(204)	114.2%	1,038	(89)	n/m
Other highlights						
Telecom subscriber connections ³ (thousands)				18,529	17,323	7.0%
Earnings before interest, income taxes, depreciation and amortization ¹ (EBITDA)	1,588	1,593	(0.3)%	3,209	3,162	1.5%
EBITDA margin ¹ (%)	32.1	36.2	(4.1) pts.	32.4	36.4	(4.0) pts.
Restructuring and other costs	115	29	n/m	274	68	n/m
Adjusted EBITDA ¹	1,703	1,622	5.0%	3,482	3,230	7.8%
Adjusted EBITDA margin ¹ (%)	34.4	36.9	(2.5) pts.	35.1	37.2	(2.1) pts.
Free cash flow ¹	279	205	36.1%	814	620	31.3%
Net debt to EBITDA – excluding restructuring and other costs ¹ (times)				3.84	3.23	0.61

Notations used in MD&A: n/m – not meaningful; pts. – percentage points.

1 These are non-GAAP and other specified financial measures. See *Section 11.1 Non-GAAP and other specified financial measures*.

2 Capital expenditures include assets purchased, excluding right-of-use lease assets, but not yet paid for. Consequently, capital expenditures 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, connected device subscribers, internet subscribers, residential voice subscribers, TV subscribers and security subscribers, measured at the end of the respective periods based on information in billing and other source systems. Effective January 1, 2023, on a prospective basis, we adjusted our mobile phone and connected device subscriber bases to remove 50,000 subscribers and add 82,000 subscribers, respectively, due to a review of our subscriber bases. Effective January 1, 2023, on a prospective basis, we adjusted our internet subscriber base to add 70,000 subscribers as a result of business acquisitions.

Operating highlights

- **Consolidated Operating revenues and other income** increased by \$545 million in the second quarter of 2023 and \$1,227 million in the first six months of 2023.

Service revenues increased by \$501 million in the second quarter of 2023 and \$1,081 million in the first six months of 2023. TTEch service revenue growth was driven by growth in health services revenues inclusive of our acquisition of LifeWorks on September 1, 2022, higher mobile network revenues and an increase in fixed data service revenues. Increased DLCX revenues resulted from growth from expanded services for existing clients and growth from new clients, including new clients from our acquisition of WillowTree on January 3, 2023.

Equipment revenues increased by \$60 million in the second quarter of 2023 and \$149 million in the first six months of 2023, driven by higher mobile equipment revenues, in addition to growth in fixed equipment revenues.

Other income decreased by \$16 million in the second quarter of 2023 and \$3 million in the first six months of 2023. The decrease in the second quarter of 2023 was largely due to the non-recurrence of a decrease in provisions arising from the settlement of business acquisition-related written put options in the prior year.

For additional details on Operating revenues and other income, see *Section 5.4 TELUS technology solutions segment* and *Section 5.5 Digitally-led customer experiences – TELUS International segment*.

- **Operating income** decreased by \$180 million in the second quarter of 2023 and \$308 million in the first six months of 2023. (See *Section 5.3 Consolidated operations* for additional details.)

EBITDA, which includes restructuring and other costs and other equity income related to real estate joint ventures, decreased by \$5 million in the second quarter of 2023 and increased by \$47 million in the first six months of 2023.

Adjusted EBITDA, which excludes restructuring and other costs and other equity income related to real estate joint ventures, increased by \$81 million in the second quarter of 2023 and \$252 million in the first six months of 2023, driven by TTech growth. This reflected: (i) higher mobile network revenues; (ii) growth in health, inclusive of the EBITDA contribution from our acquisition of LifeWorks; (iii) increased margins for internet and security; and (iv) lower organic TTech headcount. These factors were partly offset by: (i) merit-based compensation increases; (ii) higher costs related to the scaling of our digital capabilities; (iii) a decline in our DLCX contribution; and (iv) declining TV and fixed legacy voice margins. (See *Section 5.3 Consolidated operations* for additional details.)

- **Income before income taxes** decreased by \$406 million in the second quarter of 2023 and \$675 million in the first six months of 2023 as a result of higher Financing costs and lower Operating income. The increase in Financing costs largely resulted from greater interest on long-term debt, excluding lease liabilities as well as the impact of virtual power purchase agreements unrealized change in forward element (See *Financing costs* in *Section 5.3*.)
- **Income tax** expense decreased by \$104 million in the second quarter of 2023 and \$193 million in the first six months of 2023. The effective tax rate decreased from 25.0% to 24.3% in the second quarter of 2023 primarily driven by adjustments recognized in the current period for income taxes of prior periods. The effective tax rate decreased from 25.6% to 22.0% in the first six months of 2023, largely due to a lower weighted average statutory income tax rate resulting from a decreased portion of income earned in jurisdictions with higher statutory income tax rates, in addition to adjustments recognized in the current period for income taxes of prior periods.
- **Net income attributable to Common Shares** decreased by \$268 million in the second quarter of 2023 and \$436 million in the first six months of 2023, reflecting the after-tax impacts of higher Financing costs and lower Operating income.

Adjusted Net income excludes the effects of restructuring and other costs, income tax-related adjustments, other equity income related to real estate joint ventures and virtual power purchase agreements unrealized change in forward element. Adjusted Net income decreased by \$149 million or 35.3% in the second quarter of 2023 and \$178 million or 21.3% in the first six months of 2023.

- **Basic EPS** decreased by \$0.20 or 58.8% in the second quarter of 2023 and \$0.33 or 53.2% in the first six months of 2023, reflecting the after-tax impacts of higher Financing costs and lower Operating income, as well as the effect of a higher number of Common Shares outstanding.

Adjusted basic EPS excludes the effects of restructuring and other costs, income tax-related adjustments, other equity income related to real estate joint ventures and virtual power purchase agreements unrealized change in forward element. Adjusted basic EPS decreased by \$0.13 or 40.6% in the second quarter of 2023 and \$0.15 or 24.6% in the first six months of 2023.

- **Dividends declared per Common Share** were \$0.3636 in the second quarter of 2023, an increase of 7.4% from one year earlier. On August 3, 2023, the Board declared a third quarter dividend of \$0.3636 per share on our issued and outstanding Common Shares, payable on October 2, 2023, to shareholders of record at the close of business on September 8, 2023. The third quarter dividend was unchanged from the dividend declared in the second quarter of 2023 and increased by \$0.0250 per share or 7.4% from the \$0.3386 per share dividend declared one year earlier, consistent with our multi-year dividend growth program described in *Section 4.3 Liquidity and capital resources*.
- During the 12-month period ended on June 30, 2023, our total **telecom subscriber connections** increased by 1,206,000 or 7.0%. This reflected an increase of 3.9% in mobile phone subscribers, 22.1% in connected device subscribers, 9.3% in internet subscribers, 4.7% in TV subscribers and 9.7% in security subscribers, partly offset by a decline of 2.4% in residential voice subscribers. (See *Section 5.4 TELUS technology solutions segment* for additional details.)

Liquidity and capital resource highlights

- **Cash provided by operating activities** decreased by \$133 million in the second quarter of 2023, primarily driven by an increase in interest paid. Cash provided by operating activities decreased by \$507 million in the first six

months of 2023, largely reflecting other working capital changes and an increase in interest paid, partially offset by lower restructuring and other disbursements and growth in EBITDA. (See *Section 7.2 Cash provided by operating activities.*)

- **Cash used by investing activities** decreased by \$530 million in the second quarter of 2023, resulting from fewer business acquisitions and lower cash payments for capital assets, excluding spectrum licences. Cash used by investing activities increased by \$604 million in the first six months of 2023, largely attributable to the acquisition of WillowTree. Capital expenditures decreased by \$247 million in the second quarter of 2023 and \$367 million in the first six months of 2023, primarily due to a planned slowdown of our fibre and wireless network build consistent with 2023 build targets, when compared to accelerated investments in the comparative periods of 2022. (See *Section 7.3 Cash used by investing activities.*)
- **Cash used by financing activities** increased by \$233 million in the second quarter of 2023, primarily reflecting the issuance of short-term borrowings in the comparative period. Cash provided by financing activities increased by \$1,127 million in the first six months of 2023, driven by an increase in our issuances of long-term debt, net of redemptions and repayment in addition to an increase in short-term borrowings. (See *Section 7.4 Cash provided (used) by financing activities.*)
- **Net debt to EBITDA – excluding restructuring and other costs** ratio was 3.84 times at June 30, 2023, up from 3.23 times at June 30, 2022, as the effect of the increase in net debt exceeded the effect of the increase in EBITDA – excluding restructuring and other costs. As at June 30, 2023, the acquisition of spectrum licences increased the ratio by approximately 0.46 and business acquisitions over the past 12 months increased the ratio by approximately 0.28. (See *Section 4.3 Liquidity and capital resources* and *Section 7.5 Liquidity and capital resource measures.*)
- **Free cash flow** increased by \$74 million in the second quarter of 2023 and \$194 million in the first six months of 2023, primarily reflecting lower capital expenditures, partly offset by an increase in cash interest paid. Our definition of free cash flow, for which there is no industry alignment, is unaffected by accounting standards that do not impact cash.

2. Core business and strategy

Our core business and our strategic imperatives were described in our 2022 annual MD&A.

3. Corporate priorities for 2023

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 2023 corporate priorities.

Elevating our customers, communities and social purpose by honouring our brand promise, Let’s make the future friendly™

- Throughout the first half of 2023, we continued to leverage our Connecting for Good® programs to support marginalized individuals by enhancing their access to both technology and healthcare. Since the launch of our programs, we have provided support for 388,000 individuals.
 - During the first six months of 2023, we welcomed 4,000 new households to our Internet for Good® program. Since we launched the program in 2016, we have connected more than 50,500 households and over 161,000 low-income family members and seniors, in-need persons living with disabilities, government-assisted refugees and youth leaving foster care with discounted internet service.
 - Our Mobility for Good® program offers free or subsidized smartphones and mobile phone rate plans to all youth aging out of foster care and to qualifying low-income seniors across Canada. In the first half of 2023, we added 4,000 youth, seniors, Indigenous women at risk, government-assisted refugees and other marginalized individuals to the program. Since we launched Mobility for Good in 2017, the program has provided support for 48,000 people.
 - In June 2023, we expanded the reach of our Internet for Good and Mobility for Good programs to help government-assisted refugees arriving in Canada get connected. Partnering with 13 resettlement assistance program service provider organizations across the country and growing, Mobility for Good for government-assisted refugees offers a free smartphone and a subsidized data plan while Internet for Good for government-assisted refugees offers subsidized high-speed broadband internet. To date, we have already supported over 3,000 government-assisted refugees.
 - Our Health for Good® mobile health clinics, now serving 24 communities across Canada, supported 27,000 patient visits during the first half of 2023. Since the program’s inception, we have facilitated over 170,000 patient visits, bringing primary and mental healthcare to individuals experiencing homelessness.

- In April 2023, we partnered with the Old Brewery Mission to launch our newest mobile health clinic in Montreal. The Old Brewery Mission Mobile Health Clinic, powered by TELUS Health, is helping marginalized Montreal residents and communities with free healthcare services, as well as social and housing-related support.
- In May 2023, working in partnership with Alberta Health Services and Indigenous Services Canada, we redeployed our Edmonton mobile health clinic to support wildfire evacuees.
- During the first half of 2023, our Tech for Good® program provided access to personalized one-on-one training, support and customized recommendations on mobile devices and related assistive technology and/or access to discounted mobile plans for over 1,000 Canadians living with disabilities. Since the program’s inception in 2017, we have provided professional assistance for 7,500 Canadians living with disabilities to help them independently use or control their mobile device and the TELUS Wireless Accessibility Discount.
- We continued to help individuals stay safe in our digital world through our TELUS Wise® program. During the first half of 2023, more than 73,000 individuals in Canada and around the world participated in virtual TELUS Wise workshops and events to improve digital literacy and online safety, bringing our cumulative participation to more than 636,000 individuals since the program launched in 2013.
- In May 2023, we hosted our 18th annual TELUS Days of Giving® across 32 countries with more than 80,000 TELUS team members, retirees, family and friends volunteering in 260 local communities, making this year’s event our most giving year yet.
- During the second quarter of 2023, TELUS, our team members, customers and TELUS Friendly Future Foundation® (the Foundation) have enabled \$5.1 million in community giving, through cash donations and in-kind contributions, to support disaster relief efforts across the country, including the wildfires in Alberta, Nova Scotia, Quebec and Northwest Territories.
- The Foundation and Canadian TELUS Community Boards continue to direct all financial support to charitable initiatives that help youth and marginalized populations. During the first half of 2023, the Foundation had a direct impact on the lives of more than 650,000 youth by granting over \$4 million to 315 projects delivered by registered charities. Since its inception in 2018, the Foundation has provided \$40 million in cash donations to our communities, helping more than 14 million youth reach their full potential.
- Our Canadian and global TELUS Community Boards entrust local leaders to make recommendations on the allocation of local grants. These grants support registered charities that offer health, education or technology programs to help youth thrive. Since 2005, our 19 TELUS Community Boards have contributed \$104 million in cash donations to 9,400 initiatives, providing resources and support for underserved citizens, especially young people, around the world.
- The TELUS Indigenous Communities Fund offers grants for Indigenous-led social, health and community programs. In the first half of 2023, the Fund allocated its first grants of the year to five Indigenous-led organizations across Canada totalling \$100,000 in cash donations.
- In April 2023, we were recognized as one of Canada’s top 10 most valuable brands by Brand Finance Canada, for the second consecutive year, with a 2023 brand value of \$10.3 billion, up by \$200 million year-over-year and representing our highest third-party brand valuation ever.
- In May 2023, we received the Mercure award for Sustainable Development Strategy in the Large Corporation category as part of the 2023 Mercuriades Awards, which celebrate the innovation, ambition, entrepreneurship and performance of Quebec businesses. This recognition from the Fédération des Chambres de Commerce du Québec highlights our position as an industry leader in sustainability.
- In June 2023, we were named to the Corporate Knights Best 50 Corporate Citizens in Canada for the 17th time, ranking in the top 10 and as the highest among the telecom industry in Canada.
- In June 2023, we were recognized by Gustavson Brand Trust Index as the most trusted telecom brand in Canada, for the fifth consecutive year.
- In June 2023, we won Best Eco-Loyalty Initiative and Best Corporate Social Responsibility (CSR) Initiative for our TELUS Rewards® program at the International Loyalty Awards held in London U.K.

Leveraging TELUS’ world-leading technology to drive superior growth across mobile, home and business services

- In May 2023, we were named the first North American communications service provider (CSP) to be awarded the “Running on ODA” status by industry association TM Forum, recognizing the progress we are making in our Open Digital Architecture (ODA) and delivery capabilities, using cloud-native, vendor-agnostic solutions and TM Forum’s industry standard Open application programming interfaces (APIs) to deliver value to customers. We are the fourth CSP globally to gain this recognition. TM Forum is an industry association of over 850 global companies that collaboratively solve complex industry-wide challenges, deploy new services and create technology breakthroughs to accelerate change.
- In June 2023, our #StandWithOwners program returned for the fourth consecutive year, championing innovative, growing Canadian businesses. Owners can apply for a chance to win one of five grand prizes valued at over \$125,000 each, in funding, advertising and technology, plus additional prizes to help their business grow and thrive.
- In June 2023, we announced that we signed an agreement with the École de Technologie Supérieure (ÉTS) and iBwave, a Montreal-based software developer, to stimulate innovation in the construction and telecom industries using 5G technology. The collaboration includes the development of a 5G laboratory at ÉTS, which will serve as a multidisciplinary platform for researchers, students and companies to drive innovation in telecommunications, construction, engineering and architecture through 5G networks.

- In June 2023, we announced a strategic partnership with Australian electric vehicle (EV) charging company, JOLT, to install up to 5,000 public DC fast chargers across Canada, running on the TELUS network. This partnership accelerates the development of critical infrastructure to meet public demand, helping to drive the adoption of EVs and support the reduction of greenhouse gas emissions.

Scaling our innovative digital capabilities in TELUS Health and TELUS Agriculture & Consumer Goods to build assets of consequence

TELUS Health

- In April 2023, we announced a collaboration with Baycrest, an academic health sciences centre providing a continuum of care for older adults aiming to defeat dementia. This collaboration will introduce Baycrest’s Goal Management Training (GMT) program to TELUS Health’s AbilitiCBT platform that is currently being used by corporations, health care institutions and health insurance companies. GMT is a therapist-guided, cognitive rehabilitation and training program that can be tailored to users for the treatment of conditions with associated cognitive impairment such as mental illness, post-COVID-19 brain fog, ADHD and substance use.
- In May 2023, we launched Total Mental Health for organizations across Canada and the United States. This digital-first solution provides employees with access to a team of care professionals who curate personal care journeys with unlimited mental health counselling, therapist-led iCBT programs, digital tools, assessments, and ongoing tracking and feedback that is accessible by employees through their company’s health benefits. Employees can connect with TELUS Health mental health professionals 24 hours a day, seven days a week, 365 days a year if they are experiencing a mental health concern, with the flexibility of meeting in person, via telephone/audio or through video or online chat. These digital-first solutions allow employees to also practice and learn on their own or between sessions, track their mental health progress and receive regular feedback from their care team.

TELUS Agriculture & Consumer Goods

- During the quarter, we introduced a new shared workspace in London, U.K. with TELUS Health and TELUS International. This enabled us to achieve cost savings by consolidating our London real estate footprint and will foster collaboration and innovation among our TELUS family, creating a centralized and unified experience for all U.K.-based team members, marking a significant milestone in our real estate journey.
- The Minnesota chapter of the Public Relations Society of America awarded us with the best overall public relations campaign for launching our North Carolina Community Board, which has committed to donating US\$1 million to grassroots projects and charities until 2026.

Scaling our innovative digital capabilities in TELUS International to build an asset of consequence

- During the second quarter of 2023, TI expanded its global operations to the Republic of South Africa and Kingdom of Morocco, fulfilling near-term client demand for greater diversification in offshore and nearshore delivery capabilities, with additional growth expected in the region over the longer-term.
- TI remains top of mind for clients and peers, winning various industry awards in recognition of its digital capabilities leadership. In the second quarter of 2023, TI was:
 - The winner in the Best Informational Bot Solution category for our intelligent Bot Platform by the AI Breakthrough Awards, for the third consecutive year. These awards recognize trailblazing companies, technologies, products and services in the field of AI around the world.
 - The Elite 8 winner of the 2023 Achievers 50 Most Engaged Workplaces Award in the category of Purpose and Leadership. The Elite 8 recognition is given to the companies that most exemplify one of Achievers’ Eight Elements of Employee Engagement used to evaluate the most engaged workplaces.
 - A winner of the Webby Award for Best Public Service and Activism in the General Apps category developed through WillowTree’s partnership with Meals on Wheels of Charlottesville/Albemarle.

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* in our 2022 annual MD&A.

4.2 Operational resources

TELUS technology solutions (TTech)

From mid-2013 through June 30, 2023, we have invested more than \$7.2 billion to acquire wireless spectrum licences in spectrum auctions and other private transactions. This has more than doubled our national spectrum holdings in support of our top priority to put customers first.

Mobile data consumption has been increasing rapidly and is expected to continue growing at a fast rate as the industry transitions to 5G. We have responded by investing in the coverage, capacity, performance and reliability of our network to ensure that we are able to support additional data consumption and growth in our mobile subscriber base in a geographically diverse country, while maintaining the high quality of our network. This includes investments in wireless small cells connected directly to our fibre technology to improve coverage and capacity utilized in our 5G network launch.

As at June 30, 2023, our 4G LTE technology covered 99% of Canada’s population, consistent with June 30, 2022. We have continued to invest in the roll-out of our LTE advanced technology, which covered over 95% of Canada’s population at June 30, 2023, consistent with one year earlier. Furthermore, our 5G network covered approximately 84% of Canada’s population at June 30, 2023, up from approximately 77% at June 30, 2022.

We are continuing to invest in urban and rural communities across B.C., Alberta and Eastern Quebec with commitments to deliver broadband technology capabilities to as many Canadians in these communities as possible, including expanding our fibre footprint by connecting more homes and businesses directly to fibre in these communities. 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 has enabled our 5G deployment. Our home and business security integrates safety and security monitoring with smart devices.

As at June 30, 2023, approximately 3.1 million households and businesses in B.C., Alberta and Eastern Quebec were covered with fibre-optic cable, which provides these premises with immediate access to our fibre-optic technology. This is up from more than 2.8 million households and businesses in the second quarter of 2022. We have a very small number of legacy lead-sheathed cables making up less than 0.3% of our entire network. A large percentage of lead-sheathed cables have been removed and will continue to be removed as we progress our copper retirement strategy. The majority of the remaining lead-sheathed cables are underground, within a contained conduit structure (vault) and inaccessible to the public.

Within our digital health solutions, our core areas of focus in the global marketplace are: employers (small, medium and large enterprise), payors (both insurers and public sector), providers (including physicians, clinicians, pharmacists) and consumer solutions. We offer a variety of integrated health and well-being products, solutions and services, including virtual care (comprehensive primary care, mental health support, wellness offerings for employees and individuals, pet care), remote patient monitoring and personal emergency response services, medication management (virtual pharmacy, pharmacy management systems), health records management (personal health records, electronic medical records (EMR), and collaborative health records (CHR)), claims management solutions, and the curation of health content. Upon our acquisition of LifeWorks, we expanded the global footprint of TELUS Health, primarily with respect to employer and employee-focused well-being. This includes well-being, health and productivity solutions (including employee and family assistance programs (EFAP), internet-based cognitive behavioural therapy (iCBT) and absence and disability management), corporate reward, recognition and perks programs, pension and benefits administrative solutions, and retirement and financial solutions.

Our agriculture and consumer goods solutions include agronomy record-keeping and recommendations, rebate management services, supplier management, animal health solutions, food traceability and quality assurance, cold chain tracking, data management solutions and software solutions for trade promotion management, optimization and analytics (TPx), retail execution, supply chain solutions and analytics capabilities.

Digitally-led customer experiences – TELUS International (DLCX)

Our DLCX segment offers services that support the full lifecycle of our clients’ digital transformation journeys. We enable our clients to more quickly embrace next-generation digital technologies to deliver better business outcomes. The solutions and services offered are relevant across multiple markets, including information technology (IT) services for digital transformation of customer experience systems and digital customer experience management.

Our DLCX segment has built an agile delivery model with global scale to support next-generation, digitally-led customer experiences. Substantially all of the delivery locations are connected through a carrier-grade infrastructure backed by cloud technologies, enabling globally distributed and virtualized teams. The interconnectedness of our DLCX teams and ability to seamlessly shift interactions between physical and digital channels enables our DLCX teams to tailor our delivery strategy to clients’ evolving needs.

4.3 Liquidity and capital resources

Capital structure financial policies

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

In our definition of financial capital, we include Common equity (excluding Accumulated other comprehensive income), Non-controlling interests, 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, Short-term borrowings, including those arising from securitized receivables, and other long-term debts, including those arising from securitized receivables.

We manage our financial 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 financial 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 (including Common Shares and TELUS International Subordinate Voting Shares), issue new debt, issue new debt to replace existing debt with different characteristics, increase or decrease the amount of receivables sold to an arm’s-length securitization trust, and/or enter into a new arm’s-length securitization trust to replace an existing arm’s-length securitization trust with different characteristics.

We monitor financial capital utilizing a number of measures, including 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 specified financial measures.*)

Financing and capital structure management plans

Report on financing and capital structure management plans

Pay dividends to the holders of the common shares of TELUS Corporation (Common Shares) under our multi-year dividend growth program

- In May 2022, we announced our intention to target ongoing semi-annual dividend increases, with the annual increase in the range of 7 to 10% from 2023 through to the end of 2025, 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. Our long-term Common Share dividend payout ratio guideline is 60 to 75% of free cash flow on a prospective basis. (See *Section 7.5 Liquidity and capital resource measures.*) There can be no assurance that we will maintain a dividend growth program or that it will be unchanged through 2025. (See *Caution regarding forward-looking statements – Lower than planned free cash flow could constrain our ability to invest in operations, reduce leverage or return capital to shareholders, and could affect our ability to sustain our dividend growth program through 2025 and any further dividend growth programs* and *Section 10.14 Financing, debt and dividends* in our 2022 annual MD&A.)
- On August 3, 2023, the Board elected to declare a third quarter dividend of \$0.3636 per share, payable on October 2, 2023, to shareholders of record at the close of business on September 8, 2023. The third quarter dividend for 2023 reflects a cumulative increase of \$0.0250 per share or 7.4% from the \$0.3386 per share dividend declared one year earlier.
- Our dividend reinvestment and share purchase (DRISP) plan trustee acquired shares from Treasury for the DRISP plan, rather than acquiring Common Shares in the stock market. We may, at our discretion, offer Common Shares at a discount of up to 5% from the market price under the DRISP. Effective with the dividends paid beginning on October 1, 2019, we offered Common Shares from Treasury at a discount of 2%. During the second quarter of 2023, for the dividends paid on April 3, 2023, our DRISP plan trustee acquired from Treasury approximately 7 million dividend reinvestment Common Shares for \$186 million. For the dividends paid on July 4, 2023, the DRISP participation rate, calculated as the DRISP investment of \$188 million (including the employee share purchase plan) as a percentage of gross dividends, was approximately 36%.
- TELUS International currently intends to retain all available funds and any future earnings to support operations and to finance the growth and development of its business.

Purchase Common Shares

- We did not purchase any shares pursuant to the 2022 NCIB which concluded on June 5, 2023.

Report on financing and capital structure management plans

Use proceeds from securitized 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 \$1.9 billion at June 30, 2023, all of which was denominated in U.S. dollars (US\$1.5 billion), compared to \$1.5 billion (US\$1.1 billion) at December 31, 2022, and \$1.9 billion (US\$1.5 billion) at June 30, 2022. Our unsecured revolving credit facility, with uses that include the backstop of commercial paper, was renewed and expiry was extended approximately two years to July 14, 2028. See *Section 7.6* for additional details.
- Net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TI credit facility were US\$1.5 billion at June 30, 2023, compared to US\$689 million at December 31, 2022, and US\$771 million at June 30, 2022. The TI credit facility is non-recourse to TELUS Corporation.
- Proceeds from securitized trade receivables were \$590 million at June 30, 2023, compared to \$100 million at December 31, 2022 and \$275 million at June 30, 2022.

Maintain compliance with financial objectives

- Maintain investment-grade credit ratings – On August 4, 2023, investment-grade credit ratings from the four rating agencies that cover TELUS were in the desired range. (See *Section 7.8 Credit ratings*.)
- Net debt to EBITDA – excluding restructuring and other costs ratio of 2.20 to 2.70 times – As measured at June 30, 2023, this ratio was 3.84 times, outside of the objective range, primarily due to the acquisition of spectrum licences (as spectrum is our largest indefinite life asset) and business acquisitions. Given the cash demands of the 600 MHz auction in 2019, the 3500 MHz auction in 2021 and upcoming spectrum auctions in 2023 and 2024, the assessment of the guideline and timing of return to the objective range remains to be determined; however, it is our intent to return to a ratio below 2.70 times in the medium term (following the spectrum auction in 2021, and the spectrum auctions upcoming in 2023 and 2024), consistent with our long-term strategy. (See *Section 7.5 Liquidity and capital resource measures*.)
- Common Share dividend payout ratio of 60 to 75% of free cash flow on a prospective basis – Our objective range is on a prospective basis. The Common Share dividend payout ratio¹ we present in this MD&A is a historical measure utilizing the dividends declared in the most recent four quarters, net of dividend reinvestment plan effects, and free cash flow, and is disclosed on a retrospective basis for illustrative purposes in evaluating our target guideline. As at June 30, 2023, the ratio was 87%, outside of the objective range, primarily due to our planned accelerated capital expenditures program to support our broadband capital investments, the build-out of our TELUS PureFibre® infrastructure and the acceleration of our 5G network roll-out. Excluding the effects of our accelerated capital expenditures program of \$358 million for the most recent four quarters, as at June 30, 2023, the ratio was 70%. We estimate the ratio will be within the objective range on a prospective basis. (See *Section 7.5 Liquidity and capital resource measures*.)
- Generally maintain a minimum of \$1 billion in available liquidity – As at June 30, 2023, our available liquidity¹ was approximately \$1.5 billion. (See *Section 7.6 Credit facilities and Liquidity risk in Section 7.9*.)

¹ These are non-GAAP and other specified financial measures. See *Section 11.1 Non-GAAP and other specified financial measures*.

4.4 Changes in internal control over financial reporting and limitations on scope of design

Changes in internal control over financial reporting

For the three-month and six-month periods ended June 30, 2023, 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.

Limitations on scope of design

In our assessment of the scope of disclosure controls and procedures and internal control over financial reporting, we have excluded the controls, policies and procedures of LifeWorks, which was acquired on September 1, 2022, and WillowTree, which was acquired on January 3, 2023. This scope limitation is in accordance with National Instrument 52-109 *Certification of Disclosure in Issuers’ Annual and Interim Filings*, which allows an issuer to limit its design of internal controls over financial reporting and disclosure controls and procedures to exclude the controls, policies and procedures of a company acquired not more than 365 days before the end of the financial period to which the certificate relates.

For the six-month period ended June 30, 2023, LifeWorks contributed revenues of \$542 million and generated net loss of \$38 million, based on information in source systems for the consolidated legal entity. As at June 30, 2023, LifeWorks’ current assets and current liabilities represented approximately 6% and 10% of TELUS’ consolidated current assets and current liabilities, respectively, while LifeWorks’ non-current assets and non-current liabilities represented approximately 6% and 6% of TELUS’ consolidated non-current assets and non-current liabilities, respectively, based on information in source systems.

From January 3, 2023 (the acquisition date) to June 30, 2023, WillowTree contributed revenues of \$138 million and generated net loss of \$69 million, such amounts as measured at the end of the period based on information in source systems for the consolidated legal entity. As at June 30, 2023, WillowTree’s current assets and current liabilities

represented approximately 2% and 2% of TELUS’ consolidated current assets and current liabilities, respectively, while WillowTree’s non-current assets and non-current liabilities represented approximately 4% and 5% of TELUS’ consolidated non-current assets and non-current liabilities, respectively, based on information in source systems. The amounts recognized for the assets acquired and liabilities assumed as at the acquisition date are described in *Note 18* of the interim consolidated financial statements.

5. Discussion of operations

This section contains forward-looking statements, including those with respect to mobile phone average revenue per subscriber per month (ARPU) growth, products and services trends regarding loading and retention spending, equipment margins, subscriber growth and various future trends. There can be no assurance that we have accurately identified these trends based on past results or that these trends will continue. See *Caution regarding forward-looking statements* at the beginning of this MD&A.

5.1 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, and in particular, Adjusted EBITDA, are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. Effective September 1, 2022, we embarked upon the modification of our internal and external reporting processes, systems and internal controls concurrent with the acquisition and integration of LifeWorks, and correspondingly we are assessing our segmented reporting structure. 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).

The TELUS technology solutions (TTech) segment includes: network revenues and equipment sales arising from mobile technologies; data revenues (which include internet protocol; television; hosting, managed information technology and cloud-based services; and home and business security); healthcare services, software and technology solutions (including employee and family assistance programs and benefits administration); agriculture and consumer goods services (software, data management and data analytics-driven smart-food chain and consumer goods technologies); voice and other telecommunications services revenues; and equipment sales.

The digitally-led customer experiences – TELUS International (DLCX) segment, which has the U.S. dollar as its primary functional currency, is comprised of digital customer experience and digital-enablement transformation solutions, including artificial intelligence (AI) and content management, provided by TELUS International.

5.2 Summary of consolidated quarterly results and trends

Summary of quarterly results

(\$ millions, except per share amounts)	2023 Q2	2023 Q1	2022 Q4	2022 Q3	2022 Q2	2022 Q1	2021 Q4	2021 Q3
Operating revenues and other income¹	4,946	4,964	5,058	4,671	4,401	4,282	4,872	4,251
Operating expenses								
Goods and services purchased ²	1,790	1,803	2,082	1,794	1,637	1,594	1,882	1,660
Employee benefits expense ²	1,568	1,540	1,378	1,231	1,171	1,119	1,108	1,095
Depreciation and amortization	1,006	1,022	929	850	831	842	830	804
Total operating expenses	4,364	4,365	4,389	3,875	3,639	3,555	3,820	3,559
Operating income	582	599	669	796	762	727	1,052	692
Financing costs before long-term debt prepayment premium	323	320	322	34	97	179	192	184
Long-term debt prepayment premium	—	—	—	—	—	—	—	10
Income before income taxes	259	279	347	762	665	548	860	498
Income taxes	63	55	82	211	167	144	197	140
Net income	196	224	265	551	498	404	663	358
Net income attributable to Common Shares	200	217	248	514	468	385	644	345
Net income per Common Share:								
Basic earnings per share (EPS)	0.14	0.15	0.17	0.37	0.34	0.28	0.47	0.25
Adjusted basic EPS ³	0.19	0.27	0.24	0.34	0.32	0.30	0.23	0.29
Diluted EPS	0.14	0.15	0.17	0.37	0.34	0.28	0.47	0.25
Dividends declared per Common Share	0.3636	0.3511	0.3511	0.3386	0.3386	0.3274	0.3274	0.3162
Additional information:								
EBITDA	1,588	1,621	1,598	1,646	1,593	1,569	1,882	1,496
Restructuring and other costs	115	159	94	78	29	39	44	63
Other equity (income) losses related to real estate joint ventures	—	(1)	(3)	—	—	—	1	—
Gain on disposition of financial solutions business	—	—	—	—	—	—	410	—
Adjusted EBITDA	1,703	1,779	1,689	1,724	1,622	1,608	1,517	1,559
Cash provided by operating activities	1,117	761	1,126	1,300	1,250	1,135	896	1,309
Free cash flow	279	535	323	331	205	415	43	203

1 In the fourth quarter of 2021, we recorded a gain on disposition of our financial solutions business of \$410 million.

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

3 See Section 11.1 Non-GAAP and other specified financial measures.

Trends

For trends discussions related to revenues, EBITDA and Adjusted EBITDA, see Section 5.4 TELUS technology solutions segment and Section 5.5 Digitally-led customer experiences – TELUS International segment.

The trend of year-over-year increases in Depreciation and amortization reflects increases related to capital assets acquired in business acquisitions; growth in capital assets in support of the expansion of our broadband footprint, including our generational investment to connect homes and businesses to TELUS PureFibre and 5G technology coverage; and growth in internet, TV and security subscriber loading. The investments in our fibre-optic technology also support our technology strategy to improve coverage and capacity, including the ongoing build-out of our 5G network.

The trend of general year-over-year increases in Financing costs reflects greater long-term debt outstanding and increases in effective interest rates attributed to floating-rate debt and for recent fixed rate issuances, mainly associated with our investments in spectrum and fibre technology, as well as business acquisitions. Financing costs include a long-term debt prepayment premium of \$10 million in the third quarter of 2021. Moreover, Financing costs are net of capitalized interest related to spectrum licences acquired during the 600 MHz spectrum auction, which we commenced deploying into our existing network in 2021, and during the 3500 MHz spectrum auction. Financing costs also include Interest accretion on provisions (asset retirement obligations and written put options) and Employee defined benefit plans net interest. Additionally, for the eight periods shown, Financing costs include varying amounts of foreign exchange gains or losses, varying amounts of interest income and, effective for the second quarter of 2022, virtual power purchase agreements unrealized change in forward element which contributed to income up to the third quarter of 2022 and to losses thereafter.

The trend in Net income reflects the items noted above and, historically, the trend in basic EPS has reflected trends in Net income. For further discussion of trends, see *Section 5.4 TELUS technology solutions segment* and *Section 5.5 Digitally-led customer experiences – TELUS International 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 TELUS technology solutions segment* and *Section 5.5 Digitally-led customer experiences – TELUS International segment*.

In our news releases dated July 13, 2023 and August 4, 2023, filed with the SEC on EDGAR and with the Canadian securities regulators on SEDAR+, our full-year outlook for 2023 was updated.

Operating revenues

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Operating revenues						
Service	4,358	3,857	13.0%	8,703	7,622	14.2%
Equipment	576	516	11.6%	1,156	1,007	14.8%
Operating revenues (arising from contracts with customers)	4,934	4,373	12.8%	9,859	8,629	14.3%
Other income	12	28	(57.1)%	51	54	(5.6)%
Operating revenues and other income	4,946	4,401	12.4%	9,910	8,683	14.1%

Consolidated Operating revenues and other income increased by \$545 million in the second quarter of 2023 and \$1,227 million in the first six months of 2023.

- **Service revenues** increased by \$501 million in the second quarter of 2023 and \$1,081 million in the first six months of 2023. TTech service revenue increased due to: (i) growth in health services revenues, mainly driven by our acquisition of LifeWorks on September 1, 2022; (ii) higher mobile network revenues attributable to subscriber growth and roaming revenue improvements, which principally started in the second quarter of 2022; and (iii) an increase in fixed data service revenues, resulting from subscriber growth, business acquisitions and higher revenue per internet customer. These factors were partly offset by lower TV and fixed legacy voice services revenues, primarily due to technological substitution. Growth in DLCX operating revenues resulted from expanded services for existing clients and growth from new clients, including new clients from our acquisition of WillowTree on January 3, 2023, and favourable foreign exchange impacts, which collectively offset the impact of some DLCX clients reducing their own costs.
- **Equipment revenues** increased by \$60 million in the second quarter of 2023 and \$149 million in the first six months of 2023, driven by higher mobile equipment revenues due to higher contracted volumes and higher-value smartphones in the sales mix, in addition to growth in fixed equipment revenues resulting from higher business and consumer sales volumes and lower discounts on consumer premise equipment.
- **Other income** decreased by \$16 million in the second quarter of 2023, largely due to the non-recurrence of a decrease in provisions arising from the settlement of business acquisition-related written put options in the prior year. Other income decreased by \$3 million in the first six months of 2023, largely due to lower changes in business combination provision reversals.

Operating expenses

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Goods and services purchased	1,790	1,637	9.3%	3,593	3,231	11.2%
Employee benefits expense	1,568	1,171	33.9%	3,108	2,290	35.7%
Depreciation	598	536	11.6%	1,238	1,087	13.9%
Amortization of intangible assets	408	295	38.3%	790	586	34.8%
Operating expenses	4,364	3,639	19.9%	8,729	7,194	21.3%

Consolidated operating expenses increased by \$725 million in the second quarter of 2023 and \$1,535 million in the first six months of 2023.

- **Depreciation** increased by \$62 million in the second quarter of 2023 and \$151 million in the first six months of 2023, primarily due to growth in capital assets over the past 12 months, including business acquisitions and our expanded broadband footprint, as well as increased depreciation from real estate right-of-use lease asset impairments from real estate rationalization, in addition to higher asset retirement activity.
- **Amortization of intangible assets** increased by \$113 million in the second quarter of 2023 and \$204 million in the first six months of 2023, arising from business acquisitions and higher expenditures associated with the intangible asset base over the past 12 months, in addition to greater impairment.

Operating income

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
TTech EBITDA ¹ (See Section 5.4)	1,457	1,417	2.9%	2,910	2,817	3.3%
DLCX EBITDA ¹ (See Section 5.5)	131	176	(25.9)%	299	345	(13.2)%
EBITDA	1,588	1,593	(0.3)%	3,209	3,162	1.5%
Depreciation and amortization (discussed above)	(1,006)	(831)	21.1%	(2,028)	(1,673)	21.2%
Operating income (consolidated earnings before interest and income taxes (EBIT))	582	762	(23.6)%	1,181	1,489	(20.7)%

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

Operating income decreased by \$180 million in the second quarter of 2023 and \$308 million in the first six months of 2023, while EBITDA decreased by \$5 million in the second quarter of 2023 and increased by \$47 million in the first six months of 2023. As a partial offset to the growth drivers discussed within *Adjusted EBITDA* below, EBITDA also reflects higher restructuring and other costs of \$86 million in the second quarter of 2023, primarily related to efficiency and effectiveness programs including workforce reduction, and \$206 million in the first six months of 2023, inclusive of real estate rationalization, as well as one-time amounts recorded of \$68 million for the ratification of the new collective agreement between the Telecommunications Workers Union, United Steelworkers Local 1944 (TWU) and ourselves.

Adjusted EBITDA

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
TTech Adjusted EBITDA ¹ (See Section 5.4)	1,551	1,436	8.1%	3,144	2,871	9.5%
DLCX Adjusted EBITDA ^{1,2} (See Section 5.5)	152	186	(18.6)%	338	359	(5.8)%
Adjusted EBITDA ¹	1,703	1,622	5.0%	3,482	3,230	7.8%

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

² For certain financial metrics, there are definitional differences between TELUS and TELUS International reporting. These differences largely arise from TELUS International adopting definitions consistent with practice in its industry.

Adjusted EBITDA increased by \$81 million or 5.0% in the second quarter of 2023 and \$252 million or 7.8% in the first six months of 2023 driven by TTech growth, which reflects: (i) higher mobile network revenues driven by subscriber growth and our roaming recovery; (ii) growth in health, inclusive of the EBITDA contribution from our acquisition of LifeWorks on September 1, 2022; (iii) increased margins for internet and security, primarily driven by subscriber growth; and (iv) lower organic TTech headcount. These factors were partly offset by: (i) merit-based compensation increases; (ii) higher costs related to the scaling of our digital capabilities, inclusive of increased subscription-based licences, contractor and cloud usage costs; (iii) a decline in our DLCX contribution, primarily associated with cost imbalances arising from reductions in service demand, principally in Europe, from some of our larger technology clients, as well as higher service delivery costs in our AI business due to higher task complexity, all of these impacts combined were only partially offset by cost efficiency efforts realized during the second quarter of 2023; and (iv) declining TV and fixed legacy voice margins.

Financing costs

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Interest on long-term debt, excluding lease liabilities – gross	270	179	50.8%	533	348	53.2%
Interest on long-term debt, excluding lease liabilities – capitalized	(1)	(12)	(91.7)%	(3)	(27)	(88.9)%
Interest on lease liabilities	31	17	82.4%	59	33	78.8%
Interest on short-term borrowings and other	9	3	n/m	12	7	71.4%
Interest accretion on provisions	7	5	40.0%	15	8	87.5%
Interest expense	316	192	64.6%	616	369	66.9%
Employee defined benefit plans net interest	2	2	—%	4	4	—%
Foreign exchange (gains) losses	—	(17)	(100.0)%	4	(16)	n/m
Virtual power purchase agreements unrealized change in forward element	7	(80)	n/m	26	(80)	n/m
Interest income	(2)	—	n/m	(7)	(1)	n/m
Financing costs	323	97	n/m	643	276	133.0%

Financing costs increased by \$226 million in the second quarter of 2023 and \$367 million in the first six months of 2023, mainly due to the following factors:

- **Interest expense** increased by \$124 million in the second quarter of 2023 and \$247 million in the first six months of 2023. These changes largely resulted from the following:
 - Gross interest expense on long-term debt, excluding lease liabilities, increased by \$91 million in the second quarter of 2023 and \$185 million in the first six months of 2023, primarily driven by an increase in average long-term debt balances outstanding, attributable in part to business acquisitions, in addition to an increase in the effective interest rate. Our weighted average interest rate on long-term debt (excluding commercial paper, TELUS bank credit facilities, the revolving components of the TI credit facility, lease liabilities and other long-term debt) was 4.19% at June 30, 2023, compared to 3.72% one year earlier. (See *Long-term debt issued and Redemptions and repayments of long-term debt* in Section 7.4.)
 - Capitalized long-term debt interest, excluding lease liabilities, is in respect of debt incurred for the purchase of spectrum licences during the 3500 MHz spectrum auction held in June to July 2021 by Innovation, Science and Economic Development Canada (ISED).
 - Interest on lease liabilities increased by \$14 million in the second quarter of 2023 and \$26 million in the first six months of 2023, resulting from an increase in both lease principal and effective interest rate.
- **Foreign exchange gains** changed by \$17 million in the third quarter of 2022 and \$20 million in the first six months of 2023, primarily reflecting changes in the value of the Canadian dollar relative to the U.S. dollar, as well as the European euro relative to the Canadian dollar.
- **Virtual power purchase agreements unrealized change in forward element** represents the estimated unrealized decline recorded from our virtual power purchase agreements (VPPAs) with renewable energy projects as of June 30, 2023. We have entered into VPPAs with renewable energy projects that develop solar and wind power facilities as part of our commitment to reduce our carbon footprint.

Income taxes

(\$ in millions, except tax rates)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Income taxes computed at applicable statutory rates (%)	24.2	25.7	(1.5) pts.	23.3	25.6	(2.3) pts.
Adjustments recognized in the current period for income taxes of prior periods (%)	(5.3)	(0.9)	(4.4) pts.	(2.2)	(0.5)	(1.7) pts.
(Non-taxable) non-deductible amounts, net (%)	0.8	0.2	0.6 pts.	(1.3)	—	(1.3) pts.
Withholding and other taxes (%)	0.8	1.0	(0.2) pts.	1.7	1.2	0.5 pts.
Losses not recognized (%)	1.9	0.2	1.7 pts.	1.5	0.2	1.3 pts.
Foreign tax differential (%)	1.5	(1.3)	2.8 pts.	(1.3)	(0.9)	(0.4) pts.
Other (%)	0.4	0.1	0.3 pts.	0.3	—	0.3 pts.
Effective tax rate (%)	24.3	25.0	(0.7) pts.	22.0	25.6	(3.6) pts.
Income taxes computed at applicable statutory rates	62	171	(63.7)%	125	311	(59.8)%
Adjustments recognized in the current period for income taxes of prior periods	(13)	(6)	(116.7)%	(12)	(6)	100.0%
(Non-taxable) non-deductible amounts, net	2	1	100.0%	(7)	(1)	n/m
Withholding and other taxes	2	7	(71.4)%	9	15	(40.0)%
Losses not recognized	5	1	n/m	8	3	n/m
Foreign tax differential	4	(8)	(150)%	(7)	(11)	(36.4)%
Other	1	(1)	n/m	2	—	n/m
Income taxes	63	167	(62.3)%	118	311	(62.1)%

Total income tax expense decreased by \$104 million in the second quarter of 2023 and \$193 million in the first six months of 2023. The effective tax rate decreased from 25.0% to 24.3% in the second quarter of 2023, primarily driven by adjustments recognized in the current period for income taxes of prior periods. The effective tax rate decreased from 25.6% to 22.0% in the first six months of 2023, largely due to a lower weighted average statutory income tax rate resulting from a decreased portion of income earned in jurisdictions with higher statutory income tax rates, in addition to adjustments recognized in the current period for income taxes of prior periods.

Comprehensive income

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Net income	196	498	(60.6)%	420	902	(53.4)%
Other comprehensive income (net of income taxes):						
Items that may be subsequently reclassified to income	(82)	(8)	n/m	(70)	14	n/m
Items never subsequently reclassified to income	1	134	(99.3)%	(9)	298	n/m
Comprehensive income	115	624	(81.6)%	341	1,214	(71.9)%

Comprehensive income decreased by \$509 million in the second quarter of 2023 and \$873 million in the first six months of 2023, largely as a result of the decrease in Net income, employee defined benefit plan re-measurement amounts and the change in unrealized fair value of derivatives designated as cash flow hedges. Items that may subsequently be reclassified to income are composed of changes in the unrealized fair value of derivatives designated as cash flow hedges and foreign currency translation adjustments arising from translating financial statements of foreign operations. Items never subsequently reclassified to income are composed of employee defined benefit plans re-measurement amounts and changes in measurement of investment financial assets.

5.4 TELUS technology solutions segment**TTech trends and seasonality**

The historical trend over the past eight quarters in mobile network revenue primarily reflects growth in our mobile phone subscriber base, as well as an increase in Internet of Things (IoT) connections. Supplementing this, the trend of mobile phone ARPU has been supported by the progressive recovery of international roaming revenues from increasing travel volumes and our ameliorating historical domestic ARPU declines. Historical domestic ARPU declines were largely attributable to customers having greater access to higher network speeds and larger allotments of data for a given price point.

Mobile equipment revenue growth has been moderating as a result of higher value smartphones in the sales mix and the impact of steadily increasing device sales volumes which are heavily impacted by increased retail traffic and promotional activity, compared to previous trending declines at the height of the pandemic. Declines in mobile device sales were mainly attributed to the improving durability and increasing cost of popular devices that result in customers deferring upgrades, which we are mitigating by offering certified pre-owned devices and our Bring-It-Back[®] program and also contributing to a circular economy.

Our spectrum investments and capital expenditures on network improvements increase capacity, reliability and coverage, allowing us to grow revenue through net additions of new mobile phone and connected devices subscribers. The growth in our mobile phone subscriber base is attributable to: (i) the success of our promotions, including the bundling of our mobility and home services; (ii) the effects of market growth arising from a growing population, changing population demographics and an increasing number of customers with multiple devices; (iii) continuous improvements in the speed, performance and reliability of our network, as well as our enhanced digital capabilities; and (iv) our relatively low churn rate, which reflects our customers first efforts and upgrade volume programs, despite increased switching activity as a result of the post-pandemic opening of retail channels.

Our connected device subscriber base has been growing, primarily in response to our expanded IoT offerings. Growth within our IoT subscriber base is attributed to increased demand for IoT solutions across various industries, including healthcare, agriculture, transportation, smart buildings and smart cities, energy and retail. Our investments in network infrastructure and expanding our IoT product portfolio have also allowed us to provide reliable and scalable IoT solutions to our customer base.

Growth in our internet subscriber base has been supported by our continued investments in building out our fibre-optic infrastructure, supplemented by our relatively low customer churn rate. The total number of TV subscribers has increased (in contrast to market-reported declines in conventional television viewing habits), reflecting net subscriber additions in response to our diverse and flexible product offerings, combined with our relatively low customer churn rate. Our security subscriber base growth is increasing as a result of organic growth and business acquisitions, including our acquisition of Vivint Smart Home, Inc. in the second quarter of 2022. Our home services growth is also attributable to the adoption of our bundling of home services, as well as the bundling of mobility and home services to meet the demand for multiple services per home. Adoption increases our services per home and positively impacts churn for most services, in addition to the effectiveness of our self-install and virtual-install models. Residential voice subscriber losses have decelerated as a result of the success of our bundled services and lower-priced offerings, as well as strong retention efforts to mitigate the ongoing substitution to mobile and internet-based services.

The trend of growing fixed data services revenues is attributable to the sustained demand for faster internet speeds and larger bandwidth, home and business security offerings and other advanced applications, which are enabled by investments in our fibre-optic footprint. The trend of declining TV revenues and legacy fixed voice revenues are due to technological substitution and intensification of competition in the small and medium-sized business market. However, we are mitigating this trend with our bundled product and lower-priced offerings, product diversification and successful retention efforts. The migration of business product and service offerings to IP services and the entry of new competitors have yielded inherently lower margins compared to some legacy business product and service offerings; however, we are continually refining and diversifying our portfolio of innovative business offerings, which now includes managed IT services through our acquisition of Fully Managed Inc. in the first quarter of 2022.

The trend of growth in health services revenues has been propelled by the acquisition of LifeWorks in the third quarter of 2022, as well as organic growth in our existing health offerings, which include virtual care and virtual pharmacy solutions, collaborative health records, health benefits management, personal health monitoring solutions, and employee and family assistance programs and benefits administration. The LifeWorks acquisition immediately enabled the opportunity for health services to operate and grow internationally through long-standing corporate relationships globally, with notable areas of focus in employee health and wellness programs, mental and physical health solutions, pensions and benefits management, and retirement solutions. Inclusive of LifeWorks, we are well-positioned to continue improving health and wellness outcomes for people around the world. Our competencies and assets in health, combined with the trend in digitization and automation, position us well to bolster the global healthcare system in a complementary fashion. With our technology heritage, we see the trend moving the healthcare system to improved efficiency and outcomes through better insights. We also believe Canadians will have greater control of their healthcare outcomes through the integration of disparate data (better flow of information across the system) and consent-based data management. Our diversified virtual care offerings continue to grow to meet the healthcare needs of Canadians and drive better health outcomes, including the accelerated adoption of virtual consultations, as reflected in the growing number of virtual care members. Our growing number of lives covered are largely driven by the expansion of our employee and family assistance programs, in addition to our health benefits management solutions correlated with the number of benefit claims captured in our digital health transactions.

The general trend of growth in agriculture and consumer goods services has been attributable to business acquisitions to meet the growing demand for digital solutions in the agriculture industry. Through our global team and cloud-based solutions, we are able to service our diverse client base, including growers, producers, agronomists, advisors, processors and retailers, by helping to drive more effective and agile decision-making that will address changing consumer demands, improve profitability and generate a better flow of information across the value chain. This improves the safety and sustainability of our outputs and drives efficiencies in the way we produce, distribute and consume food and consumer goods.

TTech operating indicators

At June 30	2023			2022			Change
Subscriber connections (thousands):							
Mobile phone ¹	9,798			9,429			3.9%
Connected device ¹	2,732			2,238			22.1%
Internet ²	2,553			2,335			9.3%
TV	1,351			1,290			4.7%
Residential voice	1,080			1,106			(2.4)%
Security	1,015			925			9.7%
Total telecom subscriber connections	18,529			17,323			7.0%
LTE population coverage ³ (millions)	37.0			37.0			— %
5G population coverage ³ (millions)	31.0			28.4			9.2%
	Three-month periods ended June 30			Six-month periods ended June 30			
	2023	2022	Change	2023	2022	Change	
Mobile phone gross additions (thousands)	376	320	17.5%	676	592	14.2%	
Subscriber connection net additions (losses) (thousands):							
Mobile phone	110	93	18.3%	157	139	12.9%	
Connected device	124	92	34.8%	182	138	31.9%	
Internet	35	34	2.9%	70	64	9.4%	
TV	17	15	13.3%	26	25	4.0%	
Residential voice	(8)	(7)	(14.3)%	(16)	(17)	5.9%	
Security	15	20	(25.0)%	37	46	(19.6)%	
Total telecom subscriber connection net additions	293	247	18.6%	456	395	15.4%	
Mobile phone ARPU, per month ⁴ (\$)	58.80	57.74	1.8%	58.71	57.10	2.8%	
Mobile phone churn, per month ⁵ (%)	0.91	0.81	0.10 pts.	0.90	0.81	0.09 pts.	
Health services (millions)							
At June 30	2023			2022			Change
Healthcare lives covered ⁶	68.3			22.4			n/m
Virtual care members	5.3			3.6			47.2%
	Three-month periods ended June 30			Six-month periods ended June 30			
	2023	2022	Change	2023	2022	Change	
Digital health transactions	152.9	145.4	5.2%	301.8	285.0	5.9%	

1 Effective January 1, 2023, on a prospective basis, we adjusted our mobile phone and connected device subscriber bases to remove 50,000 subscribers and add 82,000 subscribers, respectively, due to a review of our subscriber bases.

2 Effective January 1, 2023, on a prospective basis, we adjusted our internet subscriber base to add 70,000 subscribers as a result of business acquisitions.

3 Including network access agreements with other Canadian carriers.

4 This is an other specified financial measure. See *Section 11.1 Non-GAAP and other specified financial measures*. This is an industry measure useful in assessing operating performance of a mobile products and services company, but is not a measure defined under IFRS-IASB.

5 See *Section 11.2 Operating indicators*.

6 During the third quarter of 2022, we added 36.9 million healthcare lives covered as a result of the LifeWorks acquisition.

- **Mobile phone gross additions** were 376,000 in the second quarter of 2023 and 676,000 in the first six months of 2023, reflecting increases of 56,000 for the quarter and 84,000 for the six-month period. These increases were largely driven by growth in postpaid gross additions due to increased levels of retail traffic, increased market-driven promotional activity and growth in the Canadian population.
- Our **mobile phone churn rate** was 0.91% in the second quarter of 2023 and 0.90% in the first six months of 2023, compared to 0.81% in the second quarter of 2022 and 0.81% in the first six months of 2022. These churn rates grew largely due to increased customer switching activity corresponding with higher levels of retail traffic and increased market-driven promotional activity, as discussed above. Additionally, increased travel volumes from prior periods have resulted in higher travel-related prepaid deactivations in the second quarter of 2023. These factors have been partly mitigated by our continued focus on customer retention through our industry-leading service and network quality, successful promotions and bundled offerings.
- **Mobile phone net additions** were 110,000 in the second quarter of 2023 and 157,000 in the first six months of 2023, reflecting increases of 17,000 for the quarter and 18,000 for the six-month period, driven by higher mobile phone gross additions, partially offset by higher mobile phone churn, as described above.
- **Mobile phone ARPU** was \$58.80 in the second quarter of 2023 and \$58.71 in the first six months of 2023, reflecting increases of \$1.06 or 1.8% for the quarter and \$1.61 or 2.8% for the six-month period. These increases

were largely due to higher roaming revenues as a result of increased international travel, which had notable recoveries beginning in the second quarter of 2022. Domestic ARPU has modestly increased as we continue to focus our efforts on driving higher-value loading, partly offset by family discounts and bundling credits offered to our customers and lower overage revenues as customers continue to adopt larger or unlimited data and voice allotments in their rate plans.

- **Connected device net additions** were 124,000 in the second quarter of 2023 and 182,000 in the first six months of 2023, reflecting increases of 32,000 for the quarter and 44,000 for the six-month period, attributable to increased IoT connections, as well as sales of other connected devices, such as tablets and mobile internet.
- **Internet net additions** were 35,000 in the second quarter of 2023 and 70,000 in the first six months of 2023, reflecting increases of 1,000 for the quarter and 6,000 for the six-month period. The increases were due to strong loading in the business market and our success in driving strong gross additions in the consumer market through bundled product offerings, partly offset by a higher churn rate driven by macroeconomic pressures impacting consumer purchasing decisions.
- **TV net additions** were 17,000 in the second quarter of 2023 and 26,000 in the first six months of 2023, reflecting increases of 2,000 for the quarter and 1,000 for the six-month period, due to our diverse offerings, partly offset by higher churn related to the same factors as internet.
- **Residential voice net losses** were 8,000 in the second quarter of 2023 and 16,000 in the first six months of 2023, reflecting an increase of 1,000 losses for the quarter and an improvement of 1,000 for the six-month period. Our bundled product and lower-priced offerings have been successful at mitigating losses and minimizing substitution to mobile and internet-based services.
- **Security net additions** were 15,000 in the second quarter of 2023 and 37,000 in the first six months of 2023, reflecting decreases of 5,000 for the quarter and 9,000 for the six-month period, due to higher churn related to the same factors as internet, partly offset by increased demand for our bundled product offerings and diverse suite of products and services.
- **Healthcare lives covered** were 68.3 million as of the end of the second quarter of 2023, an increase of 45.9 million over the past 12 months, mainly due to the addition of 36.9 million lives covered from our third quarter 2022 acquisition of LifeWorks, as well as healthy post-acquisition growth from both new and existing clients across all of our regions. Organically, lives covered also increased due to continued demand for virtual solutions and personal health records.
- **Virtual care members** were 5.3 million as of the end of the second quarter of 2023, an increase of 1.7 million over the past 12 months, attributable to the continued adoption of virtual solutions that keep Canadians and others safely connected to health and wellness care.
- **Digital health transactions** were 152.9 million in the second quarter of 2023 and 301.8 million in the first six months of 2023, reflecting increases of 7.5 million for the quarter and 16.8 million for the six-month period, largely driven by increased paid exchange of healthcare data between our health benefits management system and care providers resulting from higher patient demand for elective health services.

Operating revenues and other income – TTech segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Mobile network revenue	1,718	1,623	5.9%	3,415	3,200	6.7%
Mobile equipment and other service revenues	519	459	13.1%	1,036	899	15.2%
Fixed data services ¹	1,146	1,079	6.2%	2,274	2,136	6.5%
Fixed voice services	190	201	(5.5)%	382	401	(4.7)%
Fixed equipment and other service revenues	131	121	8.3%	259	234	10.7%
Health services	428	137	n/m	851	277	n/m
Agriculture and consumer goods services	79	81	(2.5)%	163	166	(1.8)%
Operating revenues (arising from contracts with customers)	4,211	3,701	13.8%	8,380	7,313	14.6%
Other income	12	28	(57.1)%	51	54	(5.6)%
External Operating revenues and other income	4,223	3,729	13.2%	8,431	7,367	14.4%
Intersegment revenues	4	4	— %	8	8	— %
TTech Operating revenues and other income	4,227	3,733	13.2%	8,439	7,375	14.4%

¹ Excludes health services and agriculture and consumer goods services.

TTech Operating revenues and other income increased by \$494 million in the second quarter of 2023 and \$1,064 million in the first six months of 2023.

Mobile network revenue increased by \$95 million or 5.9% in the second quarter of 2023 and \$215 million or 6.7% in the first six months of 2023, largely due to growth in our mobile phone and connected device subscriber base, roaming revenue recovery attributed to the easing of pandemic-related restrictions, which principally started in the second quarter of 2022, and contributions from higher base rate plans.

Mobile equipment and other service revenues increased by \$60 million in the second quarter of 2023 and \$137 million in the first six months of 2023, largely attributable to higher contracted volumes, in addition to the impact of higher-value smartphones in the sales mix.

Fixed data services revenues increased by \$67 million in the second quarter of 2023 and \$138 million in the first six months of 2023. These increases were driven by: (i) an increase in our internet, security and TV subscribers; (ii) business acquisitions; and (iii) higher revenue per customer as a result of internet speed upgrades and rate changes. This growth was partially offset by lower TV revenue per customer, reflecting an increased mix of customers selecting smaller TV combination packages and technological substitution.

Fixed voice services revenues decreased by \$11 million in the second quarter of 2023 and \$19 million in the first six months of 2023, reflecting the ongoing decline in legacy voice revenues as a result of technological substitution and price plan changes. Declines were partly mitigated by the success of our bundled product offerings, retention efforts and the migration from legacy to IP services offerings.

Fixed equipment and other service revenues increased by \$10 million in the second quarter of 2023 and \$25 million in the first six months of 2023, reflecting higher business and consumer sales volumes and lower discounts on consumer premise equipment.

Health services revenues increased by \$291 million in the second quarter of 2023 and \$574 million in the first six months of 2023, driven by: (i) our acquisition of LifeWorks on September 1, 2022; (ii) the continued adoption of our virtual care solutions; and (iii) growth in our traditional pharmacy solutions reflecting more demand for our pharmacy management software coupled with increased prices.

Agriculture and consumer goods services revenues decreased by \$2 million in the second quarter of 2023 and \$3 million in the first six months of 2023, reflecting transient headwinds, including subscription softness in our Software-as-a-Service (SaaS)-based revenue management software for consumer goods manufacturers and decreased sales funnel opportunities related to macroeconomic challenges. Our agriculture and consumer goods revenues are largely earned in U.S. dollars, and in 2023 compared to 2022, the Canadian dollar weakened against the U.S. dollar, resulting in higher reported revenues in these periods.

Other income decreased by \$16 million in the second quarter of 2023, largely due to the non-recurrence of a decrease in provisions arising from the settlement of business acquisition-related written put options in the prior year. Other income decreased by \$3 million in the first six months of 2023, largely due to lower changes in business combination provision reversals.

Intersegment revenues represent services provided to the DLCX segment that are eliminated upon consolidation, together with the associated DLCX expenses.

Direct contribution – TTech segment

Three-month periods ended June 30 (\$ in millions)	Mobile products and services			Fixed products and services ¹			Total TTech		
	2023	2022	Change	2023	2022	Change	2023	2022	Change
Revenues									
Service	1,748	1,647	6.1%	1,887	1,538	22.7%	3,635	3,185	14.1%
Equipment	489	435	12.4%	87	81	7.4%	576	516	11.6%
Operating revenues (arising from contracts with customers)	2,237	2,082	7.4%	1,974	1,619	21.9%	4,211	3,701	13.8%
Expenses									
Direct expenses	662	609	8.7%	671	471	42.5%	1,333	1,080	23.4%
Direct contribution	1,575	1,473	6.9%	1,303	1,148	13.5%	2,878	2,621	9.8%

Direct contribution – TTech segment

Six-month periods ended June 30 (\$ in millions)	Mobile products and services			Fixed products and services ¹			Total TTech		
	2023	2022	Change	2023	2022	Change	2023	2022	Change
Revenues									
Service	3,473	3,247	7.0%	3,751	3,059	22.6%	7,224	6,306	14.6%
Equipment	978	852	14.8%	178	155	14.8%	1,156	1,007	14.8%
Operating revenues (arising from contracts with customers)	4,451	4,099	8.6%	3,929	3,214	22.2%	8,380	7,313	14.6%
Expenses									
Direct expenses	1,318	1,202	9.7%	1,331	932	42.8%	2,649	2,134	24.1%
Direct contribution	3,133	2,897	8.1%	2,598	2,282	13.8%	5,731	5,179	10.7%

¹ Includes health services and agriculture and consumer goods services.

The direct expenses included in the direct contribution calculations in the preceding tables represent components of the Goods and services purchased and Employee benefits expense totals included in the table below and have been calculated in accordance with the accounting policies used to prepare the totals presented in the financial statements. TTech direct contribution increased by \$257 million or 9.8% in the second quarter of 2023 and \$552 million or 10.7% in the first six months of 2023.

TTech mobile products and services direct contribution increased by \$102 million or 6.9% in the second quarter of 2023 and \$236 million or 8.1% in the first six months of 2023, largely reflecting mobile subscriber growth, higher roaming margins associated with an increase in international travel volumes and higher equipment margins. These were partly offset by higher commissions attributed to increased levels of retail traffic.

TTech fixed products and services direct contribution increased by \$155 million or 13.5% in the second quarter of 2023 and \$316 million or 13.8% in the first six months of 2023, reflecting growth in health, inclusive of business acquisitions and organic growth, as well as increased margins for internet, data and security, primarily driven by subscriber growth. These were partly offset by declining TV and legacy voice margins, principally due to technological substitution.

Operating expenses – TTech segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Goods and services purchased ¹	1,820	1,609	13.1%	3,630	3,170	14.5%
Employee benefits expense ¹	950	707	34.4%	1,899	1,388	36.8%
TTech operating expenses	2,770	2,316	19.6%	5,529	4,558	21.3%

¹ Includes restructuring and other costs.

TTech operating expenses increased by \$454 million in the second quarter of 2023 and \$971 million in the first six months of 2023. See *TTech Adjusted EBITDA* below for further details.

EBITDA – TTech segment

(\$ in millions, except margins)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
EBITDA	1,457	1,417	2.9%	2,910	2,817	3.3%
Add restructuring and other costs included in EBITDA	94	19	n/m	235	54	n/m
Deduct other equity income related to real estate joint ventures	—	—	n/m	(1)	—	n/m
Adjusted EBITDA	1,551	1,436	8.1%	3,144	2,871	9.5%
EBITDA margin ¹ (%)	34.5	37.9	(3.4) pts.	34.5	38.2	(3.7) pts.
Adjusted EBITDA margin ¹ (%)	36.7	38.4	(1.7) pts.	37.3	38.9	(1.6) pts.

¹ These are non-GAAP and other specified financial measures. See *Section 11.1 Non-GAAP and other specified financial measures*.

TTech EBITDA increased by \$40 million or 2.9% in the second quarter of 2023 and \$93 million or 3.3% in the first six months of 2023. As a partial offset to the growth drivers discussed within *TTech Adjusted EBITDA* below, EBITDA also reflects higher restructuring and other costs in the second quarter of 2023, primarily related to efficiency and effectiveness programs, and in the first six months of 2023, inclusive of real estate rationalization as well as one-time amounts recorded of \$68 million for the ratification of the new collective agreement between the TWU and ourselves.

TTech Adjusted EBITDA increased by \$115 million or 8.1% in the second quarter of 2023 and \$273 million or 9.5% in the first six months of 2023, reflecting an increase in direct contribution, in addition to lower organic TTech headcount. These factors were partially offset by: (i) higher costs related to business acquisitions, inclusive of a greater number of team members; (ii) merit-based compensation increases; (iii) increased services provided by the DLCX segment; (iv) higher costs related to the scaling of our digital capabilities, inclusive of increased subscription-based licences, contractor and cloud usage costs.

Adjusted EBITDA margin decreased by 1.7 percentage points in the second quarter of 2023 and 1.6 percentage points in the first six months of 2023. These declines were largely due to our continued diversification into growth sectors that are generally lower margin – and less capital intensive – than traditional telecommunications, inclusive of our LifeWorks acquisition, in addition to rising software license and cloud infrastructure costs as we scale our digital capabilities while working in the early stages of decommissioning certain on-premise servers and other organizational processes.

Adjusted EBITDA less capital expenditures – TTech segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Adjusted EBITDA	1,551	1,436	8.1%	3,144	2,871	9.5%
Capital expenditures	(773)	(1,016)	(23.9)%	(1,466)	(1,818)	(19.4)%
Adjusted EBITDA less capital expenditures ¹	778	420	85.2%	1,678	1,053	59.4%

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

TTech Adjusted EBITDA less capital expenditures increased by \$358 million in the second quarter of 2023 and \$625 million in the first six months of 2023. See Section 7.3 for further discussion on capital expenditures.

EBIT – TTech segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
EBITDA	1,457	1,417	2.9%	2,910	2,817	3.3%
Depreciation	(553)	(498)	11.0%	(1,150)	(1,012)	13.6%
Amortization of intangible assets	(344)	(252)	36.5%	(664)	(497)	33.6%
EBIT ¹	560	667	(16.0)%	1,096	1,308	(16.2)%

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

TTech EBIT decreased by \$107 million in the second quarter of 2023 and \$212 million in the first six months of 2023. Depreciation and amortization increased, reflecting business acquisitions and growth in capital assets over the past 12 months, including our expanded fibre footprint and 5G network roll-out, in addition to higher depreciation on right-of-use lease asset impairments, partly offset by the prior period’s accelerated depreciation resulting from asset retirement activity.

5.5 Digitally-led customer experiences – TELUS International segment

DLCX trends

The historical trend over the past eight quarters in DLCX revenue reflects both the growth in our organic customer base, increases in new service programs provided to existing clients, and growth from acquisitions, including our acquisition of WillowTree on January 3, 2023. The higher revenue also includes revenue from internal services provided to the TTech segment. In the second quarter of 2023, DLCX revenue experienced a greater than expected reduction in service volume demand from some of our larger technology clients, particularly in Europe. In addition, several of our key clients also moved to aggressively reduce their own costs, which has created delays and near-term reductions in spend commitments.

Goods and services purchased and Employee benefits expense increased with the increases in the DLCX team member base to service growing volumes and changes in external labour requirements to support the growth in our digital services business, changes in our crowd-sourced enabled workforce to support our AI business, increases in our software licensing costs associated with a growing team member base and increases in administrative expenses and facility costs to support overall business growth and acquisitions.

Depreciation and amortization have increased due to growth in our capital assets, to support the expansion of our delivery sites required to service customer demand, and growth in intangible assets recognized in connection with our business acquisitions, including our acquisition of WillowTree.

DLCX operating indicators

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Operating revenues by industry vertical						
Tech and games	399	367	8.7%	787	722	9.0%
Communications and media	211	183	15.3%	418	359	16.4%
eCommerce and fintech	89	98	(9.2)%	196	198	(1.0)%
Banking, financial services and insurance	50	64	(21.9)%	110	106	3.8%
Healthcare	50	14	n/m	104	29	n/m
All others ¹	97	71	36.6%	209	142	47.2%
	896	797	12.4%	1,824	1,556	17.2%
Operating revenues by geographic region						
Europe	279	284	(1.8)%	570	581	(1.9)%
North America	254	201	26.4%	538	378	42.3%
Asia-Pacific	211	193	9.3%	421	372	13.2%
Central America and others ²	152	119	27.7%	295	225	31.1%
	896	797	12.4%	1,824	1,556	17.2%

1 All others includes, among others, travel and hospitality, retail and consumer packaged goods industry verticals.

2 Others includes South America and Africa geographic regions.

Across all of our verticals, the reported revenue growth rates were positively impacted by the strengthening U.S. dollar to Canadian dollar movements compared to the same period in the prior year.

Revenue from our tech and games industry vertical increased by \$32 million in the second quarter of 2023 and \$65 million in the first six months of 2023, due to continued growth experienced with a number of our technology clients and the addition of new clients. This growth was partially offset by lower revenue from our second-largest client. Revenue from our communications and media industry vertical increased by \$28 million in the second quarter of 2023 and \$59 million in the first six months of 2023, driven primarily by more services provided to the TTEch segment and the addition of new clients from our acquisition of WillowTree. Revenue from our eCommerce and fintech industry vertical decreased by \$9 million in the second quarter of 2023 and \$2 million in the first six months of 2023, due to a decline in service volumes from fintech clients. Revenue from our banking, financial services and insurance industry vertical decreased by \$14 million in the second quarter of 2023 due to lower service volumes from a global financial institution client, partially offset by the addition of new clients from our acquisition of WillowTree, and increased by \$4 million in the first six months of 2023. Revenue from our healthcare industry vertical increased by \$36 million in the second quarter of 2023 and \$75 million in the first six months of 2023, which was primarily due to more services provided to the healthcare business unit of the TTEch segment.

We serve our clients, who are primarily domiciled in North America and Europe, from multiple delivery locations across four geographic regions. In addition, our TELUS International AI Data Solutions (TIAI) clients are largely supported by crowdsourced contractors that are globally dispersed and not limited to the physical locations of our delivery centres. In general, revenue growth in each geographic region, excluding Europe, corresponds with the overall growth of the business and our consolidated revenue. The decline in revenue in Europe for both the second quarter and first six months of 2023 was due to lower service volumes from our technology clients serviced from this region. The table above presents the revenue generated in each geographic region, based on the location of our delivery centre or where the services were provided from, for the periods presented.

Operating revenues and other income – DLCX segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Operating revenues (arising from contracts with customers)	723	672	7.6%	1,479	1,316	12.4%
Intersegment revenues	173	125	38.4%	345	240	43.8%
DLCX Operating revenues and other income	896	797	12.4%	1,824	1,556	17.2%

DLCX Operating revenues and other income increased by \$99 million in the second quarter of 2023 and \$268 million in the first six months of 2023.

Our **digital and customer experience solutions revenues** increased by \$51 million in the second quarter of 2023 and \$163 million in the first six months of 2023, primarily attributable to growth in our tech and games and other industry vertical clients, arising from additional services provided to existing clients and new clients added since the prior year, including new clients from the acquisition of WillowTree. In addition, the strengthening of the U.S. dollar against the Canadian dollar resulted in a favourable foreign currency impact on our DLCX operating results. Revenues from

contracts denominated in U.S. dollars, European euros and other currencies will be affected by changes in foreign exchange rates.

Intersegment revenues represent services provided to the TTech segment, including those from the TELUS master services agreement. Such revenue is eliminated upon consolidation, together with the associated TTech expenses. The increase in intersegment revenues reflects the competitive benefits TELUS derives from the lower cost structure in the DLCX segment and the significant amounts of value-generating digital, AI, telecommunications, health, and agriculture and consumer goods solutions TELUS receives, while maintaining control over the quality of the associated services delivered.

Operating expenses – DLCX segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Goods and services purchased ¹	147	157	(6.4)%	316	309	2.3%
Employee benefits expense ¹	618	464	33.2%	1,209	902	34.0%
DLCX operating expenses	765	621	23.2%	1,525	1,211	25.9%

1 Includes restructuring and other costs.

DLCX operating expenses increased by \$144 million in the second quarter of 2023 and \$314 million in the first six months of 2023.

EBITDA – DLCX segment

(\$ in millions, except margins)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
EBITDA	131	176	(25.9)%	299	345	(13.2)%
Add restructuring and other costs included in EBITDA	21	10	n/m	39	14	n/m
Adjusted EBITDA¹	152	186	(18.6)%	338	359	(5.8)%
EBITDA margin ² (%)	14.6	22.2	(7.6) pts.	16.4	22.2	(5.8) pts.
Adjusted EBITDA margin² (%)	16.9	23.4	(6.5) pts.	18.5	23.1	(4.6) pts.

1 For certain metrics, there are definitional differences between TELUS and TELUS International reporting. These differences largely arise from TELUS International adopting definitions consistent with practice in its industry.

2 These are non-GAAP and other specified financial measures. See Section 11.1 Non-GAAP and other specified financial measures.

DLCX EBITDA decreased by \$45 million or 25.9% in the second quarter of 2023 and \$46 million or 13.2% in the first six months of 2023. DLCX Adjusted EBITDA decreased by \$34 million or 18.6% in the second quarter of 2023 and \$21 million or 5.8% in the first six months of 2023, while Adjusted EBITDA margin decreased by 6.5 percentage points in the second quarter of 2023 and 4.6 percentage points in the first six months of 2023. These decreases were primarily associated with cost imbalances arising from reductions in service demand, principally in Europe, from some of our larger technology clients, as well as higher service delivery costs in our AI business due to higher task complexity, all of these impacts combined were only partially offset by cost efficiency efforts realized during the second quarter of 2023.

Adjusted EBITDA less capital expenditures – DLCX segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Adjusted EBITDA	152	186	(18.6)%	338	359	(5.8)%
Capital expenditures	(34)	(38)	(10.5)%	(54)	(69)	(21.7)%
Adjusted EBITDA less capital expenditures¹	118	148	(20.3)%	284	290	(2.1)%

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

DLCX Adjusted EBITDA less capital expenditures decreased by \$30 million in the second quarter of 2023 and \$6 million in the first six months of 2023. See Section 7.3 for further discussion on capital expenditures.

EBIT – DLCX segment

(\$ in millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
EBITDA	131	176	(25.9)%	299	345	(13.2)%
Depreciation	(45)	(38)	18.4%	(88)	(75)	17.3%
Amortization of intangible assets	(64)	(43)	48.8%	(126)	(89)	41.6%
EBIT ¹	22	95	(76.8)%	85	181	(53.0)%

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

DLCX EBIT decreased by \$73 million in the second quarter of 2023 and \$96 million in the first six months of 2023, primarily due to the decrease in EBITDA as described above, higher depreciation and amortization related to the acquisition of WillowTree and corresponding intangible assets acquired on January 3, 2023.

6. Changes in financial position

Financial position at:	June 30	Dec. 31	Change	Change includes:
(\$ millions)	2023	2022		
Current assets				
Cash and temporary investments, net	649	974	(325)	See Section 7 Liquidity and capital resources
Accounts receivable	3,238	3,316	(78)	An improvement in days sales outstanding primarily driven by a decrease in accounts receivable arising from receipt of vendor credits and from wireless roaming
Income and other taxes receivable	171	124	47	Instalments to date are more than the expense
Inventories	580	537	43	An increase primarily driven by the advanced purchase of fixed product inventory, and increase in rates and volume of used handsets
Contract assets	427	441	(14)	Refer to description in non-current contract assets
Prepaid expenses	808	617	191	An increase in the annual prepayment of statutory employee benefits and licensing fees, and prepayment of maintenance contracts net of amortization
Current derivative assets	55	83	(28)	A decrease in the notional amount of hedging items.
Current liabilities				
Short-term borrowings	594	104	490	See Note 22 of the interim consolidated financial statements
Accounts payable and accrued liabilities	3,249	3,947	(698)	A decrease primarily driven by a reduction in liabilities associated with capital expenditures, trade account payables, and a decrease in payroll and other employee-related liabilities. See Note 23 of the interim consolidated financial statements
Income and other taxes payable	120	112	8	Instalments to date are less than the expense
Dividends payable	526	502	24	Effects of increases in the share price and number of shares outstanding
Advance billings and customer deposits	942	891	51	An increase in advance billings primarily due to business growth during the period. See Note 24 of the interim consolidated financial statements
Provisions	240	166	74	An increase primarily driven by employee-related provisions, partly offset by the reversal of provisions for contingent consideration related to a business acquisition
Current maturities of long-term debt	3,716	2,541	1,175	An increase from the reclassification of long-term debt related to the upcoming maturity of \$1,100 million Notes, Series CK, in April 2024, and an increase in outstanding commercial paper; partly offset by the maturity of \$500 million Notes, Series CJ, in March 2023
Current derivative liabilities	39	18	21	An increase in the notional amount of hedging items.
Working capital (Current assets subtracting Current liabilities)	(3,498)	(2,189)	(1,309)	TELUS normally has a negative working capital position. See <i>Financing and capital structure management plans</i> in Section 4.3 and Note 4(c) of the interim consolidated financial statements.

Financial position at: (\$ millions)	June 30 2023	Dec. 31 2022	Change	Change includes:
Non-current assets				
Property, plant and equipment, net	17,297	17,084	213	See <i>Capital expenditures</i> in Section 7.3 <i>Cash used by investing activities</i> and <i>Depreciation</i> in Section 5.3 <i>Consolidated operations</i>
Intangible assets, net	19,871	19,239	632	See <i>Capital expenditures</i> in Section 7.3 <i>Cash used by investing activities</i> and <i>Amortization of intangible assets</i> in Section 5.3 <i>Consolidated operations</i>
Goodwill, net	10,015	9,125	890	An increase primarily due to the acquisitions of WillowTree and individually immaterial business acquisitions. See <i>Note 18</i> of the interim consolidated financial statements
Contract assets	290	320	(30)	A decrease driven by lower subsidized devices offset with our Bring-It-Back and TELUS Easy Payment® programs
Other long-term assets	2,276	2,203	73	An increase primarily due to new investments in associates, partially offset by a decrease in derivative assets due to notional amount of currency hedging items for U.S. dollar-denominated long-term debt.
Non-current liabilities				
Provisions	664	538	126	A net increase primarily driven by business acquisitions
Long-term debt	22,872	22,496	376	See Section 7.4 <i>Cash provided (used) by financing activities</i>
Other long-term liabilities	722	636	86	An increase in the notional amount of hedging items, and an increase due to pension and post-employment benefit liabilities. See <i>Note 27</i> of the interim consolidated financial statements
Deferred income taxes	4,414	4,454	(40)	An overall decrease in temporary differences between the accounting and tax basis of assets and liabilities.
Owners’ equity				
Common equity	16,407	16,569	(162)	See <i>Consolidated statements of changes in owners’ equity</i> in the interim consolidated financial statements
Non-controlling interests	1,172	1,089	83	See <i>Consolidated statements of changes in owners’ equity</i> in the interim consolidated financial statements.

7. Liquidity and capital resources

This section contains forward-looking statements, including those with respect to our TELUS Corporation Common Share (Common Share) dividend payout ratio and net debt to EBITDA – excluding restructuring and other costs ratio. See *Caution regarding forward-looking statements* at the beginning of this MD&A.

7.1 Overview

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

Cash flows

(\$ millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Cash provided by operating activities	1,117	1,250	(133)	1,878	2,385	(507)
Cash used by investing activities	(908)	(1,438)	530	(3,241)	(2,637)	(604)
Cash provided (used) by financing activities	(437)	(204)	(233)	1,038	(89)	1,127
Decrease in Cash and temporary investments, net	(228)	(392)	164	(325)	(341)	16
Cash and temporary investments, net, beginning of period	877	774	103	974	723	251
Cash and temporary investments, net, end of period	649	382	267	649	382	267

7.2 Cash provided by operating activities

Analysis of changes in cash provided by operating activities

(\$ millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Operating revenues and other income (see <i>Section 5.3</i>)	4,946	4,401	545	9,910	8,683	1,227
Goods and services purchased (see <i>Section 5.3</i>)	(1,790)	(1,637)	(153)	(3,593)	(3,231)	(362)
Employee benefits expense (see <i>Section 5.3</i>)	(1,568)	(1,171)	(397)	(3,108)	(2,290)	(818)
Restructuring and other costs, net of disbursements	15	8	7	100	(17)	117
Net employee defined benefit plans expense	16	25	(9)	31	52	(21)
Employer contributions to employee defined benefit plans	(7)	(8)	1	(16)	(25)	9
Share-based compensation expense, net of payments	30	42	(12)	73	68	5
Unrealized change in forward element of virtual power purchase agreements (see <i>Section 5.3</i>)	7	(80)	87	26	(80)	106
Interest paid	(295)	(195)	(100)	(581)	(375)	(206)
Interest received	3	—	3	7	1	6
Income taxes paid, net of recoveries received	(152)	(130)	(22)	(279)	(238)	(41)
Other operating working capital changes	(88)	(5)	(83)	(692)	(163)	(529)
Cash provided by operating activities	1,117	1,250	(133)	1,878	2,385	(507)

Cash provided by operating activities decreased by \$133 million in the second quarter of 2023 and \$507 million in the first six months of 2023.

- Restructuring and other costs, net of disbursements, represented a net change of \$7 million in the second quarter of 2023 and \$117 million in the first six months of 2023. We incurred lower restructuring and other costs disbursements net of expense, related to improving our overall cost structure and operational efficiency, which includes \$68 million in one-time amounts for the ratification of the new collective agreement between the Telecommunications Workers Union, United Steelworkers Local 1944 (TWU) and ourselves that was paid in the second quarter of 2023.
- Interest paid increased by \$100 million in the second quarter of 2023 and \$206 million in the first six months of 2023, largely due to: (i) the issuances of the third quarter 2022 three-tranche \$2.0 billion of notes and Series CAJ notes described in *Section 7.4*; (ii) increased draws on the TELUS International (TI) credit facility; (iii) the unsecured non-revolving \$1.1 billion bank credit facility maturing July 9, 2024; and (iv) increased interest paid on commercial paper, as we had more commercial paper outstanding during the first six months of 2023 at higher interest rates.
- Income taxes paid, net of recoveries received increased by \$22 million in the second quarter of 2023 and \$41 million in the first six months of 2023, primarily related to lower income tax refunds received.
- 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.

7.3 Cash used by investing activities

Analysis of changes in cash used by investing activities

(\$ millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Cash payments for capital assets, excluding spectrum licences	(777)	(1,016)	239	(1,753)	(2,029)	276
Cash payments for spectrum licences	(5)	—	(5)	(5)	—	(5)
Cash payments for acquisitions, net	—	(353)	353	(1,262)	(480)	(782)
Advances to, and investment in, real estate joint ventures and associates	(112)	(2)	(110)	(117)	(2)	(115)
Real estate joint venture receipts	2	1	1	4	2	2
Proceeds on disposition	7	7	—	7	12	(5)
Investment in portfolio investments and other	(23)	(75)	52	(115)	(140)	25
Cash used by investing activities	(908)	(1,438)	530	(3,241)	(2,637)	(604)

Cash used by investing activities decreased by \$530 million in the second quarter of 2023 and increased by \$604 million in the first six months of 2023.

- The decrease in Cash payments for capital assets, excluding spectrum licences in both the second quarter and first six months of 2023, was primarily composed of:
 - Decreases in capital expenditures of \$247 million in the second quarter of 2023 and \$367 million in the first six months of 2023 (see *Capital expenditure measures* table and discussion below)

- Higher capital expenditure payments of \$8 million in the second quarter of 2023 and \$91 million in the first six months of 2023 with respect to payment timing differences.
- In the first quarter of 2023, we made cash payments for the acquisition of WillowTree, as well as individually immaterial business acquisitions that are complementary to our existing lines of business. This is compared to the first six months of 2022, where we made cash payments for the acquisitions of Fully Managed Inc. and Vivint Smart Home, as well as other individually immaterial business acquisitions that were complementary to our existing lines of business.
- Advances to, and investments in, real estate joint ventures and associates increased by \$110 million in the second quarter of 2023 and \$115 million in the first six months of 2023, primarily related to our equity interest in Miovision Technologies Incorporated. See *Note 21* of the interim consolidated financial statements for further details.
- Investment in portfolio investments and other decreased by \$52 million in the second quarter of 2023 and \$25 million in the first six months of 2023, primarily from investments in a greater number of portfolio investments in the second quarter and first six months of 2022, as well as a decrease of capital inventory.

Capital expenditure measures

(\$ millions, except capital expenditure intensity)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Capital expenditures¹						
TELUS technology solutions (TTech) segment						
TTech operations	761	1,012	(24.8)%	1,449	1,805	(19.7)%
TTech real estate development	12	4	n/m	17	13	30.8%
	773	1,016	(23.9)%	1,466	1,818	(19.4)%
Digitally-led customer experiences – TELUS International (DLCX) segment	34	38	(10.5)%	54	69	(21.7)%
Consolidated	807	1,054	(23.4)%	1,520	1,887	(19.4)%
TTech segment capital expenditure intensity ² (%)	18	27	(9) pts.	17	24	(7) pts.
DLCX segment capital expenditure intensity ² (%)	4	5	(1) pt.	3	4	(1) pt.
Consolidated capital expenditure intensity ² (%)	16	24	(8) pts.	15	22	(7) pts.

1 Capital expenditures include assets purchased, excluding right-of-use lease assets, but not yet paid for. Consequently, capital expenditures 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 specified financial measures*.

Consolidated capital expenditures decreased by \$247 million in the second quarter of 2023 and \$367 million in the first six months of 2023. TTech operations drove \$251 million of the decrease in the second quarter of 2023 and \$356 million in the first six months of 2023, primarily due to a planned slowdown of fibre and wireless network build, which is consistent with 2023 build targets when compared to our accelerated investments in the comparative periods of 2022. Our capital investments have enabled: (i) our internet, TV and security subscriber growth, as well as more premises connected to our fibre network; (ii) increased coverage of our 5G network; (iii) the expansion of our health product offerings and capabilities, including our acquisition of LifeWorks on September 1, 2022, as well as to support business integration; and (iv) enhancement of our product and digital development to increase our system capacity and reliability. TTech real estate development capital expenditures increased by \$8 million in the second quarter of 2023 and \$4 million in the first six months of 2023, due to increased capital investment to support construction of multi-year development projects including TELUS Ocean. By June 30, 2023, our 5G network covered nearly 31 million Canadians, representing approximately 84% of the population.

7.4 Cash provided (used) by financing activities

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

(\$ millions)	Three-month periods ended June 30			Six-month periods ended June 30		
	2023	2022	Change	2023	2022	Change
Dividends paid to holders of Common Shares	(320)	(290)	(30)	(638)	(583)	(55)
Issue (repayment) of short-term borrowings, net	1	171	(170)	490	165	325
Long-term debt issued	1,836	1,770	66	5,517	4,057	1,460
Redemptions and repayment of long-term debt	(1,898)	(1,770)	(128)	(4,270)	(3,629)	(641)
Shares of subsidiary purchased from non-controlling interests, net	(57)	(85)	28	(57)	(85)	28
Other	1	—	1	(4)	(14)	10
Cash provided (used) by financing activities	(437)	(204)	(233)	1,038	(89)	1,127

Cash used by financing activities increased by \$233 million in the second quarter of 2023 and cash provided by financing activities increased by \$1,127 million in the first six months of 2023.

Dividends paid to holders of Common Shares

Our dividend reinvestment and share purchase (DRISP) plan trustee acquired shares from Treasury for the DRISP plan, rather than acquiring Common Shares in the stock market. Effective with the dividends paid on October 1, 2019, we offered Common Shares from Treasury at a discount of 2%. Cash payments for dividends increased by \$30 million in the second quarter of 2023 and \$55 million in the first six months of 2023, which reflected higher dividend rates under our dividend growth program (see *Section 4.3*) and an increase in the number of shares outstanding. This was partly offset by a higher discounted DRISP issuance. During the second quarter of 2023, our DRISP plan trustee acquired Common Shares for \$186 million.

In July 2023, we paid dividends of \$338 million to the holders of Common Shares and the trustee acquired dividend reinvestment Common Shares from Treasury for \$188 million, totalling \$526 million.

Issue (repayment) of short-term borrowings, net

In the first quarter of 2023, we drew down amounts advanced to us from an arm’s-length securitization trust to finance working capital.

Long-term debt issued and Redemptions and repayment of long-term debt

In the second quarter of 2023, long-term debt issued increased by \$66 million, while redemptions and repayment of long-term debt increased by \$128 million. These changes were primarily composed of:

- A net increase in commercial paper outstanding, including foreign exchange effects, of \$70 million to a balance of \$1.9 billion (US\$1.5 billion) at June 30, 2023, from a balance of \$1.9 billion (US\$1.4 billion) at March 31, 2023. Our commercial paper program, when utilized, provides lower-cost funds and is fully backstopped by the revolving credit facility (see *Section 7.6 Credit facilities*).
- A decrease in net draws on the TI credit facility, including foreign exchange effects, of \$63 million. As at June 30, 2023, net draws due to a syndicate of financial institutions (excluding TELUS Corporation) were US\$1.5 billion, whereas as at March 31, 2023, net draws were US\$1.6 billion. The TI credit facility is non-recourse to TELUS Corporation.

For the first six months of 2023, long-term debt issued increased by \$1,460 million, while redemptions and repayment of long-term debt increased by \$641 million. The change in balance for the first six months of 2023 was primarily composed of:

- A net increase in commercial paper outstanding, including foreign exchange effects, of \$486 million from a balance of \$1.5 billion (US\$1.1 billion) at December 31, 2022.
- An increase in net draws on the TI credit facility, including foreign exchange effects, of \$1.1 billion. As at December 31, 2022, net draws due to a syndicate of financial institutions (excluding TELUS Corporation) were US\$689 million. The increase in net draws on the TI credit facility was used to fund the acquisition of WillowTree.
- The March 28, 2023 issue of \$500 million of senior unsecured 4.95% Sustainability-Linked Notes, Series CAJ, maturing on March 28, 2033. The net proceeds were used for the repayment of outstanding indebtedness and other general corporate purposes.
- The repayment upon maturity of \$500 million of 3.35% Notes, Series CJ due March 2023.

The average term to maturity of our long-term debt (excluding commercial paper, TELUS bank credit facilities, the revolving components of the TI credit facility, lease liabilities and other long-term debt) was 11.6 years at June 30, 2023, a decrease from 12.1 years at December 31, 2022 and from 12.0 years at June 30, 2022. Additionally, the weighted average cost of our long-term debt (excluding commercial paper, TELUS bank credit facilities, the revolving components of the TI credit facility, lease liabilities and other long-term debt) was 4.19% at June 30, 2023, an increase from 4.03% at December 31, 2022 and from 3.72% at June 30, 2022.

Shares of subsidiary purchased from non-controlling interests, net

In the second quarter of 2023, we acquired 2.5 million multiple voting shares of TELUS International from a non-controlling interest. Upon completion, TELUS held approximately 56.1% of the outstanding shares of TELUS International, 2.0% of the outstanding subordinate voting shares, 76.0% of the outstanding multiple voting shares of TELUS International and 73.4% of the outstanding voting rights of TELUS International.

In the second quarter of 2022, we also acquired shares of TELUS International from a non-controlling interest.

Other

We incurred debt issuance costs in connection with the issuance of our senior unsecured 4.95% Sustainability-Linked Notes, Series CAJ, in the first quarter of 2023 which was lesser than debt issuance costs in connection with the issuance of our senior unsecured 3.40% U.S. Dollar Sustainability-Linked Notes in the first quarter of 2022.

7.5 Liquidity and capital resource measures

Net debt was \$26.5 billion at June 30, 2023, an increase of \$4.8 billion compared to one year earlier, resulting mainly from: the third quarter 2022 three-tranche issuance of \$2.0 billion of notes; the draw-down of the unsecured non-revolving \$1.1 billion bank credit facility maturing July 9, 2024; an increase in net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TI credit facility, which is non-recourse to TELUS Corporation; the first quarter 2023 issuance of \$500 million of Sustainability-Linked Notes, Series CAJ, as described in *Section 7.4*; and the draw-down of amounts advanced to us from an arm’s-length securitization trust. These factors were partially offset by the repayment upon maturity of 3.35% Notes, Series CJ in the first quarter of 2023, and greater Cash and temporary investments.

Fixed-rate debt as a proportion of total indebtedness, which excludes lease liabilities and other long-term debt, was 80% as at June 30, 2023, down from 87% one year earlier. The decrease was primarily due to the draw-down of the unsecured non-revolving \$1.1 billion bank credit facility maturing July 9, 2024, which is classified as floating-rate debt in this calculation; an increase in net draws due to a syndicate of financial institutions (excluding TELUS Corporation) on the TI credit facility; the draw-down of amounts advanced to us from an arm’s-length securitization trust; and the repayment upon maturity of 3.35% Notes, Series CJ in the first quarter of 2023. These factors were partially offset by: the third quarter 2022 three-tranche issuance of \$2.0 billion of notes; and the first quarter 2023 issuance of \$500 million of Sustainability-Linked Notes, Series CAJ, as described in *Section 7.4*.

Our **Net debt to EBITDA – excluding restructuring and other costs** ratio supports our financial objective of maintaining investment-grade credit ratings, which facilitates reasonable access to capital. This ratio was 3.84 times, as measured at June 30, 2023, up from 3.23 times one year earlier. As at June 30, 2023, this ratio remains outside of the long-term objective range of 2.20 to 2.70 times, resulting from prior issuances of incremental debt, primarily due to the acquisition of spectrum licences (as spectrum is our largest indefinite life asset) and business acquisitions, partially offset by growth in EBITDA – excluding restructuring and other costs. As at June 30, 2023, the acquisition of spectrum licences increased the ratio by approximately 0.46 and business acquisitions over the past 12 months increased the ratio by approximately 0.28. Our recent acquisitions of spectrum licences have increased our national spectrum holdings and represent an investment to extend our network capacity to support continuing growth in demand for data, as well as growth in our mobile subscriber base. Given the cash demands of the 600 MHz auction in 2019, the 3500 MHz auction in 2021 and upcoming spectrum auctions in 2023 and 2024, the assessment of the guideline and timing of return to the objective range remains to be determined; however, it is our intent to return to a ratio below 2.70 times in the medium term (following the spectrum auction in 2021, and the spectrum auctions upcoming in 2023 and 2024), consistent with our long-term strategy. While this ratio exceeds our long-term objective range, we are well in compliance with the leverage ratio covenant in our credit facilities, which states that we may not permit our leverage ratio to exceed 4.25 to 1.00 at June 30, 2023 (see *Section 7.6 Credit facilities*).

Liquidity and capital resource measures

As at, or for the 12-month periods ended, June 30	2023	2022	Change
Components of debt and coverage ratios (\$ millions)			
Long-term debt	26,588	21,628	4,960
Net debt ¹	26,485	21,693	4,792
Net income	1,236	1,923	(687)
EBITDA – excluding restructuring and other costs ¹	6,899	6,715	184
Financing costs	999	662	337
Net interest cost ¹	1,084	755	329
Debt ratios			
Fixed-rate debt as a proportion of total indebtedness (excluding lease liabilities and other long-term debt) (%)	80	87	(7) pts.
Average term to maturity of long-term debt (excluding commercial paper, TELUS bank credit facilities, the revolving components of the TI credit facility, lease liabilities and other long-term debt) (years)	11.6	12.0	(0.4)
Weighted average interest rate on long-term debt (excluding commercial paper, TELUS bank credit facilities, the revolving components of the TI credit facility, lease liabilities and other long-term debt) (%)	4.19	3.72	0.47 pts.
Net debt to EBITDA – excluding restructuring and other costs ¹ (times)	3.84	3.23	0.61
Coverage ratios¹ (times)			
Earnings coverage	2.5	4.2	(1.7)
EBITDA – excluding restructuring and other costs interest coverage	6.4	8.9	(2.5)
Other measures¹ (%)			
Determined using most comparable IFRS-IASB measures			
Ratio of Common Share dividends declared to cash provided by operating activities less capital expenditures	168	224	(56) pts.
Determined using management measures			
Common Share dividend payout ratio – net of dividend reinvestment plan effects	87	133	(46) pts.
1 See Section 11.1 Non-GAAP and other specified financial measures.			

Earnings coverage ratio for the 12-month period ended June 30, 2023 was 2.5 times, down from 4.2 times one year earlier. A decrease in income before borrowing costs and income taxes decreased the ratio by 0.8, while an increase in borrowing costs decreased the ratio by 0.9. Restructuring and other costs impacted the ratio by 0.3.

EBITDA – excluding restructuring and other costs interest coverage ratio for the 12-month period ended June 30, 2023 was 6.4 times, down from 8.9 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.2 and an increase in net interest costs decreased the ratio by 2.7.

Common Share dividend payout ratios: Actual Common Share dividend payout decisions will continue to be subject to our Board’s assessment of our financial position and outlook, as well as our long-term Common Share dividend payout objective range of 60 to 75% of prospective free cash flow. So as to be consistent with the way we manage our business, our Common Share dividend payout ratio is presented as a historical measure calculated as the sum of the dividends declared in the most recent four quarters for Common Shares, as recorded in the financial statements, net of dividend reinvestment plan effects, divided by the sum of the most recent four quarters’ free cash flow amounts for interim reporting periods. For fiscal years, the denominator is annual free cash flow. The historical measure for the 12-month period ended June 30, 2023 is presented for illustrative purposes in evaluating our target guideline. As at June 30, 2023, the ratio was outside of the objective range, primarily due to our planned accelerated capital expenditures program to support our broadband capital investments, the build-out of our TELUS PureFibre infrastructure and the acceleration of our 5G network roll-out. Excluding the effects of our accelerated capital expenditures program of \$358 million for the four most recent quarters, as at June 30, 2023, the ratio was 70%.

TI intends to retain all available funds and any future earnings to support operations and to finance the growth and development of its business.

7.6 Credit facilities

At June 30, 2023, we had \$806 million of liquidity available from the TELUS revolving credit facility and \$399 million of liquidity available from the TI credit facility with a syndicate of financial institutions (excluding TELUS Corporation). We are well within our objective of generally maintaining at least \$1 billion of available liquidity.

TELUS credit facilities

We have a \$2.75 billion (or U.S. dollar equivalent) unsecured revolving credit facility with a syndicate of financial institutions, expiring April 6, 2026. The revolving credit facility is used for general corporate purposes, including the

backstop of commercial paper, as required. Subsequent to June 30, 2023, the credit facility was renewed for \$2.75 billion with an expiry date of July 14, 2028. As at June 30, 2023, we had an unsecured non-revolving \$1.1 billion bank credit facility, maturing July 9, 2024, with a syndicate of financial institutions, which is to be used for general corporate purposes. As at June 30, 2023, we had drawn \$1.1 billion on the non-revolving bank credit facility, with an effective average interest rate of 5.9% through July 2023.

TELUS revolving credit facility at June 30, 2023

(\$ millions)	Expiry	Size	Drawn	Outstanding undrawn letters of credit	Backstop for commercial paper program	Available liquidity
Revolving credit facility ¹	April 6, 2026	2,750	—	—	(1,944)	806
1 Canadian dollars or U.S. dollar equivalent.						

Our credit facilities contain customary covenants, including a requirement that we not permit our consolidated leverage ratio to exceed 4.25 to 1.00 and that we not permit our consolidated coverage ratio to be less than 2.00 to 1.00 at the end of any financial quarter. As at June 30, 2023, our consolidated leverage ratio was 3.84 to 1.00 and our consolidated coverage ratio was 6.36 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 are substantially similar other than the covenant includes in EBITDA the unrealized effects of non-currency risk-related derivative financial instruments that are held for trading (see *Note 4(d)* of the interim consolidated financial statements). 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 equivalent amount at any one time of \$2.0 billion (US\$1.5 billion maximum) as at June 30, 2023. Foreign currency forward contracts are used to manage currency risk arising from issuing commercial paper denominated in U.S. dollars. The commercial paper program is to be used for general corporate purposes, including, but not limited to, capital expenditures and investments. Our ability to reasonably access the commercial paper market in the U.S. is dependent on our credit ratings (see *Section 7.8 Credit ratings*).

TELUS International credit facility

As at June 30, 2023, TELUS International (Cda) Inc. had a credit facility, secured by its assets, expiring on January 3, 2028, with a syndicate of financial institutions, including TELUS Corporation. The TI credit facility is comprised of revolving components totalling US\$800 million (TELUS Corporation as approximately 7.2% lender) and amortizing term loan components totalling US\$1.2 billion (TELUS Corporation as approximately 7.2% lender). The TI credit facility is non-recourse to TELUS Corporation. The outstanding revolving components and term loan components had a weighted average interest rate of 7.2% as at June 30, 2023.

The term loan components are subject to amortization schedules which requires that 5% of the principal advanced be repaid each year of the term of the agreement, with the balance due at maturity.

Other letter of credit facilities

At June 30, 2023, we had \$62 million of letters of credit outstanding issued under various uncommitted facilities; such letter of credit facilities are in addition to the ability to provide letters of credit pursuant to our committed revolving bank credit facility. Available liquidity under various uncommitted letters of credit facilities was \$123 million at June 30, 2023. We have arranged incremental letters of credit to allow us to participate in Innovation, Science and Economic Development Canada’s 3800 MHz wireless spectrum auction that is to commence in October 2023. Under the terms of the auction, communications between bidders that would provide insights into bidding strategies, including reference to preferred blocks, technologies or valuations, are precluded until the deadline for the final payment in the auction. Disclosure of the precise amount of our letters of credit could be interpreted as a signal of bidding intentions. The maximum amount of letters of credit that any national incumbent could be required to deliver is approximately \$350 million.

Other long-term debt

Other liabilities bear interest at 3.3%, are secured by the AWS-4 spectrum licences associated with these other liabilities, and are subject to amortization schedules, so that the principal is repaid over the periods to maturity, the last period ending March 31, 2035.

7.7 Sale of trade receivables

TELUS Communications Inc. (TCI), 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 currently able to sell an interest in certain trade receivables for an amount up to a maximum of \$600 million. The agreement is in effect until December 31, 2024, and available liquidity was \$10 million as at June 30, 2023. (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.

TCI is required to maintain a credit rating of at least BB by DBRS Ltd. or the securitization trust may require the sale program to be wound down prior to the end of the term. The minimum credit rating was exceeded as of August 4, 2023.

7.8 Credit ratings

There were no changes to our investment-grade credit ratings during the second quarter of 2023 or as of August 4, 2023. We believe adherence to most of our stated financial policies (see *Section 4.3*), coupled with our efforts to maintain a constructive relationship with banks, investors and credit rating agencies, continue to provide reasonable access to capital markets.

7.9 Financial instruments, commitments and contingent liabilities

Financial instruments

Our financial instruments, their accounting classification and the nature of certain risks that they may be subject to were described in *Section 7.9* in our 2022 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 supply chain financing program; 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, 2023, TELUS Corporation could offer an unlimited amount of securities in Canada, and US\$3.5 billion of securities in the U.S., qualified pursuant to a Canadian shelf prospectus that is in effect until September 2024. TI has a Canadian shelf prospectus that is in effect until May 2024 under which an unlimited amount of debt or equity securities could be offered.

As at June 30, 2023, we had \$806 million of liquidity available from the TELUS revolving credit facility and \$399 million of liquidity available from the TI credit facility with a syndicate of financial institutions (excluding TELUS Corporation) (see *Section 7.6 Credit facilities*). Excluding the TI credit facility and including cash and temporary investments of \$649 million, we had available liquidity of approximately \$1.5 billion at June 30, 2023 (see *Section 11.1 Non-GAAP and other specified financial measures*). 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, 2023, our contractual commitments related to the acquisition of Property, plant and equipment were \$385 million through to December 31, 2027, as compared to \$275 million over a period ending December 31, 2027 reported as at December 31, 2022. The increase was primarily attributable to real estate development initiatives.

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 mobile 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 mobile 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(a)* of the interim consolidated financial statements.

7.10 Outstanding share information

Outstanding shares (millions)	June 30, 2023	July 31, 2023
Common Shares	1,447	1,454
Common Share options	2	2
Restricted share units and deferred share units – equity-settled	12	12

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 Team. Total compensation expense for key management personnel was \$18 million in the second quarter of 2023 and \$42 million in the first six months of 2023 compared to \$28 million and \$55 million in the respective periods in 2022. The decrease in compensation expense for key management personnel in both the second quarter and first six months of 2023 was primarily due to lower share-based compensation. See *Note 30(a)* of the interim consolidated financial statements for additional details.

Transactions with defined benefit pension plans

We provided our defined benefit pension plans with management and administrative services on a cost recovery basis and actuarial services on an arm’s-length basis. Charges for these services were immaterial.

Transactions with real estate joint venture

During the three-month and six-month periods ended June 30, 2023, we had transactions with the TELUS Sky real estate joint venture, which is a related party to us, as set out in *Note 21* of the interim consolidated financial statements. The new-build tower was completed in 2020.

For the TELUS Sky real estate joint venture, commitments and contingent liabilities include construction financing (\$342 million, with Canadian financial institutions as 66-2/3% lender and TELUS as 33-1/3% lender) under a credit agreement maturing July 15, 2023. Subsequent to June 30, 2023, the TELUS Sky real estate joint venture extended its credit agreement with Canadian financial institutions (as 66-2/3% lender) and TELUS (as 33-1/3% lender), providing \$282 million of construction financing for the project and maturing on July 12, 2024. We have entered into lease agreements with the TELUS Sky real estate joint venture.

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, 2022. The preparation of financial statements in conformity with generally accepted accounting principles (GAAP) requires management to make estimates, assumptions and judgments that affect: the reported amounts of assets and liabilities at the date of the financial statements; the disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts and classification of income and expense during the reporting period. Actual results could differ from those estimates. Our critical accounting estimates and significant judgments are generally discussed with the Audit Committee each quarter and are described in *Section 8.1* in our 2022 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* in our 2022 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 2023 outlook, as described in *Section 9* in our 2022 annual MD&A, remain the same, except for the following:

- Our revised estimates for 2023 economic growth in Canada, B.C., Alberta, Ontario and Quebec are 0.9%, 0.5%, 1.9%, 0.5% and 0.4%, respectively (compared to 0.6%, 0.4%, 1.5%, 0.3% and 0.5%, respectively, as reported in our 2022 annual MD&A).
- Our revised estimates for 2023 annual inflation rates in Canada, B.C., Alberta and Ontario are 3.6%, 3.6%, 3.4% and 3.5%, respectively (compared to 3.7%, 3.7%, 3.8% and 3.6%, respectively, as reported in our 2022 annual MD&A).
- Our revised estimates for 2023 annual unemployment rates in Canada, B.C., Alberta, Ontario and Quebec are 5.6%, 5.2%, 6.0%, 5.8% and 4.6%, respectively (compared to 6.1%, 5.6%, 5.9%, 6.6% and 5.5%, respectively, as reported in our 2022 annual MD&A).
- Our revised estimates for 2023 annual rates of housing starts on an unadjusted basis in Canada, B.C., Alberta, Ontario and Quebec are 225,000 units, 42,000 units, 34,000 units, 80,000 units and 49,000 units, respectively (compared to 212,000 units, 34,000 units, 31,000 units, 71,000 units and 50,000 units, respectively, as reported in our 2022 annual MD&A).

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

- Regarding DLCX, we anticipate continued optimization of its cost structure enabled by automation and generative AI solutions to mitigate near-term challenges from persistent global macroeconomic pressures. Long-term growth and profitability will be supported by the differentiation of digital customer experience solutions.
- Defined benefit pension plan funding has been revised to approximately \$28 million from approximately \$35 million due to improvements in the funded statuses of the plans.
- Our restructuring and other costs assumption has been revised to up to \$750 million from approximately \$275 million. This was driven by accelerated cost efficiency programs implemented to drive EBITDA expansion, margin accretion and accelerated cash flow growth.
- Our income taxes computed at an applicable statutory rate assumption has been revised downward to 23.3 to 23.9% from 24.7 to 25.3%, and our cash income tax payments assumption has been revised downward to a range of approximately \$420 million to \$500 million from a range of approximately \$550 million to \$630 million. The decrease in applicable statutory rate assumption is primarily due to lower income earned in jurisdictions with higher statutory income tax rates. The decrease in our cash income tax payments range is due to lower forecasted net income before tax.
- We anticipate a 2023 European euro to U.S. dollar average exchange rate of €1.00: US\$1.09 compared to our original European euro to U.S. dollar average exchange rate of €1.00: US\$1.08 assumption.

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 operations of our health business are also subject to various federal and provincial health laws and regulations, as well as policies, guidelines and directives issued by regulatory and administrative bodies. See *Section 10.3 Regulatory matters* in our 2022 annual MD&A.

The following is a summary of certain significant communications industry regulatory developments and proceedings relevant to our telecommunications business and our industry. This summary is not intended to be a comprehensive legal analysis or description of all of the specific issues described. Although we have indicated those issues for which we do not currently expect the outcome of a development or proceeding to be material to us, there can be no assurance that the expected outcome will occur or that our current assessment of its likely impact on us will be accurate. See *Section 10.3 Regulatory matters* in our 2022 annual MD&A.

Radiocommunication licences and spectrum-related matters

ISED regulates, among other matters, the allocation and use of radio spectrum in Canada and licenses radio apparatus, frequency bands and/or radio channels within various frequency bands to service providers and private users. The department also establishes the terms and conditions that may attach to such radio authorizations, including restrictions on licence transfers, coverage obligations, research and development obligations, annual reporting, and obligations concerning mandated roaming and antenna site sharing with competitors.

Spectrum transfer moratorium and review of the spectrum transfer framework

On March 31, 2023, the Minister of Innovation, Science and Industry announced a moratorium on high-impact transfers of spectrum licences in commercial mobile bands. “High-impact” transfers are those that would have a significant effect on the ability of telecommunications service providers to offer wireless services in Canada. The Minister also directed ISED to launch a comprehensive review of Canada’s spectrum transfer framework, with the moratorium expiring once a new framework comes into effect. No details were released about when the framework review would take place, or when a new framework will be implemented. There is a risk that this moratorium could have a material impact on us depending on how long it remains in place.

Decision on amendments to SRSP-520, Technical requirements for fixed and/or mobile systems, including flexible use broadband systems, in the band 3450-3650 MHz

On November 18, 2021, ISED issued its decision on amendments to the 3500 MHz technical requirements due to its concern that 5G equipment operating on 3500 MHz spectrum may have the potential to cause interference with radio altimeters on aircraft. The decision included limiting use in areas around major airports and restricting the transmission of energy above the horizon. On July 5, 2023, ISED issued its decision on SRSP-520, issue 3 and RSS-192, issue 5, on further changes to the technical requirement for the 3500 MHz, now also extended to apply to the 3800 MHz band, which set out, among other things, revised mitigation measures to protect radio altimeters in aircraft. The decision eases restrictions on our future network deployment, ensures aviation stakeholders are responsible for retrofitting underperforming radio altimeter equipment, and reduces uncertainty for the industry by defining an end date to mitigation measures intended to protect those radio altimeters.

mmWave spectrum auction to support 5G

On June 5, 2019, ISED released its *Decision on Releasing Millimetre Wave Spectrum to Support 5G*, repurposing several tranches of mmWave spectrum for mobile use. On June 6, 2022, ISED issued its Consultation on a Policy and Licensing Framework for Spectrum in the 26, 28 and 38 GHz bands, which is the first step in setting the auction framework rules, including competitive measures for these mmWave bands. 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 spectrum. ISED maintains its projection that the mmWave auction will commence in 2024.

3800 MHz spectrum auction to support 5G

The 3800 MHz spectrum band is seen as an extension to the 3500 MHz band. On May 21, 2021, ISED released its *Decision on the Technical and Policy Framework for the 3650-4200 MHz Band and Changes to the Frequency Allocation of the 3500-3650 MHz Band*, which will make 250 MHz of spectrum available for auction. The 3800 MHz spectrum will only be cleared and available by March 2025 in urban areas and March 2027 in many rural areas. Certain rural areas (in Northwest Territories, Yukon and Nunavut, and northern parts of British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec and Newfoundland and Labrador) are still deemed satellite-dependent and this spectrum is considered encumbered for mobile use in these areas. On June 30, 2022, ISED released its *Decision on a Policy and Licensing Framework for Spectrum in the 3800 MHz Band*, which defines the auction rules and conditions of licence for the 3800 MHz band. The auction framework includes a 100 MHz cap across the 3500 MHz and 3800 MHz bands and unlike previous auctions, it does not include set-asides. In 29 of the 172 licence areas, only 50 MHz of unencumbered spectrum is available and the remaining 200 MHz will be encumbered by coexistence with satellite earth stations. The limited amount of unencumbered spectrum may impact our ability to acquire an adequate quantity of 3800 MHz band spectrum in satellite-dependent areas. The deadline for receipt of applications and financial deposits for participation in the 3800 MHz spectrum auction is July 25, 2023. Auction bidding is scheduled to start October 24, 2023.

Consultation on Conditions of Licence relating to the Provision of Service within the Toronto Transit Commission (TTC) Subway System

On July 24, 2023, ISED released *Consultation on Conditions of Licence relating to the Provision of Service within the Toronto Transit Commission (TTC) Subway System*, a consultation concerning the introduction of conditions of licence applicable to telecommunications common carriers providing service in the TTC subway system. The key topics in the consultation include timelines for negotiations and agreements between Rogers and other wireless service providers, deployment requirements, and reporting obligations to monitor progress. We will provide a written submission addressing the issues raised in the consultation on August 8, 2023. Until ISED issues a decision in this consultation, it is too early to determine its impact on us.

Regulatory and federal government reviews

The CRTC and the federal government have initiated public proceedings to review various matters. A number of key proceedings are discussed below.

Review of the wholesale high-speed access service framework

On March 8, 2023, the CRTC issued *Review of the wholesale high-speed access service framework*, Telecom Notice of Consultation CRTC 2023-56. The Notice of Consultation first creates a rate reduction by requiring incumbent carriers to

revise their rates to reflect a 10% decrease in the costs of traffic-sensitive components. The Notice of Consultation then seeks comment on a number of issues, including whether wholesale access to fibre-to-the-premises (FTTP) service should be offered on an aggregated basis and whether any further regulation, including retail regulation, is warranted. The Notice of Consultation further expresses the CRTC’s preliminary view that incumbents should be required to provide an interim aggregated wholesale FTTP service pending the disposition of the consultation. The consultation on the matter of an interim aggregated wholesale FTTP mandate has now closed, and the remainder of the proceeding is scheduled to conclude with an oral hearing at a date to be fixed. Until the CRTC releases its decisions in this matter, it is too early to determine the impact of this proceeding on us.

Review of mobile wireless services

On April 15, 2021, the CRTC released its decision in the *Wireless Regulatory Framework Review*. The CRTC determined that TELUS, Bell, Rogers and SaskTel must provide wholesale mobile virtual network operator (MVNO) access to facilities-based regional wireless providers in areas where those providers hold a mobile wireless spectrum licence. MVNO access is based on commercially negotiated rates and will be phased out after seven years. On October 25, 2022, the CRTC released Telecom Decision CRTC 2022-288, where it made determinations on the draft terms and conditions of the MVNO tariffs of TELUS, Bell, Rogers and SaskTel. The carriers updated their tariffs based on this decision and the Commission granted final approval on May 9, 2023 in Telecom Order 2023-133. TELUS, Bell, Rogers and SaskTel now have the MVNO service operational and available for use. Eligible wireless providers desiring MVNO access are entitled to commence negotiations and the CRTC expects that the first MVNO agreements are to be completed by August 7, 2023 (90 days after final tariff approval). The Commission also issued Telecom Order 2023-171 where it approved updates to the domestic roaming tariffs of TELUS, Bell and Rogers to take into account the availability of seamless roaming and 5G services as part of mandated domestic roaming.

On July 24, 2023, the CRTC issued its first arbitration decision related to the MVNO framework, in the context of a final offer arbitration between Rogers and Quebecor. The CRTC selected Quebecor’s offer for the MVNO data access rate, but the rate remains confidential. The impact of this decision on us will be dependent on the commercial rates that are negotiated for MVNO access or otherwise imposed by the CRTC through the final offer arbitration process.

We were also granted leave to appeal two determinations from this decision to the Federal Court of Appeal: (i) the requirement for the national mobile carriers, including us, to offer seamless roaming as an additional condition under which the existing mandated wholesale roaming service must be offered; and (ii) the ruling that sections 43 and 44 of the *Telecommunications Act* do not provide the CRTC with jurisdiction to adjudicate disputes involving mobile wireless transmission facilities. The appeal was heard in December 2022 and was dismissed on April 13, 2023. We have sought leave to appeal to the Supreme Court of Canada on the issue of CRTC jurisdiction over mobile wireless transmission facilities.

Consultation on amending the CRTC MVNO mandate to include additional retail market segments

On March 1, 2023, the CRTC issued *Facilities-based wholesale mobile virtual network operator (MVNO) access tariffs – Considering the inclusion of additional retail market segments*, Telecom Notice of Consultation CRTC 2023-48. In this consultation, the CRTC is soliciting comments on whether the wholesale MVNO framework should be broadened to include enterprise, Internet of Things (IoT) and machine-to-machine service. The record of this proceeding is now closed. Until the CRTC issues a decision in this consultation, it is too early to determine its impact on us.

Application to seek a review of domestic wholesale roaming rates

On May 19, 2022, Bragg Communications Inc., Cogeco Communications Inc., Videotron Ltd., Xplornet Communications Inc. and Xplore Mobile Inc. filed a joint application to the CRTC seeking a review of the tariffed rates currently charged by TELUS, Bell and Rogers for domestic wholesale roaming, claiming that the current rates are no longer just and reasonable. We have filed an answer to this application demonstrating why such a review is not warranted at this time and the CRTC has since issued requests for information to wireless services providers. The impact of this application is dependent upon whether the CRTC decides to undertake a review of mandated roaming rates and to what extent there are any changes for current tariffed rates.

New draft cybersecurity legislation

On June 14, 2022, the federal government introduced Bill C-26, *An Act respecting cyber security, amending the Telecommunications Act and making consequential amendments to other Acts*. The legislation would amend the *Telecommunications Act*, among other things, to allow the Governor in Council to prohibit telecommunications service providers from using equipment from designated companies in their networks. In practice, this will allow the federal government to ban the use of Huawei and ZTE equipment in our network and impose penalties for non-compliance. The Minister of Innovation, Science and Industry stated that the government intends to use its powers under Bill C-26, if passed, to, among other things, require the removal of existing Huawei and ZTE 5G equipment by June 28, 2024. The legislation would also create a new statute, the *Critical Cyber Systems Protection Act* (CCSPA). The CCSPA would require designated federally regulated corporations to maintain cybersecurity plans, impose reporting requirements and

impose penalties for non-compliance. Bill C-26 received second reading on March 27, 2023. If we are ultimately subject to an order requiring us to remove a significant amount of equipment from our network, the effect could be material.

Government of Canada and CRTC activities to improve Canadian network resiliency

As a result of a July 8, 2022 Rogers network outage, on July 11, 2022, the Minister of Innovation, Science and Industry held a meeting with representatives of Bell, Eastlink, Rogers, SaskTel, Shaw, Videotron and TELUS to discuss improving the resiliency of networks across Canada. The Minister requested that these carriers enter into a formal agreement to ensure mutual assistance during any future outages, emergency roaming and communications protocols to ensure that the public and authorities are well informed during future network disruptions. A memorandum of understanding (MOU) on these issues was signed by various carriers, including TELUS, with an effective date of September 9, 2022. Among other things, the MOU requires that wireless service providers with overlapping network coverage areas sign reciprocal emergency roaming agreements within nine months of September 9, 2022. In compliance with the MOU, we have now executed emergency roaming agreements with other wireless service providers.

On February 22, 2023, the CRTC issued *Call for comments – Development of a regulatory framework to improve network reliability and resiliency – Mandatory notification and reporting about major telecommunications service outages*, Telecom Notice of Consultation CRTC 2023-39, in which it sought comments on a notification and reporting regime for major service outages. In addition, the Commission mandated the implementation of an interim notification and reporting regime for major service outages while the consultation is ongoing. We implemented the interim regime on March 8, 2023, and are also participating in the consultation. ISED is also conducting further steps via the Canadian Security Telecommunications Advisory Committee (CSTAC) to examine network resiliency. We continue to participate in all follow-up initiatives as required. It is too early to determine if these initiatives will have a material impact until they are concluded.

Nova Scotia 911 legislation

In November 2022, Nova Scotia passed amendments to the *Emergency 911 Act* and the *Emergency Management Act* that, among other things, require telecommunications service providers to take certain actions to prevent certain outages, to inform stakeholders, and to refund customers in the case of certain outages. These amendments have received royal assent but have not been proclaimed into force. Most of the obligations of telecommunications service providers are to be set out in regulations, which have yet to be made by the Governor in Council. Until the regulations are made, it is too early to determine the impact of this legislation on us.

CRTC proceeding regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada

On December 10, 2019, the CRTC issued *Call for comments regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada*, Telecom Notice of Consultation CRTC 2019-406. In this proceeding, the CRTC sought comment on barriers that service providers and communities face in building new facilities, or interconnecting to or accessing existing facilities, and in extending networks into underserved areas in order to offer universal service objective-level services. The CRTC has specifically identified access to affordable transport services and efficient use of support structures as potential barriers. The record of the proceeding is now closed and we anticipate a decision this year. It is too early to determine the impact of the proceeding on us.

CRTC proceeding regarding access to poles owned by Canadian carriers

On February 15, 2023, the CRTC issued *Regulatory measures to make access to poles owned or controlled by Canadian carriers more efficient*, Telecom Regulatory Policy CRTC 2023-31, following a lengthy review that began in 2020. Among other things, the decision preserves the ability of support structure owners to reserve spare pole capacity with no express time limit; implements a “one touch make ready” regime; sets out a timeline for owners to reply to access requests; and obligates owners to assume the cost of pre-existing corrective work.

CRTC review of rate setting for wholesale telecommunications services

On July 7, 2023, the CRTC issued Telecom Decision CRTC 2023-196, *Review of the approach to rate setting for wholesale telecommunications services*. In this proceeding, the CRTC sought comment on whether to change its methodology of setting wholesale rates and, if so, how. The CRTC ultimately determined to continue its existing methodological framework driven by facilities-based competition and wholesale rates based on long-run incremental costs, with certain changes, including a requirement for wholesale providers to submit market-level pricing information when filing rate-setting applications. The CRTC will also initiate two additional consultations, including to explore the development of a costing model that is common to all carriers.

CRTC review of deadlines for transition to next-generation 9-1-1 service

On June 14, 2021, the CRTC issued Telecom Decision CRTC 2021-199, *Establishment of new deadlines for Canada’s transition to next-generation 9-1-1* (NG9-1-1), where the CRTC stipulated revised implementation for NG9-1-1 service in Canada. Consistent with the CRTC’s requirements, we are now transiting live NG9-1-1 traffic over our NG9-1-1 network,

but full implementation of NG9-1-1 in our NG9-1-1 territory is contingent on interconnections with 9-1-1 call centres and such implementation is dependent upon local government authorities. We continue our work to fully implement NG9-1-1.

Development of a network-level blocking framework to limit botnet traffic

On June 23, 2022, the CRTC released *Development of a network-level blocking framework to limit botnet traffic and strengthen Canadians’ online safety*, Compliance and Enforcement and Telecom Decision CRTC 2022-170. The Commission has asked its technical working group, the CRTC Interconnection Steering Committee, to examine the issue and produce a report within nine months about how internet service providers (ISPs) can implement network blocking of malicious botnet traffic. Parties will have an opportunity to comment on the report prior to the Commission rendering any further determinations. The outcome is not expected to be material.

Federal private sector privacy bill proposes to repeal and replace the Personal Information Protection and Electronic Documents Act

On June 16, 2022, Bill C-27 was introduced and received first reading in the House of Commons. The *Digital Charter Implementation Act, 2022* proposes to enact the *Consumer Privacy Protection Act* (replacing the existing private sector privacy legislation and implementing new consumer privacy rights, enhanced enforcement powers and a private right of action), the *Personal Information and Data Protection Tribunal Act* (a new adjudicative body to provide independent oversight on enforcement activities by the regulator) and the *Artificial Intelligence and Data Act* (a new regulatory regime for the use of AI in the private sector, using a risk-based framework supported by extensive enforcement powers). The bill proposes significant changes to federal privacy legislation in Canada. Bill C-27 is currently awaiting House of Commons Standing Committee on Industry and Technology study. Until the bill is passed in its final form, we are unable to determine the materiality of the proposed changes.

Amendments to Quebec’s public and private sector privacy law

On September 22, 2021, *An Act to modernize legislative provisions as regards the protection of personal information*, received assent. Extensive new requirements governing the collection, use and disclosure of the personal information of individuals in Quebec will be phased in over three years (September 2022 to September 2024). The Act also creates a new enforcement regime with significant criminal fines and administrative monetary penalties for certain infractions and a private right of action with minimum statutory punitive damages. The full impact of the Act is not yet known because some key provisions, such as those relating to artificial intelligence, have to be further elaborated through government regulations and interpretive guidance from the regulator. The materiality of the change cannot be fully assessed at this time.

CRTC Review of Telecommunications Services to the Far North

On November 2, 2020, the CRTC initiated the first phase of a review of its regulatory framework for Northwestel Inc. and the state of telecommunications services in Canada’s North in Telecom Notice of Consultation CRTC 2020-367. On January 20, 2021, a number of interveners proposed large subsidy increases to Northwestel and other companies providing service in Canada’s North. On June 8, 2022, the CRTC released Telecom Notice of Consultation CRTC 2022-147 initiating the second phase of this review, leaving open the potential for subsidy increases. On October 24, 2022, the CRTC added three TELUS communities (High Level, Alberta, Atlin, B.C. and Fort St. John, B.C.) to the scope of the proceeding. A hearing was held in Whitehorse, Yukon from April 17 to 21, 2023, but the proceeding has since been suspended while the CRTC considers whether it has heard sufficient diversity of voices and perspectives. A decision is unlikely before 2024. The impact of this proceeding is not expected to be material.

Consultation on amendments to the Competition Act

In February 2022, ISED announced its intention to undertake a review of the *Competition Act*, beginning with immediate, targeted amendments to the Act. The targeted amendments received royal assent on June 23, 2022 and included: (i) addition of a new provision to protect workers from agreements between employers that fix wages and restrict job mobility; (ii) addition of a new provision regarding “drip pricing” to both the civil and criminal prohibition on false or misleading representations; (iii) addition of an expanded list of factors to be considered when assessing the competitive impact of mergers, business practices and competitor collaborations; (iv) amendments to clarify an “anti-competitive act” for abuse of dominance; (v) amendments to provide access by private parties to the Competition Tribunal if they are directly and substantially affected by the conduct of another party; and (vi) introduction of an anti-avoidance provision to the notifiable transactions provisions of the *Competition Act*.

In November 2022, ISED commenced a consultation seeking input on further amendments to the *Competition Act*. The further consultations were commenced by the issuance of a discussion paper entitled *The Future of Competition Policy in Canada*, released in November 2022. ISED has outlined five areas of focus for the consultation: (i) merger review; (ii) unilateral conduct; (iii) competitor collaborations; (iv) deceptive marketing; and (v) administration and enforcement of the law. We filed comments setting out our views on these topics in response.

Rogers application to attach small cell antennas to TELUS and Bell support structures

On July 4, 2023, Rogers brought an application to the CRTC alleging that TELUS and Bell have an obligation to process Rogers applications to attach small cell antennas to support structures and that TELUS and Bell have failed to meet this obligation. Answers to the application are due on August 11, 2023 and we intend to oppose the allegations vigorously.

Proceeding regarding support structure relocation compensation

On January 16, 2023, we filed a proposed revision to our support structure tariff that allows support structure licensees to negotiate relocation terms and compensation directly with the party forcing the relocation, pursuant to the CRTC’s direction in Telecom Decision CRTC 2022-311 (the “decision”), *Rogers Communications Canada Inc. and Shaw Cablesystems G.P. – Application regarding compensation for transmission line relocation in British Columbia*. Concurrent with the tariff application proceeding, which included requests for information and replies to interventions, on February 28, 2023, British Columbia’s Ministry of Transportation and Infrastructure (MOTI) filed an application with the CRTC to stay the Commission’s directives in the decision, as well as to review and rescind or vary the decision. We responded on March 30, 2023 asking the Commission to dismiss MOTI’s review and vary application (R&V) and on May 16, 2023, the Commission denied MOTI’s request for a stay of the directives but has yet to conclude on the R&V. The R&V ruling is not expected to be material.

Broadcasting and content-related issues

Regulatory Plan to modernize Canada’s broadcasting system

Bill C-11, *An Act to amend the Broadcasting Act and to make related and consequential amendments to other Acts*, which brings streaming services that operate over the internet expressly within the scope of the *Broadcasting Act*, was passed by Parliament and received Royal Assent on April 27, 2023. On May 12, 2023, the CRTC issued three notices of consultation for Phase 1 of the Regulatory Plan, including notices of consultation concerning the contribution framework that will apply to traditional and online broadcasting undertakings, the registration of online undertakings, and a review of exemption orders and basic conditions of service that will apply to online undertakings. We are participating in all three consultations. It is too early to determine the impact on us.

Review of the Copyright Act and consultations on copyright reform to address specific issues

The *Copyright Act*’s last statutorily mandated review was launched in 2017 and resulted in reports from the Standing Committee on Industry, Science and Technology and the Standing Committee on Canadian Heritage being presented to the House of Commons in the summer of 2019. The parliamentary review led to further government consultations (described below) launched in 2021 to explore specific issues raised during the review, such as how to modernize the copyright framework for online intermediary liability, AI and IoT. The timeline for potential changes to the *Copyright Act* is uncertain, although the next statutorily mandated review was supposed to be launched in 2022 and it is unclear whether or how this might impact the timeline for comprehensive copyright reform legislation. In the meantime, the federal government has made smaller changes to the *Copyright Act*, such as the inclusion in the 2022 budget of proposed amendments to extend the term of copyright by 20 years, which was required to satisfy Canada’s obligations under the *Canada-United States-Mexico Agreement*. The policy approach for copyright has traditionally been based on a balance between the rights of copyright owners and user rights, and as a result, the impact of this proceeding is not expected to be material.

On April 14, 2021, ISED announced the launch of a consultation to modernize the copyright framework for online intermediaries. The consultation builds on the work done in 2018 and 2019 as part of the parliamentary review of the *Copyright Act*. ISED sought comments on a broad range of issues, including the role of intermediaries in policing online copyright infringement, how to remunerate rights holders for the use of their content on online platforms, and what types of enforcement tools (such as website-blocking orders) should be available against intermediaries. We participated in this consultation and filed joint comments with other ISPs on May 31, 2021. Among other things, the comments advocated for a continuation of existing government policy that provides ISPs with unconditional safe harbour protection for the potentially infringing activities of their customers. It is too early to tell whether this consultation will have a material impact on us.

On July 19, 2021, the government announced a consultation to modernize the copyright framework applicable to AI and IoT. The government’s objectives were to support innovation and investment in AI and other digital and emerging technologies, support Canada’s cultural industries and preserve the incentive to create and invest provided by the economic rights set out in the Act, and support competition and marketplace needs regarding IoT devices and other software-enabled products. We participated in this consultation and filed joint comments with other ISPs on September 17, 2021. Among other things, the joint comments advocated that no changes should be made to the *Copyright Act* that would unduly burden or create potential liability risks for ISPs. Similar to the broader *Copyright Act* review, the impact of this proceeding is not expected to be material.

Consultation on the government’s proposed approach to address harmful content online

On July 29, 2021, the government launched a consultation on its proposed approach to address harmful content online.

The government’s proposals largely target social media and content platforms, but a few proposals would also have impacted ISPs. Accordingly, we participated in this consultation and filed joint comments with other ISPs on September 25, 2021. Among other things, the joint comments advocated that the legal framework for addressing harmful online content should not create undue obligations or liability for telecommunications carriers, and that requirements to block access to content online or to provide subscriber information should continue to require judicial orders. In March 2022, the government established an expert advisory group on online safety, with a mandate to provide the Minister of Canadian Heritage with advice on how to design the legislative and regulatory framework to address harmful content online and how to best incorporate the feedback received during the national consultation held from July to September 2021. Following the publication of the group’s report, the government conducted further consultations with stakeholder groups regarding the advice it received from the expert advisory group. The government has indicated it expects to table a bill to address online harms in 2023. The impact of this consultation is not expected to be material.

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 2022 annual MD&A and have not materially changed since December 31, 2022, except for the ratification of the new collective agreement between the TWU and ourselves as further described in *Note 29(b)* of the interim consolidated financial statements. 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 specified 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. For certain financial metrics, there are definitional differences between TELUS and TELUS International reporting. These differences largely arise from TELUS International adopting definitions consistent with practice in its industry. Securities regulations require such measures to be clearly defined, qualified and reconciled with their nearest GAAP measure. Certain of the metrics do not have generally accepted industry definitions.

Adjusted Net income and adjusted basic earnings per share (EPS): These are non-GAAP measures that do not have any standardized meaning prescribed by IFRS-IASB and are therefore unlikely to be comparable to similar measures presented by other issuers. Adjusted Net income excludes the effects of restructuring and other costs, income tax-related adjustments, other equity (income) losses related to real estate joint ventures, long-term debt prepayment premium and other adjustments (identified in the following tables). Adjusted basic EPS is calculated as adjusted net income divided by the basic weighted-average number of Common Shares outstanding. These measures are used to evaluate performance at a consolidated level and exclude items that, in management’s view, may obscure underlying trends in business performance or items of an unusual nature that do not reflect our ongoing operations. They should not be considered alternatives to Net income and basic EPS in measuring TELUS’ performance.

Reconciliation of adjusted Net income

(\$ millions)	Three-month periods ended June 30		Six-month periods ended June 30	
	2023	2022	2023	2022
Net income attributable to Common Shares	200	468	417	853
Add (deduct) amounts net of amount attributable to non-controlling interests:				
Restructuring and other costs	107	27	256	64
Tax effect of restructuring and other costs	(26)	(8)	(58)	(16)
Real estate rationalization-related restructuring impairments	—	—	52	1
Tax effect of real estate rationalization-related restructuring impairments	—	—	(14)	—
Income tax-related adjustments	(13)	(6)	(12)	(6)
Other equity income related to real estate joint ventures	—	—	(1)	—
Virtual power purchase agreements unrealized change in forward element	7	(80)	26	(80)
Tax effect of virtual power purchase agreements unrealized change in forward element	(2)	21	(7)	21
Adjusted Net income	273	422	659	837

Reconciliation of adjusted basic EPS

(\$)	Three-month periods ended June 30		Six-month periods ended June 30	
	2023	2022	2023	2022
Basic EPS	0.14	0.34	0.29	0.62
Add (deduct) amounts net of amount attributable to non-controlling interests:				
Restructuring and other costs, per share	0.08	0.02	0.18	0.04
Tax effect of restructuring and other costs, per share	(0.02)	—	(0.04)	(0.01)
Real estate rationalization-related restructuring impairments, per share	—	—	0.04	—
Tax effect of real estate rationalization-related restructuring impairments, per share	—	—	(0.01)	—
Income tax-related adjustments, per share	(0.01)	—	(0.01)	—
Virtual power purchase agreements unrealized change in forward element, per share	—	(0.06)	0.01	(0.06)
Tax effect of virtual power purchase agreements unrealized change in forward element, per share	—	0.02	—	0.02
Adjusted basic EPS	0.19	0.32	0.46	0.61

Available liquidity: This is a non-GAAP measure that does not have any standardized meaning prescribed by IFRS-IASB and is therefore unlikely to be comparable to similar measures presented by other issuers. Available liquidity is calculated as the sum of Cash and temporary investments, net, amounts available from the revolving credit facility and amounts available under our trade receivables securitization program measured at the end of the period. We believe this to be a useful measure because it allows us to monitor compliance with our financial objectives. It should not be considered as an alternative to Cash and temporary investments, net in measuring TELUS’ performance.

Available liquidity reconciliation

As at June 30 (\$ millions)	2023	2022
Cash and temporary investments, net	649	382
Net amounts available from the TELUS Corporation revolving credit facility	806	828
Amounts available under trade receivables securitization program	10	325
Available liquidity¹	1,465	1,535

¹ Excludes available liquidity from the unsecured non-revolving \$1.1 billion bank credit facility.

Capital expenditure intensity: This measure is calculated as capital expenditures excluding real estate development divided by Operating revenues and other income. It provides a basis for comparing the level of capital expenditures to those of other companies of varying size within the same industry.

Calculation of Capital expenditure intensity

Three-month periods ended June 30 (\$ millions, except ratio)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – Capital expenditures excluding real estate development	761	1,012	34	38	—	—	795	1,050
Denominator – Operating revenues and other income	4,227	3,733	896	797	(177)	(129)	4,946	4,401
Capital expenditure intensity (%)	18	27	4	5	n/m	n/m	16	24

Calculation of Capital expenditure intensity

Six-month periods ended June 30 (\$ millions, except ratio)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – Capital expenditures excluding real estate development	1,449	1,805	54	69	—	—	1,503	1,874
Denominator – Operating revenues and other income	8,439	7,375	1,824	1,556	(353)	(248)	9,910	8,683
Capital expenditure intensity (%)	17	24	3	4	n/m	n/m	15	22

TELUS Corporation Common Share (Common Share) dividend payout ratio: This is a historical measure calculated as the sum of the most recent four quarterly dividends declared, as recorded in the financial statements, net of dividend reinvestment plan effects, divided by the sum of free cash flow amounts for the most recent four quarters for interim reporting periods. For fiscal years, the denominator is annual free cash flow. Our objective range for the annual TELUS Corporation Common Share dividend payout ratio is on a prospective basis, rather than on a trailing basis. (See *Section 4.3 Liquidity and capital resources* and *Section 7.5 Liquidity and capital resource measures*.)

Calculation of ratio of Common Share dividends declared to cash provided by operating activities less capital expenditures

Determined using most comparable IFRS-IASB measures

For the 12-month periods ended June 30 (\$ millions, except ratio)	2023	2022
Numerator – Sum of the last four quarterly dividends declared	2,014	1,796
Cash provided by operating activities	4,304	4,590
Less:		
Capital expenditures	(3,105)	(3,787)
Denominator – Cash provided by operating activities less capital expenditures	1,199	803
Ratio (%)	168	224

Calculation of Common Share dividend payout ratio, net of dividend reinvestment plan effects

Determined using management measures

For the 12-month periods ended June 30 (\$ millions, except ratio)	2023	2022
Sum of the last four quarterly dividends declared	2,014	1,796
Sum of the amounts of the last four quarterly dividends declared reinvested in Common Shares	(730)	(644)
Numerator – Sum of the last four quarterly dividends declared, net of dividend reinvestment plan effects	1,284	1,152
Denominator – Free cash flow ¹	1,468	866
Ratio (%)	87	133

¹ Reflects the impacts of our accelerated capital program announced on March 25, 2021.

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

For the 12-month periods ended June 30 (\$ millions, except ratio)	2023	2022
Net income attributable to Common Shares	1,179	1,842
Income taxes (attributable to Common Shares)	405	603
Borrowing costs (attributable to Common Shares) ¹	1,034	756
Numerator	2,618	3,201
Denominator – Borrowing costs	1,034	756
Ratio (times)	2.5	4.2

1 Interest on Long-term debt plus Interest on short-term borrowings and other plus long-term debt prepayment premium, adding capitalized interest and deducting borrowing costs attributable to non-controlling interests.

EBITDA (earnings before interest, income taxes, depreciation and amortization): We have issued guidance on and report EBITDA because it is a key measure used to evaluate performance at a consolidated level. EBITDA is commonly reported and widely used by investors and lending institutions as an indicator of a company’s operating performance and ability to incur and service debt, and as a valuation metric. EBITDA should not be considered as an alternative to Net income in measuring TELUS’ performance, nor should it be used as a measure of cash flow. EBITDA as calculated by TELUS is equivalent to Operating revenues and other income less the total of Goods and services purchased expense and Employee benefits expense.

We calculate EBITDA – excluding restructuring and other costs, as it is a component of the **EBITDA – excluding restructuring and other costs interest coverage** ratio and the **Net debt to EBITDA – excluding restructuring and other costs** ratio.

We also calculate **Adjusted EBITDA** to exclude items of an unusual nature that do not reflect our ongoing operations and should not, in our opinion, be considered in a long-term valuation metric or should not be included in an assessment of our ability to service or incur debt.

EBIT (earnings before interest and income taxes) is calculated for our reportable segments because we believe it is a meaningful indicator of our operating performance, as it represents our earnings from operations before costs of capital structure and income taxes.

EBITDA and Adjusted EBITDA reconciliations

Three-month periods ended June 30 (\$ millions)	TTech		DLCX		Total	
	2023	2022	2023	2022	2023	2022
Net income					196	498
Financing costs					323	97
Income taxes					63	167
EBIT	560	667	22	95	582	762
Depreciation	553	498	45	38	598	536
Amortization of intangible assets	344	252	64	43	408	295
EBITDA	1,457	1,417	131	176	1,588	1,593
Add restructuring and other costs included in EBITDA	94	19	21	10	115	29
EBITDA – excluding restructuring and other costs and Adjusted EBITDA	1,551	1,436	152	186	1,703	1,622

EBITDA and Adjusted EBITDA reconciliations

Six-month periods ended June 30 (\$ millions)	TTech		DLCX		Total	
	2023	2022	2023	2022	2023	2022
Net income					420	902
Financing costs					643	276
Income taxes					118	311
EBIT	1,096	1,308	85	181	1,181	1,489
Depreciation	1,150	1,012	88	75	1,238	1,087
Amortization of intangible assets	664	497	126	89	790	586
EBITDA	2,910	2,817	299	345	3,209	3,162
Add restructuring and other costs included in EBITDA	235	54	39	14	274	68
EBITDA – excluding restructuring and other costs	3,145	2,871	338	359	3,483	3,230
Other equity income related to real estate joint ventures	(1)	—	—	—	(1)	—
Adjusted EBITDA	3,144	2,871	338	359	3,482	3,230

Adjusted EBITDA less capital expenditures is calculated for our reportable segments, as it represents a simple cash flow view that may be more comparable to other issuers.

Adjusted EBITDA less capital expenditures reconciliation

Three-month periods ended June 30 (\$ millions)	TTech		DLCX		Total	
	2023	2022	2023	2022	2023	2022
Adjusted EBITDA	1,551	1,436	152	186	1,703	1,622
Capital expenditures	(773)	(1,016)	(34)	(38)	(807)	(1,054)
Adjusted EBITDA less capital expenditures	778	420	118	148	896	568

Adjusted EBITDA less capital expenditures reconciliation

Six-month periods ended June 30 (\$ millions)	TTech		DLCX		Total	
	2023	2022	2023	2022	2023	2022
Adjusted EBITDA	3,144	2,871	338	359	3,482	3,230
Capital expenditures	(1,466)	(1,818)	(54)	(69)	(1,520)	(1,887)
Adjusted EBITDA less capital expenditures	1,678	1,053	284	290	1,962	1,343

We calculate **EBITDA margin** and **Adjusted EBITDA margin** to evaluate the performance of our operating segments and we believe these measures are also used by investors as indicators of a company’s operating performance. We calculate EBITDA margin as EBITDA divided by Operating revenues and other income. Adjusted EBITDA margin is a non-GAAP ratio that 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 calculate Adjusted EBITDA margin as Adjusted EBITDA divided by adjusted Operating revenues and other income.

Calculation of EBITDA margin

Three-month periods ended June 30 (\$ millions, except margin)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – EBITDA	1,457	1,417	131	176	—	—	1,588	1,593
Denominator – Operating revenues and other income	4,227	3,733	896	797	(177)	(129)	4,946	4,401
EBITDA margin (%)	34.5	37.9	14.6	22.2	n/m	n/m	32.1	36.2

Calculation of EBITDA margin

Six-month periods ended June 30 (\$ millions, except margin)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – EBITDA	2,910	2,817	299	345	—	—	3,209	3,162
Denominator – Operating revenues and other income	8,439	7,375	1,824	1,556	(353)	(248)	9,910	8,683
EBITDA margin (%)	34.5	38.2	16.4	22.2	n/m	n/m	32.4	36.4

Calculation of Adjusted EBITDA margin

Three-month periods ended June 30 (\$ millions, except margin)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – Adjusted EBITDA	1,551	1,436	152	186	—	—	1,703	1,622
Adjusted Operating revenues and other income: Denominator – Operating revenues and other income	4,227	3,733	896	797	(177)	(129)	4,946	4,401
Adjusted EBITDA margin (%)	36.7	38.4	16.9	23.4	n/m	n/m	34.4	36.9

Calculation of Adjusted EBITDA margin

Six-month periods ended June 30 (\$ millions, except margin)	TTech		DLCX		Eliminations		Total	
	2023	2022	2023	2022	2023	2022	2023	2022
Numerator – Adjusted EBITDA	3,144	2,871	338	359	—	—	3,482	3,230
Adjusted Operating revenues and other income:								
Operating revenues and other income	8,439	7,375	1,824	1,556	(353)	(248)	9,910	8,683
Other equity income related to real estate joint ventures	(1)	—	—	—	—	—	(1)	—
Denominator – Adjusted Operating revenues and other income	8,438	7,375	1,824	1,556	(353)	(248)	9,909	8,863
Adjusted EBITDA margin (%)	37.3	38.9	18.5	23.1	n/m	n/m	35.1	37.2

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. It is similar to the coverage ratio covenant in our credit facilities, as described in *Section 7.6 Credit facilities*.

Calculation of EBITDA – excluding restructuring and other costs interest coverage

For the 12-month periods ended June 30 (\$ millions, except ratio)	2023	2022
Numerator – EBITDA – excluding restructuring and other costs	6,899	6,715
Denominator – Net interest cost	1,084	755
Ratio (times)	6.4	8.9

Free cash flow: We report this measure as a supplementary indicator of our operating performance, and there is no generally accepted industry definition of free cash flow. It should not be considered as 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 that may be used to, among other things, pay dividends, repay debt, purchase shares or make other investments. We exclude impacts of accounting standards 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

(\$ millions)	Three-month periods ended June 30		Six-month periods ended June 30	
	2023	2022	2023	2022
EBITDA	1,588	1,593	3,209	3,162
Restructuring and other costs, net of disbursements	15	8	100	(17)
Effects of contract asset, acquisition and fulfilment (IFRS 15 impact) and TELUS Easy Payment device financing	17	49	49	127
Effects of lease principal (IFRS 16 impact)	(129)	(125)	(259)	(248)
Items from the condensed interim consolidated statements of cash flows:				
Share-based compensation, net	30	42	73	68
Net employee defined benefit plans expense	16	25	31	52
Employer contributions to employee defined benefit plans	(7)	(8)	(16)	(25)
Interest paid	(295)	(195)	(581)	(375)
Interest received	3	—	7	1
Capital expenditures ¹	(807)	(1,054)	(1,520)	(1,887)
Free cash flow before income taxes	431	335	1,093	858
Income taxes paid, net of refunds	(152)	(130)	(279)	(238)
Free cash flow	279	205	814	620

¹ Refer to *Note 31* of the interim consolidated financial statements for further information.

The following reconciles our definition of free cash flow with Cash provided by operating activities.

Free cash flow reconciliation with Cash provided by operating activities

(\$ millions)	Three-month periods ended June 30		Six-month periods ended June 30	
	2023	2022	2023	2022
Free cash flow	279	205	814	620
Add (deduct):				
Capital expenditures ¹	807	1,054	1,520	1,887
Effects of lease principal and leases accounted for as finance leases prior to adoption of IFRS 16	129	125	259	248
Net change in non-cash operating working capital not included in preceding line items and other individually immaterial items included in Net income neither providing nor using cash	(98)	(134)	(715)	(370)
Cash provided by operating activities	1,117	1,250	1,878	2,385

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

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.

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.

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*.

Calculation of Net debt to EBITDA – excluding restructuring and other costs

For the 12-month periods ended June 30 (\$ millions, except ratio)	2023	2022
Numerator – Net debt	26,485	21,693
Denominator – EBITDA – excluding restructuring and other costs	6,899	6,715
Ratio (times)	3.84	3.23

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, virtual power purchase agreements unrealized change in forward element, 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.

Calculation of Net interest cost

For the 12-month periods ended June 30 (\$ millions)	2023	2022
Financing costs	999	662
Deduct employee defined benefit plans net interest	(8)	(17)
Add interest on long-term debt, excluding lease liabilities – capitalized	6	30
Add virtual power purchase agreements unrealized change in forward element	87	80
Net interest cost	1,084	755

11.2 Operating indicators

The following measures are industry metrics that are useful in assessing the operating performance of a mobile and fixed telecommunications entity, but do not have a standardized meaning under IFRS-IASB.

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.

Connected device subscriber means a subscriber on an active TELUS service plan with a recurring revenue-generating portable unit (e.g. tablets, internet keys, Internet of Things, wearables and connected cars) that is supported by TELUS and is intended for limited or no cellular voice capability.

Mobile phone subscriber means a subscriber on an active TELUS service plan with a recurring revenue-generating portable unit (e.g. feature phones and smartphones) where TELUS provides voice, text and/or data connectivity.

Internet subscriber means a subscriber on an active TELUS internet plan with a recurring revenue-generating unit where TELUS provides internet connectivity.

Residential voice subscriber means a subscriber on an active TELUS phone plan with a recurring revenue-generating unit where TELUS provides voice service.

Security subscriber means a subscriber on an active TELUS security plan with a recurring revenue-generating unit that is connected to the TELUS security and automation platform.

TV subscriber means a subscriber on an active TELUS TV plan with a recurring revenue-generating subscription for video services from a TELUS TV platform.

Healthcare lives covered means the number of users (primary members and their dependents) enrolled in various health programs supported by TELUS Health services (e.g. virtual care, health benefits management, preventative care, personal health security, and employee and family assistance programs). It is probable that some members and their dependents will be a user of multiple TELUS Health services.

Virtual care member means primary enrolment to receive services on an active TELUS Health virtual care plan.

Digital health transactions mean the total number of health claims, dental claims, consultations or other transactions facilitated by TELUS Health products and services.

TELUS CORPORATION

**CONDENSED INTERIM CONSOLIDATED
FINANCIAL STATEMENTS**

(UNAUDITED)

JUNE 30, 2023

condensed interim consolidated statements of income and other
comprehensive income

(unaudited)

Periods ended June 30 (millions except per share amounts)	Note	Three months		Six months	
		2023	2022	2023	2022
OPERATING REVENUES					
Service		\$ 4,358	\$ 3,857	\$ 8,703	\$ 7,622
Equipment		576	516	1,156	1,007
Operating revenues (arising from contracts with customers)	6	4,934	4,373	9,859	8,629
Other income	7	12	28	51	54
Operating revenues and other income		4,946	4,401	9,910	8,683
OPERATING EXPENSES					
Goods and services purchased	16	1,790	1,637	3,593	3,231
Employee benefits expense	8, 16	1,568	1,171	3,108	2,290
Depreciation	17	598	536	1,238	1,087
Amortization of intangible assets	18	408	295	790	586
		4,364	3,639	8,729	7,194
OPERATING INCOME					
Financing costs	9	582	762	1,181	1,489
		323	97	643	276
INCOME BEFORE INCOME TAXES					
Income taxes	10	259	665	538	1,213
		63	167	118	311
NET INCOME					
		196	498	420	902
OTHER COMPREHENSIVE INCOME (LOSS)					
Items that may subsequently be reclassified to income					
Change in unrealized fair value of derivatives designated as cash flow hedges	11	(16)	13	(35)	102
Foreign currency translation adjustment arising from translating financial statements of foreign operations		(66)	(21)	(35)	(88)
		(82)	(8)	(70)	14
Items never subsequently reclassified to income					
Change in measurement of investment financial assets		(2)	(4)	(8)	1
Employee defined benefit plan re-measurements		3	138	(1)	297
		1	134	(9)	298
		(81)	126	(79)	312
COMPREHENSIVE INCOME					
		\$ 115	\$ 624	\$ 341	\$ 1,214
NET INCOME ATTRIBUTABLE TO:					
Common Shares		\$ 200	\$ 468	\$ 417	\$ 853
Non-controlling interests		(4)	30	3	49
		\$ 196	\$ 498	\$ 420	\$ 902
COMPREHENSIVE INCOME ATTRIBUTABLE TO:					
Common Shares		\$ 144	\$ 591	\$ 355	\$ 1,182
Non-controlling interests		(29)	33	(14)	32
		\$ 115	\$ 624	\$ 341	\$ 1,214
NET INCOME PER COMMON SHARE					
	12				
Basic		\$ 0.14	\$ 0.34	\$ 0.29	\$ 0.62
Diluted		\$ 0.14	\$ 0.34	\$ 0.29	\$ 0.62
TOTAL WEIGHTED AVERAGE COMMON SHARES OUTSTANDING					
Basic		1,447	1,381	1,443	1,378
Diluted		1,452	1,387	1,447	1,384

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



As at (millions)	Note	June 30, 2023	December 31, 2022
ASSETS			
Current assets			
Cash and temporary investments, net		\$ 649	\$ 974
Accounts receivable	6(b)	3,238	3,316
Income and other taxes receivable		171	124
Inventories	1(b)	580	537
Contract assets	6(c)	427	441
Prepaid expenses	20	808	617
Current derivative assets	4(d)	55	83
		5,928	6,092
Non-current assets			
Property, plant and equipment, net	17	17,297	17,084
Intangible assets, net	18	19,871	19,239
Goodwill, net	18	10,015	9,125
Contract assets	6(c)	290	320
Other long-term assets	20	2,276	2,203
		49,749	47,971
		\$ 55,677	\$ 54,063
LIABILITIES AND OWNERS' EQUITY			
Current liabilities			
Short-term borrowings	22	\$ 594	\$ 104
Accounts payable and accrued liabilities	23	3,249	3,947
Income and other taxes payable		120	112
Dividends payable	13	526	502
Advance billings and customer deposits	24	942	891
Provisions	25	240	166
Current maturities of long-term debt	26	3,716	2,541
Current derivative liabilities	4(d)	39	18
		9,426	8,281
Non-current liabilities			
Provisions	25	664	538
Long-term debt	26	22,872	22,496
Other long-term liabilities	27	722	636
Deferred income taxes	10	4,414	4,454
		28,672	28,124
Liabilities		38,098	36,405
Owners' equity			
Common equity	28	16,407	16,569
Non-controlling interests		1,172	1,089
		17,579	17,658
		\$ 55,677	\$ 54,063

Contingent liabilities

29

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

condensed interim consolidated statements of changes in owners' equity

(unaudited)

(millions)	Note	Common equity							Non-controlling interests	Total
		Equity contributed			Retained earnings	Accumulated other comprehensive income	Total			
		Common Shares (Note 28)	Share capital	Contributed surplus						
		Number of shares								
Balance as at January 1, 2022		1,370	\$ 9,644	\$ 1,013	\$ 4,256	\$ 203	\$ 15,116	\$ 943	\$ 16,059	
Net income		—	—	—	853	—	853	49	902	
Other comprehensive income (loss)	11	—	—	—	297	32	329	(17)	312	
Dividends	13	—	—	—	(917)	—	(917)	—	(917)	
Dividends reinvested and optional cash payments	13(b), 14(c)	11	317	—	—	—	317	—	317	
Equity accounted share-based compensation		—	—	68	—	—	68	7	75	
Issue of Common Shares in business combination		—	6	—	—	—	6	—	6	
Change in ownership interests of subsidiaries	28(c)	—	—	(56)	—	—	(56)	(18)	(74)	
Balance as at June 30, 2022		1,381	\$ 9,967	\$ 1,025	\$ 4,489	\$ 235	\$ 15,716	\$ 964	\$ 16,680	
Balance as at January 1, 2023		1,431	\$ 11,399	\$ 956	\$ 4,104	\$ 110	\$ 16,569	\$ 1,089	\$ 17,658	
Net income		—	—	—	417	—	417	3	420	
Other comprehensive income (loss)	11	—	—	—	(1)	(61)	(62)	(17)	(79)	
Dividends	13	—	—	—	(1,032)	—	(1,032)	—	(1,032)	
Dividends reinvested and optional cash payments	13(b), 14(c)	14	371	—	—	—	371	—	371	
Equity accounted share-based compensation	14(b)	—	—	55	—	—	55	(1)	54	
Change in ownership interests of subsidiaries	25, 28(c)	2	54	35	—	—	89	98	187	
Balance as at June 30, 2023		1,447	\$ 11,824	\$ 1,046	\$ 3,488	\$ 49	\$ 16,407	\$ 1,172	\$ 17,579	

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



condensed interim consolidated statements of cash flows

(unaudited)

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
OPERATING ACTIVITIES					
Net income		\$ 196	\$ 498	\$ 420	\$ 902
Adjustments to reconcile net income to cash provided by operating activities:					
Depreciation and amortization		1,006	831	2,028	1,673
Deferred income taxes	10	(36)	(5)	(129)	(6)
Share-based compensation expense, net	14(a)	30	42	73	68
Net employee defined benefit plans expense	15(a)	16	25	31	52
Employer contributions to employee defined benefit plans	15(a)	(7)	(8)	(16)	(25)
Non-current contract assets		16	11	30	37
Non-current unbilled customer finance receivables	20	(8)	113	(22)	31
Unrealized change in forward element of virtual power purchase agreements	9	7	(80)	26	(80)
Loss from equity accounted investments	7, 21	4	3	8	7
Other		(79)	(68)	(58)	(72)
Net change in non-cash operating working capital	31(a)	(28)	(112)	(513)	(202)
Cash provided by operating activities		1,117	1,250	1,878	2,385
INVESTING ACTIVITIES					
Cash payments for capital assets, excluding spectrum licences	31(a)	(777)	(1,016)	(1,753)	(2,029)
Cash payments for spectrum licences		(5)	—	(5)	—
Cash payments for acquisitions, net	18(b)	—	(353)	(1,262)	(480)
Advances to, and investment in, real estate joint ventures and associates	21	(112)	(2)	(117)	(2)
Real estate joint venture receipts	21	2	1	4	2
Proceeds on disposition		7	7	7	12
Investment in portfolio investments and other		(23)	(75)	(115)	(140)
Cash used by investing activities		(908)	(1,438)	(3,241)	(2,637)
FINANCING ACTIVITIES					
Dividends paid to holders of Common Shares	31(b) 13(a)	(320)	(290)	(638)	(583)
Issue (repayment) of short-term borrowings, net		1	171	490	165
Long-term debt issued	26	1,836	1,770	5,517	4,057
Redemptions and repayment of long-term debt	26	(1,898)	(1,770)	(4,270)	(3,629)
Shares of subsidiary purchased from non-controlling interests, net	28(c)	(57)	(85)	(57)	(85)
Other		1	—	(4)	(14)
Cash provided (used) by financing activities		(437)	(204)	1,038	(89)
CASH POSITION					
Decrease in cash and temporary investments, net		(228)	(392)	(325)	(341)
Cash and temporary investments, net, beginning of period		877	774	974	723
Cash and temporary investments, net, end of period		\$ 649	\$ 382	\$ 649	\$ 382
SUPPLEMENTAL DISCLOSURE OF OPERATING CASH FLOWS					
Interest paid		\$ (295)	\$ (195)	\$ (581)	\$ (375)
Interest received		\$ 3	\$ —	\$ 7	\$ 1
Income taxes paid, net		\$ (152)	\$ (130)	\$ (279)	\$ (238)

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

JUNE 30, 2023

TELUS Corporation is one of Canada's largest telecommunications companies, providing a wide range of technology solutions, which include mobile and fixed voice and data telecommunications services and products, healthcare services, software and technology solutions (including employee and family assistance programs and benefits administration), agriculture and consumer goods services (software, data management and data analytics-driven smart-food chain and consumer goods technologies), and digitally-led customer experiences. Data services include: internet protocol; television; hosting, managed information technology and cloud-based services; and home and business 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" refer to TELUS Corporation and, where the context of the narrative permits or requires, its subsidiaries. Our principal subsidiaries are: TELUS Communications Inc., in which, as at June 30, 2023, we have a 100% equity interest; and TELUS International (Cda) Inc., in which, as at June 30, 2023, we have a 56.1% equity interest, as discussed further in *Note 28(c)*, and which completed its initial public offering in February 2021. Although it has not had any effect on our current determination of which are our principal subsidiaries, we also made a material business acquisition during the six-month period ended June 30, 2023, as set out in *Note 18(b)*.

Notes to consolidated financial statements	Page
General application	
1. Condensed interim consolidated financial statements	6
2. Accounting policy developments	7
3. Capital structure financial policies	8
4. Financial instruments	10
Consolidated results of operations focused	
5. Segment information	17
6. Revenue from contracts with customers	20
7. Other income	21
8. Employee benefits expense	21
9. Financing costs	21
10. Income taxes	22
11. Other comprehensive income	23
12. Per share amounts	25
13. Dividends per share	25
14. Share-based compensation	26
15. Employee future benefits	29
16. Restructuring and other costs	31
Consolidated financial position focused	
17. Property, plant and equipment	32
18. Intangible assets and goodwill	33
19. Leases	35
20. Other long-term assets	36
21. Real estate joint ventures and investments in associates	36
22. Short-term borrowings	38
23. Accounts payable and accrued liabilities	39
24. Advance billings and customer deposits	39
25. Provisions	40
26. Long-term debt	41
27. Other long-term liabilities	45
28. Owners' equity	45
29. Contingent liabilities	46
Other	
30. Related party transactions	48
31. Additional statement of cash flow information	49

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, 2022.

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, 2022. 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.

These consolidated financial statements for the three-month and six-month periods ended June 30, 2023, were authorized by our Board of Directors for issue on August 4, 2023.

(b) Inventories

Our inventories primarily consist of mobile handsets, parts and accessories totalling \$436 million as at June 30, 2023 (December 31, 2022 – \$414 million), and communications equipment held for resale. Inventories are valued at the lower of cost and net realizable value, with cost being determined on an average cost basis. Costs of goods sold for the three-month and six-month periods ended June 30, 2023, totalled \$0.5 billion (2022 – \$0.5 billion) and \$1.1 billion (2022 – \$1.0 billion), respectively.

2 accounting policy developments

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

- In February 2021, the International Accounting Standards Board issued narrow-scope amendments to IAS 1, *Presentation of Financial Statements*, IFRS Practice Statement 2, *Making Materiality Judgements*, and IAS 8, *Accounting Policies, Changes in Accounting Estimates and Errors*. The amendments are effective for annual periods beginning on or after January 1, 2023, although earlier application was permitted. The amendments require the disclosure of material accounting policy information rather than disclosing significant accounting policies, and clarify how to distinguish changes in accounting policies from changes in accounting estimates. Our financial disclosure is currently not materially affected by the application of the amendments.
- In May 2021, the International Accounting Standards Board issued targeted amendments to IAS 12, *Income Taxes*. The amendments are effective for annual periods beginning on or after January 1, 2023, although earlier application was permitted. With a view to reducing diversity in reporting, the amendments clarify that companies are required to recognize deferred taxes on transactions where both assets and liabilities are recognized, such as with leases and asset retirement (decommissioning) obligations. Our financial performance and disclosure is currently not materially affected by the application of the amendments.
- In May 2023, the International Accounting Standards Board issued *International Tax Reform – Pillar Two Model Rules (Amendments to IAS 12)*, which amended IAS 12, *Income Taxes*. The amendments provide temporary relief from accounting for deferred income taxes arising from the Organisation for Economic Co-operation and Development's Pillar Two model rules (such rules ensuring that large multinational corporations would be subject to a minimum 15% income tax rate in every jurisdiction in which they operate). As different jurisdictions are expected to implement the OECD rules at different speeds and at different points in time, the amendments are intended to help ensure consistency within, and comparability across, financial statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2023. We are currently assessing the impacts of the amended standard, but do not expect that our financial disclosure will be materially affected by the application of the amendments.

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

- In May 2023, the International Accounting Standards Board issued *Supplier Finance Arrangements*, which amended IAS 7, *Statement of Cash Flows* and IFRS 7, *Financial Instruments: Disclosures*, and requires additional quantitative and qualitative disclosure about supplier finance arrangements. The amendments are effective for annual reporting periods beginning on or after January 1, 2024, although earlier application is permitted; comparative prior period information is not required in the year of initial application. We are currently

assessing the impacts of the amended standards, but do not expect that our financial disclosure, set out in *Note 23*, will be materially affected by the application of the amendments.

3 capital structure financial policies

General

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

In our definition of financial capital, we include common equity (excluding accumulated other comprehensive income), non-controlling interests, 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, short-term borrowings, including those arising from securitized receivables, and other long-term debts, including those arising from securitized receivables.

We manage our financial 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 financial 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 (including Common Shares and TELUS International (Cda) Inc. subordinate voting shares), issue new debt, issue new debt to replace existing debt with different characteristics, increase or decrease the amount of receivables sold to an arm's-length securitization trust, and/or enter into a new arm's-length securitization trust to replace an existing arm's-length securitization trust with different characteristics.

During 2023, our financial objectives, which are reviewed annually, were unchanged from 2022. We believe that our financial objectives are supportive of our long-term strategy.

We monitor financial 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, except that the covenant includes in EBITDA the unrealized effects of non-currency risk-related derivative financial instruments that are held for trading (see *Note 4(d)*). Net debt and EBITDA – excluding restructuring and other costs are measures that do not have any standardized meanings prescribed by IFRS-IASB and are therefore unlikely to be comparable to similar measures presented by other issuers. The calculation of these measures is set out in the following table. Net debt is one component of a ratio used to determine compliance with debt covenants.

As at, or for the 12-month periods ended, June 30 (\$ in millions)	Objective	2023	2022
Components of debt and coverage ratios			
Net debt ¹		\$ 26,485	\$ 21,693
EBITDA – excluding restructuring and other costs ²		\$ 6,899	\$ 6,715
Net interest cost ³ (<i>Note 9</i>)		\$ 1,084	\$ 755
Debt ratio			
Net debt to EBITDA – excluding restructuring and other costs	2.20 – 2.70 ⁴	3.84	3.23
Coverage ratios			
Earnings coverage ⁵		2.5	4.2
EBITDA – excluding restructuring and other costs interest coverage ⁶		6.4	8.9

* EBITDA is not a standardized financial measure under IFRS-IASB and might not be comparable to similar measures disclosed by other issuers; we define EBITDA as operating revenues and other income less goods and services purchased and employee benefits expense. We 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.

1 Net debt and total managed capitalization are calculated as follows:

As at June 30	Note	2023	2022
Long-term debt	26	\$ 26,588	\$ 21,628
Debt issuance costs netted against long-term debt		114	100
Derivative (assets) liabilities used to manage interest rate and currency risks associated with U.S. dollar-denominated long-term debt, net		(72)	(172)
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		(90)	240
Cash and temporary investments, net		(649)	(382)
Short-term borrowings	22	594	279
Net debt		26,485	21,693
Common equity		16,407	15,716
Non-controlling interests		1,172	964
Less: accumulated other comprehensive income amounts included above in common equity and non-controlling interests		(55)	(201)
Total managed capitalization		\$ 44,009	\$ 38,172

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, 2023	\$ 3,209	\$ 274	\$ 3,483
Year ended December 31, 2022	6,406	240	6,646
Deduct			
Six-month period ended June 30, 2022	(3,162)	(68)	(3,230)
EBITDA – excluding restructuring and other costs	\$ 6,453	\$ 446	\$ 6,899

- 3 Net interest cost is defined as financing costs, excluding employee defined benefit plans net interest, virtual power purchase agreements unrealized change in forward element, recoveries on long-term debt prepayment premium and repayment of debt, calculated on a 12-month trailing basis (expenses recorded for long-term debt prepayment premium, if any, are included in net interest cost) (see Note 9).
- 4 Our long-term objective range for this ratio is 2.20 – 2.70 times. The ratio as at June 30, 2023, 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 the spectrum auction in 2021, and the spectrum auctions upcoming in 2023 and 2024), 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 4.25:1.00 (see Note 26(d)); the calculation of the debt ratio is substantially similar to the calculation of the leverage ratio covenant in our credit facilities.
- 5 Earnings coverage is defined by Canadian Securities Administrators National Instrument 41-101 as net income before borrowing costs and income tax expense, divided by borrowing costs (interest on long-term debt; interest on short-term borrowings and other; long-term debt prepayment premium), and adding back capitalized interest, all such amounts excluding those attributable to non-controlling interests.
- 6 EBITDA – excluding restructuring and other costs interest coverage is defined as EBITDA – excluding restructuring and other costs, divided by net interest cost. This measure is substantially similar to the coverage ratio covenant in our credit facilities.

Net debt to EBITDA – excluding restructuring and other costs was 3.84 times as at June 30, 2023, as compared to 3.23 times one year earlier. The effect of the increase in net debt, primarily due to the acquisition of spectrum licences and business acquisitions, exceeded the effect of growth in EBITDA – excluding restructuring and other costs.

The earnings coverage ratio for the twelve-month period ended June 30, 2023, was 2.5 times, down from 4.2 times one year earlier. A decrease in income before borrowing costs and income taxes decreased the ratio by 0.8 and an increase in borrowing costs decreased the ratio by 0.9. The EBITDA – excluding restructuring and other costs interest coverage ratio for the twelve-month period ended June 30, 2023, was 6.4 times, down from 8.9 times one year earlier. Growth in EBITDA – excluding restructuring and other costs increased the ratio by 0.2 and an increase in net interest costs decreased the ratio by 2.7.

TELUS Corporation Common Share dividend payout ratio

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

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

(divided by annual free cash flow if the reported amount is in respect of a fiscal year). The historical measure for the 12-month period ended June 30, 2023, is presented for illustrative purposes in evaluating our target guideline.

For the 12-month periods ended June 30	Objective	2023	2022
Determined using most comparable IFRS-IASB measures			
Ratio of TELUS Corporation Common Share dividends declared to cash provided by operating activities – less capital expenditures		168%	224%
Determined using management measures			
TELUS Corporation Common Share dividend payout ratio – net of dividend reinvestment plan effects	60%–75% ¹	87%	133%

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

For the 12-month periods ended June 30 (millions)	2023	2022
TELUS Corporation Common Share dividends declared	\$ 2,014	\$ 1,796
Amount of TELUS Corporation Common Share dividends declared reinvested in TELUS Corporation Common Shares	(730)	(644)
TELUS Corporation Common Share dividends declared – net of dividend reinvestment plan effects	\$ 1,284	\$ 1,152

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

For the 12-month periods ended June 30 (millions)	Note	2023	2022
EBITDA	5	\$ 6,453	\$ 6,540
Deduct gain on disposition of financial solutions business		—	(410)
Restructuring and other costs, net of disbursements		186	7
Effects of contract asset, acquisition and fulfilment and TELUS Easy Payment device financing		(173)	(3)
Effect of lease principal	31(b)	(506)	(503)
Items from the Consolidated statements of cash flows:			
Share-based compensation, net	14	127	120
Net employee defined benefit plans expense	15	80	109
Employer contributions to employee defined benefit plans		(35)	(50)
Interest paid		(1,022)	(747)
Interest received		23	15
Capital expenditures	5	(3,105)	(3,787)
Free cash flow before income taxes		2,028	1,291
Income taxes paid, net of refunds		(560)	(486)
Effect of disposition of financial solutions business on income taxes paid		—	61
Free cash flow		1,468	866
Add (deduct):			
Capital expenditures	5	3,105	3,787
Effects of lease principal		506	503
Gain on disposition of financial solutions business, net of effect on income taxes paid		—	(349)
Net change in non-cash operating working capital not included in preceding line items and other individually immaterial items included in net income neither providing nor using cash		(775)	(217)
Cash provided by operating activities		\$ 4,304	\$ 4,590

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, 2023	December 31, 2022
Cash and temporary investments, net	\$ 649	\$ 974
Accounts receivable	3,831	3,887
Contract assets	717	761
Derivative assets	209	333
	\$ 5,406	\$ 5,955

Cash and temporary investments, net

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

Accounts receivable

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

As at (millions)		June 30, 2023			December 31, 2022		
	Note	Gross	Allowance	Net ¹	Gross	Allowance	Net ¹
Customer accounts receivable, net of allowance for doubtful accounts							
Less than 30 days past billing date		\$ 1,095	\$ (12)	\$ 1,083	\$ 936	\$ (11)	\$ 925
30-60 days past billing date		305	(12)	293	400	(11)	389
61-90 days past billing date		112	(14)	98	185	(15)	170
More than 90 days past billing date		171	(31)	140	192	(33)	159
Unbilled customer finance receivables		1,493	(38)	1,455	1,509	(39)	1,470
		\$ 3,176	\$ (107)	\$ 3,069	\$ 3,222	\$ (109)	\$ 3,113
Current	6(b)	\$ 2,569	\$ (93)	\$ 2,476	\$ 2,636	\$ (94)	\$ 2,542
Non-current	20	607	(14)	593	586	(15)	571
		\$ 3,176	\$ (107)	\$ 3,069	\$ 3,222	\$ (109)	\$ 3,113

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. The doubtful accounts expense is calculated on a specific-identification basis for customer accounts receivable balances above a specific 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		Six months	
	2023	2022	2023	2022
Balance, beginning of period	\$ 106	\$ 107	\$ 109	\$ 110
Additions (doubtful accounts expense)	27	22	48	40
Accounts written off ¹ less than recoveries	(27)	(18)	(55)	(41)
Other	1	3	5	5
Balance, end of period	\$ 107	\$ 114	\$ 107	\$ 114

¹ For the three-month and six-month periods ended June 30, 2023, accounts that were written off but were still subject to enforcement activity totalled \$45 (2022 – \$37) and \$89 (2022 – \$69), respectively.

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, 2023			December 31, 2022		
	Gross	Allowance	Net (Note 6(c))	Gross	Allowance	Net (Note 6(c))
Contract assets, net of impairment allowance						
<i>To be billed and thus reclassified to accounts receivable during:</i>						
The 12-month period ending one year hence	\$ 590	\$ (23)	\$ 567	\$ 611	\$ (23)	\$ 588
The 12-month period ending two years hence	245	(9)	236	277	(11)	266
Thereafter	55	(1)	54	55	(1)	54
	\$ 890	\$ (33)	\$ 857	\$ 943	\$ (35)	\$ 908

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 material 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 (*Note 22*), bilateral bank facilities (*Note 22*), a supply chain financing program (*Note 23*), a commercial paper program (*Note 26(c)*) and syndicated credit facilities (*Note 26(d),(e)*);
- maintaining in-effect shelf prospectuses;
- continuously monitoring forecast and actual cash flows; and
- managing maturity profiles of financial assets and financial liabilities.

Our debt maturities in future years are disclosed in *Note 26(h)*. As at June 30, 2023, unchanged from December 31, 2022, TELUS Corporation could offer an unlimited amount of securities in Canada, and US\$3.5 billion of securities in the U.S., qualified pursuant to a Canadian shelf prospectus that is in effect until September 2024. We believe that our investment grade credit ratings contribute to reasonable access to capital markets. TELUS International (Cda) Inc. has a Canadian shelf prospectus that is in effect until May 2024 under which an unlimited amount of debt or equity securities could be offered.

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.

As at June 30, 2023 (millions)	Non-derivative		Composite long-term debt				Derivative			
	Non-interest bearing financial liabilities	Short-term borrowings ¹	Long-term debt, excluding leases ¹ (<i>Note 26</i>)	Currency swap agreement amounts to be exchanged ²		Other	Currency swap agreement amounts to be exchanged		Total	
				(Receive)	Pay		(Receive)	Pay		
2023 (remainder of year)	\$ 2,859	\$ 20	\$ 2,511	\$ 327	\$ (2,101)	\$ 2,117	\$ —	\$ (361)	\$ 363	\$ 5,735
2024	253	624	3,270	608	(227)	207	—	(284)	287	4,738
2025	13	—	1,937	474	(219)	206	—	—	—	2,411
2026	80	—	2,288	346	(215)	206	—	—	—	2,705
2027	137	—	2,295	269	(1,658)	1,653	1	—	—	2,697
2028-2032	49	—	10,967	535	(2,197)	2,160	—	—	—	11,514
Thereafter	—	—	11,996	375	(2,856)	2,805	—	—	—	12,320
Total	\$ 3,391	\$ 644	\$ 35,264	\$ 2,934	\$ (9,473)	\$ 9,354	\$ 1	\$ (645)	\$ 650	\$ 42,120
			Total (<i>Note 26(h)</i>)			\$ 38,079				

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, 2023.

2 The amounts included in undiscounted non-derivative long-term debt in respect of U.S. dollar-denominated long-term debt, and the corresponding amounts in the long-term debt currency swap receive column, have been determined based upon the currency exchange rates in effect as at June 30, 2023. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swap pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

As at December 31, 2022 (millions)	Non-derivative				Derivative				Total
	Non-interest bearing financial liabilities	Short-term borrowings ¹	Composite long-term debt		Currency swap agreement amounts to be exchanged ²		Currency swap agreement amounts to be exchanged		
			Long-term debt, excluding leases ¹ (Note 26)	Leases (Note 26)	(Receive)	Pay	(Receive)	Pay	
2023	\$ 3,613	\$ 9	\$ 2,907	\$ 596	\$ (1,679)	\$ 1,674	\$ (669)	\$ 648	\$ 7,099
2024	254	105	3,126	537	(201)	193	—	—	4,014
2025	16	—	1,800	379	(599)	586	—	—	2,182
2026	12	—	2,154	273	(165)	162	—	—	2,436
2027	1	—	2,197	218	(1,644)	1,610	—	—	2,382
2028-2032	—	—	9,929	446	(1,785)	1,707	—	—	10,297
Thereafter	—	—	11,551	364	(2,921)	2,805	—	—	11,799
Total	\$ 3,896	\$ 114	\$ 33,664	\$ 2,813	\$ (8,994)	\$ 8,737	\$ (669)	\$ 648	\$ 40,209
			Total			\$ 36,220			

- 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, 2022.
- The amounts included in undiscounted non-derivative long-term debt in respect of U.S. dollar-denominated long-term debt, and the corresponding amounts in the long-term debt currency swap receive column, have been determined based upon the currency exchange rates in effect as at December 31, 2022. The hedged U.S. dollar-denominated long-term debt contractual amounts at maturity, in effect, are reflected in the long-term debt currency swap pay column as gross cash flows are exchanged pursuant to the currency swap agreements.

(c) Market risks

Net income and other comprehensive income for the six-month periods ended June 30, 2023 and 2022, could have varied if the Canadian dollar: U.S. dollar exchange rate, the U.S. dollar: European euro exchange rate, market interest rates and virtual power purchase agreement forward element valuation varied by reasonably possible amounts from their actual statement of financial position date amounts.

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

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

The sensitivity analysis of our exposure to wind discount risk and solar premium risk at the reporting date has been determined based upon a hypothetical change taking place at the relevant statement of financial position date. The notional amounts of the virtual power purchase agreements as at the relevant statement of financial position dates have 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	
	2023	2022	2023	2022	2023	2022
Reasonably possible changes in market risks ¹						
10% change in C\$: US\$ exchange rate						
Canadian dollar appreciates	\$ (7)	\$ —	\$ 121	\$ (1)	\$ 114	\$ (1)
Canadian dollar depreciates	\$ 7	\$ —	\$ (119)	\$ 1	\$ (112)	\$ 1
10% change in US\$: € exchange rate						
U.S. dollar appreciates	\$ 12	\$ 14	\$ (66)	\$ (59)	\$ (54)	\$ (45)
U.S. dollar depreciates	\$ (12)	\$ (14)	\$ 66	\$ 59	\$ 54	\$ 45
25 basis point change in interest rates						
Interest rates increase						
Canadian interest rate	\$ (8)	\$ (2)	\$ 76	\$ 80	\$ 68	\$ 78
U.S. interest rate	\$ —	\$ —	\$ (70)	\$ (85)	\$ (70)	\$ (85)
Combined	\$ (8)	\$ (2)	\$ 6	\$ (5)	\$ (2)	\$ (7)
Interest rates decrease						
Canadian interest rate	\$ 8	\$ 2	\$ (77)	\$ (83)	\$ (69)	\$ (81)
U.S. interest rate	\$ —	\$ —	\$ 75	\$ 89	\$ 75	\$ 89
Combined	\$ 8	\$ 2	\$ (2)	\$ 6	\$ 6	\$ 8
20 basis point change in wind discount						
Wind discount increases	\$ (39)	\$ —	\$ —	\$ —	\$ (39)	\$ —
Wind discount decreases	\$ 39	\$ —	\$ —	\$ —	\$ 39	\$ —

Six-month periods ended June 30 (increase (decrease) in millions)	Net income		Other comprehensive income		Comprehensive income	
	2023	2022	2023	2022	2023	2022
20 basis point change in solar premium						
Solar premium increases	\$ 24	\$ —	\$ —	\$ —	\$ 24	\$ —
Solar premium decreases	\$ (24)	\$ —	\$ —	\$ —	\$ (24)	\$ —

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

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

(d) Fair values

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, 2023		December 31, 2022	
	Carrying value	Fair value	Carrying value	Fair value
Long-term debt, excluding leases (Note 26)	\$ 24,172	\$ 22,662	\$ 22,967	\$ 21,000

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, 2023					December 31, 2022			
	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 Assets²									
<i>Derivatives used to manage</i>									
Currency risk arising from U.S. dollar revenues	HFT ⁴	2024	\$ 91	\$ 1	US\$1.00: ¥56	2023	\$ 72	\$ 1	US\$1.00: ¥55
Currency risk arising from U.S. dollar-denominated purchases	HFH ³	2024	\$ 101	2	US\$1.00: C\$1.29	2023	\$ 397	21	US\$1.00: C\$1.28
Currency risk arising from U.S. dollar-denominated long-term debt (Note 26(b)-(c))	HFH ³	2023	\$ 139	—	US\$1.00: C\$1.32	2023	\$ 526	9	US\$1.00: C\$1.33
Currency risk arising from European euro functional currency operations purchased with U.S. dollar-denominated long-term debt ⁷ (Note 26(e))	HFH ⁵	2028	\$ 45	19	€1.00: US\$1.09	2025	\$ 31	26	€1.00: US\$1.09
Interest rate risk associated with non-fixed rate credit facility amounts drawn (Note 26(e))	HFH ³	2028	\$ 11	5	3.5%	—	\$ —	—	—
Price risk associated with purchase of electrical power	HFT ⁴	2047	\$ 36	28	\$30.39/MWh	2047	\$ 36	26	\$29.66/MWh
			\$ 55				\$ 83		

As at (millions)	June 30, 2023					December 31, 2022				
Designation	Maximum maturity date	Notional amount	Fair value ¹ and carrying value	Price or rate	Maximum maturity date	Notional amount	Fair value ¹ and carrying value	Price or rate		
Other Long-Term Assets²										
<i>Derivatives used to manage</i>										
Currency risk arising from U.S. dollar-denominated long-term debt ⁶ (Note 26(b)-(c))										
HFH ³	2048	\$ 2,068	\$ 6	US\$1.00: C\$1.27	2048	\$ 4,443	\$ 66	US\$1.00: C\$1.30		
Currency risk arising from European euro functional currency operations purchased with U.S. dollar-denominated long-term debt ⁷ (Note 26(e))										
HFH ⁵	2028	\$ 606	9	€1.00: US\$1.09	2025	\$ 454	17	€1.00: US\$1.09		
Interest rate risk associated with non-fixed rate credit facility amounts drawn (Note 26(e))										
HFH ³	2028	\$ 87	—	3.4%	—	\$ —	—	—		
Price risk associated with purchase of electrical power										
HFT ⁴	2047	\$ 234	139	\$39.24/ MWh	2047	\$ 264	167	\$39.15/ MWh		
							\$ 154		\$ 250	
Current Liabilities²										
<i>Derivatives used to manage</i>										
Currency risk arising from U.S. dollar revenues										
HFT ⁴	2024	\$ 42	\$ —	US\$1.00: ₱56	2023	\$ 68	\$ 3	US\$1.00: ₱55		
Currency risk arising from U.S. dollar-denominated purchases										
HFH ³	2024	\$ 414	8	US\$1.00: C\$1.34	2023	\$ 111	1	US\$1.00: C\$1.36		
Currency risk arising from U.S. dollar-denominated long-term debt (Note 26(b)-(c))										
HFH ³	2023	\$ 1,876	31	US\$1.00: C\$1.34	2023	\$ 957	14	US\$1.00: C\$1.37		
							\$ 39		\$ 18	
Other Long-Term Liabilities²										
<i>Derivatives used to manage</i>										
Currency risk arising from U.S. dollar-denominated long-term debt ⁶ (Note 26(b)-(c))										
HFH ³	2049	\$ 4,623	\$ 75	US\$1.00: C\$1.33	2049	\$ 2,329	\$ 24	US\$1.00: C\$1.33		
Interest rate risk associated with non-fixed rate credit facility amounts drawn (Note 26(e))										
HFH ³	2028	\$ 124	1	3.6%	—	\$ —	—	—		
							\$ 76		\$ 24	

1 Fair value measured at the reporting date using significant other observable inputs (Level 2), except the fair value of virtual power purchase agreements (which we use to manage the price risk associated with the purchase of electrical power), which is measured at the reporting date using significant unobservable inputs (Level 3). Changes in the fair value of derivative financial instruments classified as Level 3 in the fair value hierarchy were as follows:

Periods ended June 30	Three months		Six months	
	2023	2022	2023	2022
Virtual power purchase agreements unrealized change in forward element				
Included in net income, excluding income taxes	\$ (7)	\$ 80	\$ (26)	\$ 80
Balance, beginning of period	174	—	193	—
Balance, end of period	\$ 167	\$ 80	\$ 167	\$ 80

- Derivative financial assets and liabilities are not set off.
- 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.
- Designated as held for trading (HFT) and classified as fair value through net income upon initial recognition; hedge accounting is not applied.
- Designated as a hedge of a net investment in a foreign operation; hedge accounting is applied. Hedge ratio is 1:1 and is established by assessing the degree of matching between the notional amounts of hedging items and the notional amounts of the associated hedged items.
- We designate only the spot element as the hedging item. As at June 30, 2023, the foreign currency basis spread included in the fair value of the derivative instruments, which is used for purposes of assessing hedge ineffectiveness, was \$115 (December 31, 2022 – \$123).
- We designate only the spot element as the hedging item. As at June 30, 2023, the foreign currency basis spread included in the fair value of the derivative instruments, which is used for purposes of assessing hedge ineffectiveness, was \$3 (December 31, 2022 – \$1).

(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 the 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)		Location	Gain (loss) reclassified from other comprehensive income to income (effective portion) (Note 11)	
		2023	2022		Amount	
		2023	2022		2023	2022
THREE-MONTH						
<i>Derivatives used to manage currency risk</i>						
Arising from U.S. dollar-denominated purchases		\$ 10	\$ 14	Goods and services purchased	\$ 6	\$ 4
Arising from U.S. dollar-denominated long-term debt ¹ 26(b)-(c)		(176)	138	Financing costs	(138)	171
Arising from net investment in a foreign operation ²		—	30	Financing costs	(5)	(1)
		(166)	182		(137)	174
<i>Derivatives used to manage other market risk</i>						
Other		1	1	Financing costs	—	—
		\$ (165)	\$ 183		\$ (137)	\$ 174
SIX-MONTH						
<i>Derivatives used to manage currency risk</i>						
Arising from U.S. dollar-denominated purchases		\$ (9)	\$ 8	Goods and services purchased	\$ 15	\$ 5
Arising from U.S. dollar-denominated long-term debt ¹ 26(b)-(c)		(151)	126	Financing costs	(138)	63
Arising from net investment in a foreign operation ²		(21)	54	Financing costs	(11)	(1)
		(181)	188		(134)	67
<i>Derivatives used to manage other market risks</i>						
Other		—	1	Financing costs	—	(1)
		\$ (181)	\$ 189		\$ (134)	\$ 66

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 amounts for the three-month and six-month periods ended June 30, 2023, were \$10 (2022 – \$32) and \$(8) (2022 – \$7), respectively.

2 Amounts recognized in other comprehensive income are net of the change in the foreign currency basis spread (which is used for purposes of assessing hedge ineffectiveness) included in the fair value of the derivative instruments; such amounts for the three-month and six-month periods ended June 30, 2023, were \$1 (2022 – \$2) and \$2 (2022 – \$NIL), 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, as well as their location within the Consolidated statements of income and other comprehensive income.

Periods ended June 30 (millions)	Location	Gain (loss) on derivatives recognized in income			
		Three months		Six months	
		2023	2022	2023	2022
Derivatives used to manage currency risk	Financing costs	\$ 2	\$ (8)	\$ 5	\$ (11)
Virtual power purchase agreements unrealized change in forward element	Financing costs	\$ (7)	\$ 80	\$ (26)	\$ 80

5 segment information

General

Operating segments are components of an entity that engage in business activities from which they earn revenues and incur expenses (including revenues and expenses related to transactions with the other component(s)), the operations of which can be clearly distinguished and for which the operating results are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. Effective September 1, 2022, we embarked upon the modification of our internal and external reporting processes, systems and internal controls concurrent with the acquisition and integration of LifeWorks Inc. and correspondingly we are assessing our segmented reporting structure.

The TELUS technology solutions segment includes: network revenues and equipment sales arising from mobile technologies; data revenues (which include internet protocol; television; hosting, managed information technology and cloud-based services; and home and business security); healthcare services, software and technology solutions (including employee and family assistance programs

and benefits administration); agriculture and consumer goods services (software, data management and data analytics-driven smart-food chain and consumer goods technologies); voice and other telecommunications services revenues; and equipment sales.

The digitally-led customer experiences – TELUS International (DLCX) segment, which has the U.S. dollar as its primary functional currency, is comprised of digital customer experience and digital-enablement transformation solutions, including artificial intelligence and content management, provided by our TELUS International (Cda) Inc. subsidiary.

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.

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, 2023	December 31, 2022
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	\$ 2,480	\$ 2,539
During the 12-month period ending two years hence	966	1,034
Thereafter	94	81
	\$ 3,540	\$ 3,654

- 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, 2023	December 31, 2022
Customer accounts receivable		\$ 2,569	\$ 2,636
Accrued receivables – customer		506	468
Allowance for doubtful accounts	4(a)	(93)	(94)
		2,982	3,010
Accrued receivables – other		256	306
Accounts receivable – current		\$ 3,238	\$ 3,316

(c) Contract assets

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Balance, beginning of period		\$ 879	\$ 831	\$ 908	\$ 877
Net additions arising from operations		368	332	718	633
Amounts billed in the period and thus reclassified to accounts receivable		(394)	(360)	(775)	(708)
Change in impairment allowance, net	4(a)	1	1	2	2
Other		3	—	4	—
Balance, end of period		\$ 857	\$ 804	\$ 857	\$ 804
To be billed and thus reclassified to accounts receivable during:					
The 12-month period ending one year hence				\$ 567	\$ 542
The 12-month period ending two years hence				236	210
Thereafter				54	52
Balance, end of period				\$ 857	\$ 804
Reconciliation of contract assets presented in the Consolidated statements of financial position – current					
Gross contract assets				\$ 567	\$ 542
Reclassification to contract liabilities of contracts with contract assets less than contract liabilities	24			(14)	(16)
Reclassification from contract liabilities of contracts with contract liabilities less than contract assets	24			(126)	(114)
				\$ 427	\$ 412

7 other income

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Government assistance		\$ 9	\$ —	\$ 10	\$ 2
Other sublet revenue	19	2	2	3	3
Investment income (loss), gain (loss) on disposal of assets and other		(4)	3	(7)	(1)
Interest income	21(a)	2	—	4	1
Changes in business combination-related provisions	25	3	23	41	49
		\$ 12	\$ 28	\$ 51	\$ 54

8 employee benefits expense

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Employee benefits expense – gross					
Wages and salaries		\$ 1,478	\$ 1,154	\$ 2,986	\$ 2,259
Share-based compensation ¹	14	44	54	98	103
Pensions – defined benefit	15(a)	16	25	31	52
Pensions – defined contribution	15(b)	35	30	63	56
Restructuring costs ¹	16(a)	95	13	143	23
Employee health and other benefits		82	63	137	120
		1,750	1,339	3,458	2,613
Capitalized internal labour costs, net					
Contract acquisition costs	20				
Capitalized		(23)	(22)	(39)	(40)
Amortized		23	20	46	39
Contract fulfilment costs	20				
Capitalized		(7)	(1)	(11)	(1)
Amortized		—	1	1	1
Property, plant and equipment		(98)	(99)	(198)	(192)
Intangible assets subject to amortization		(77)	(67)	(149)	(130)
		(182)	(168)	(350)	(323)
		\$ 1,568	\$ 1,171	\$ 3,108	\$ 2,290

1 For the three-month and six-month periods ended June 30, 2023, \$(2) (2022 – \$1) and \$NIL (2022 – \$2), respectively, of share-based compensation in the digitally-led customer experiences segment was included in restructuring costs.

9 financing costs

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Interest expense					
Interest on long-term debt, excluding lease liabilities – gross		\$ 270	\$ 179	\$ 533	\$ 348
Interest on long-term debt, excluding lease liabilities – capitalized ¹		(1)	(12)	(3)	(27)
Interest on long-term debt, excluding lease liabilities		269	167	530	321
Interest on lease liabilities	19	31	17	59	33
Interest on short-term borrowings and other		9	3	12	7
Interest accretion on provisions	25	7	5	15	8
		316	192	616	369
Employee defined benefit plans net interest	15	2	2	4	4
Foreign exchange		—	(17)	4	(16)
Virtual power purchase agreements unrealized change in forward element		7	(80)	26	(80)
		325	97	650	277
Interest income		(2)	—	(7)	(1)
		\$ 323	\$ 97	\$ 643	\$ 276
Net interest cost	3			\$ 616	\$ 379
Interest on long-term debt, excluding lease liabilities – capitalized ¹				(3)	(27)
Employee defined benefit plans net interest				4	4
Virtual power purchase agreements unrealized change in forward element				26	(80)
				\$ 643	\$ 276

1 Interest on long-term debt, excluding lease liabilities, at a composite rate of 3.10% was capitalized to intangible assets with indefinite lives during the period.

10 income taxes

Expense composition and rate reconciliation

Periods ended June 30 (millions)	Three months		Six months	
	2023	2022	2023	2022
Current income tax expense				
For the current reporting period	\$ 118	\$ 176	\$ 265	\$ 321
Adjustments recognized in the current period for income taxes of prior periods	(19)	(4)	(18)	(4)
	99	172	247	317
Deferred income tax expense				
Arising from the origination and reversal of temporary differences	(42)	(3)	(135)	(4)
Adjustments recognized in the current period for income taxes of prior periods	6	(2)	6	(2)
	(36)	(5)	(129)	(6)
	\$ 63	\$ 167	\$ 118	\$ 311

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

Three-month periods ended June 30 (\$ in millions)	2023		2022	
Income taxes computed at applicable statutory rates	\$ 62	24.2%	\$ 171	25.7%
Adjustments recognized in the current period for income taxes of prior periods	(13)	(5.3)	(6)	(0.9)
(Non-taxable) non-deductible amounts, net	2	0.8	1	0.2
Withholding and other taxes	2	0.8	7	1.0
Losses not recognized	5	1.9	1	0.2
Foreign tax differential	4	1.5	(8)	(1.3)
Other	1	0.4	1	0.1
Income tax expense per Consolidated statements of income and other comprehensive income	\$ 63	24.3%	\$ 167	25.0%

Six-month periods ended June 30 (\$ in millions)	2023		2022	
Income taxes computed at applicable statutory rates	\$ 125	23.3%	\$ 311	25.6%
Adjustments recognized in the current period for income taxes of prior periods	(12)	(2.2)	(6)	(0.5)
(Non-taxable) non-deductible amounts, net	(7)	(1.3)	(1)	(0.0)
Withholding and other taxes	9	1.7	15	1.2
Losses not recognized	8	1.5	3	0.2
Foreign tax differential	(7)	(1.3)	(11)	(0.9)
Other	2	0.3	—	—
Income tax expense per Consolidated statements of income and other comprehensive income	\$ 118	22.0%	\$ 311	25.6%

11 other comprehensive income

Periods ended June 30 (millions)	Items that may subsequently be reclassified to income							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	
	Change in unrealized fair value of derivatives designated as cash flow hedges in current period (Note 4(e))										Employee defined benefit plan re-measurements	Other comp. income
	Derivatives used to manage currency risk			Derivatives used to manage other market risks			Total					
	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total						
THREE-MONTH												
Accumulated balance as at April 1, 2022			\$ 169			\$ (2)	\$ 167	\$ (42)	\$ 88	\$ 213		
Other comprehensive income (loss) Amount arising	\$ 182	\$ (174)	8	\$ 1	\$ —	1	9	(21)	(5)	(17)	\$ 186	\$ 169
Income taxes	\$ 26	\$ (30)	(4)	\$ —	\$ —	—	(4)	—	(1)	(5)	48	43
Net			12			1	13	(21)	(4)	(12)	\$ 138	\$ 126
Accumulated balance as at June 30, 2022			\$ 181			\$ (1)	\$ 180	\$ (63)	\$ 84	\$ 201		
Accumulated balance as at April 1, 2023			\$ (38)			\$ (4)	\$ (42)	\$ 97	\$ 84	\$ 139		
Other comprehensive income (loss) Amount arising	\$ (166)	\$ 137	(29)	\$ 1	\$ —	1	(28)	(66)	(3)	(97)	\$ 5	\$ (92)
Income taxes	\$ (31)	\$ 19	(12)	\$ —	\$ —	—	(12)	—	(1)	(13)	2	(11)
Net			(17)			1	(16)	(66)	(2)	(84)	\$ 3	\$ (81)
Accumulated balance as at June 30, 2023			\$ (55)			\$ (3)	\$ (58)	\$ 31	\$ 82	\$ 55		

Periods ended June 30 (millions)	Items that may subsequently be reclassified to income							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	
	Derivatives used to manage currency risk			Derivatives used to manage other market risks			Total				Employee defined benefit plan re-measurements	Other comp. income
	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total	Gains (losses) arising	Prior period (gains) losses transferred to net income	Total						
Change in unrealized fair value of derivatives designated as cash flow hedges in current period (Note 4(e))												
SIX-MONTH												
Accumulated balance as at January 1, 2022			\$ 81			\$ (3)	\$ 78	\$ 25	\$ 83	\$ 186		
Other comprehensive income (loss)												
Amount arising	\$ 188	\$ (67)	121	\$ 1	\$ 1	2	123	(88)	1	36	\$ 400	\$ 436
Income taxes	\$ 30	\$ (9)	21	\$ —	\$ —	—	21	—	—	21	103	124
Net			100			2	102	(88)	1	15	\$ 297	\$ 312
Accumulated balance as at June 30, 2022			\$ 181			\$ (1)	\$ 180	\$ (63)	\$ 84	\$ 201		
Accumulated balance as at January 1, 2023			\$ (20)			\$ (3)	\$ (23)	\$ 66	\$ 90	\$ 133		
Other comprehensive income (loss)												
Amount arising	\$ (181)	\$ 134	(47)	\$ —	\$ —	—	(47)	(35)	(10)	(92)	\$ (1)	\$ (93)
Income taxes	\$ (32)	\$ 20	(12)	\$ —	\$ —	—	(12)	—	(2)	(14)	—	(14)
Net			(35)			—	(35)	(35)	(8)	(78)	\$ (1)	\$ (79)
Accumulated balance as at June 30, 2023			\$ (55)			\$ (3)	\$ (58)	\$ 31	\$ 82	\$ 55		
Attributable to:												
Common Shares										\$ 49		
Non-controlling interests										6		
										\$ 55		

12 per share amounts

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

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

Periods ended June 30 (millions)	Three months		Six months	
	2023	2022	2023	2022
Basic total weighted average number of Common Shares outstanding	1,447	1,381	1,443	1,378
Effect of dilutive securities – Restricted share units	5	6	4	6
Diluted total weighted average number of Common Shares outstanding	1,452	1,387	1,447	1,384

For the three-month and six-month periods ended June 30, 2023 and 2022, no outstanding equity-settled restricted share unit awards or TELUS Corporation share option awards were excluded in the calculation of diluted income per Common Share.

13 dividends per share

(a) TELUS Corporation Common Share dividends declared

Six-month periods ended
June 30 (millions except per
share amounts)

TELUS Corporation Common Share dividends	2023				2022			
	Declared		Paid to shareholders	Total	Declared		Paid to shareholders	Total
	Effective	Per share			Effective	Per share		
Quarter 1 dividend	Mar. 10, 2023	\$ 0.3511	Apr. 3, 2023	\$ 506	Mar. 11, 2022	\$ 0.3274	Apr. 1, 2022	\$ 450
Quarter 2 dividend	June 8, 2023	0.3636	July 4, 2023	526	June 10, 2022	0.3386	July 4, 2022	467
		\$ 0.7147		\$ 1,032		\$ 0.6660		\$ 917

On August 3, 2023, the Board of Directors declared a quarterly dividend of \$0.3636 per share on our issued and outstanding TELUS Corporation Common Shares payable on October 2, 2023, to holders of record at the close of business on September 8, 2023. The final amount of the dividend payment depends upon the number of TELUS Corporation Common Shares issued and outstanding at the close of business on September 8, 2023.

(b) Dividend Reinvestment and Share Purchase Plan

We have a Dividend Reinvestment and Share Purchase Plan under which eligible holders of TELUS Corporation Common Shares may acquire additional TELUS Corporation Common Shares by reinvesting dividends and by making additional optional cash payments to the trustee. Under this plan, we have the option of offering TELUS Corporation Common Shares from Treasury or having the trustee acquire TELUS Corporation Common Shares in the stock market. We may, at our discretion, offer TELUS Corporation Common Shares at a discount of up to 5% from the market price under the plan. Effective with our dividends paid October 1, 2019, we offered TELUS Corporation Common Shares from Treasury at a discount of 2%. In respect of TELUS Corporation Common Shares held by eligible shareholders who have elected to participate in the plan, dividends declared during the three-month and six-month periods ended June 30, 2023, of \$175 million (2022 – \$158 million) and \$348 million (2022 – \$307 million), respectively, were to be reinvested in TELUS Corporation Common Shares.

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)		2023			2022		
Note	Employee benefits expense ¹	Associated operating cash outflows	Statement of cash flows adjustment	Employee benefits expense	Associated operating cash outflows	Statement of cash flows adjustment	
THREE-MONTH							
Restricted share units	(b)	\$ 30	\$ —	\$ 30	\$ 44	\$ (1)	\$ 43
Employee share purchase plan	(c)	12	(12)	—	11	(11)	—
Share option awards	(d)	—	—	—	—	(1)	(1)
		\$ 42	\$ (12)	\$ 30	\$ 55	\$ (13)	\$ 42
TELUS technology solutions		\$ 39	\$ (12)	\$ 27	\$ 47	\$ (11)	\$ 36
Digitally-led customer experiences		3	—	3	8	(2)	6
		\$ 42	\$ (12)	\$ 30	\$ 55	\$ (13)	\$ 42
SIX-MONTH							
Restricted share units	(b)	\$ 74	\$ (2)	\$ 72	\$ 85	\$ (8)	\$ 77
Employee share purchase plan	(c)	23	(23)	—	22	(22)	—
Share option awards	(d)	1	—	1	(2)	(7)	(9)
		\$ 98	\$ (25)	\$ 73	\$ 105	\$ (37)	\$ 68
TELUS technology solutions		\$ 76	\$ (24)	\$ 52	\$ 87	\$ (29)	\$ 58
Digitally-led customer experiences		22	(1)	21	18	(8)	10
		\$ 98	\$ (25)	\$ 73	\$ 105	\$ (37)	\$ 68

¹ Within employee benefits expense (see Note 8), for the three-month and six-month periods ended June 30, 2023, restricted share units expense of \$32 (2022 – \$43) and \$74 (2022 – \$83), respectively, are presented as share-based compensation expense and the balance is included in restructuring costs (see Note 16) of the digitally-led customer experiences segment.

(b) Restricted share units

TELUS Corporation restricted share units

We also award restricted share units that largely have the same features as our general restricted share units, but have a variable payout (0% – 200%) that depends upon the achievement of our total customer connections performance condition (with a weighting of 25%) and the total shareholder return on TELUS Corporation Common Shares relative to an international peer group of telecommunications companies (with a weighting of 75%). The grant-date fair value of the notional subset of our restricted share units affected by the total customer connections performance condition equals the fair market value of the corresponding TELUS Corporation Common Shares at the grant date, and thus the notional subset has been included in the presentation of our restricted share units with only service conditions. Reflecting a variable payout, our estimate of the fair value of the notional subset of our restricted share units affected by the relative total shareholder return performance condition is determined using a Monte Carlo simulation. Grants of restricted share units in 2023 and 2022 are accounted for as equity-settled, as that was the expected manner of their settlement when granted.

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

	June 30, 2023	December 31, 2022
Number of non-vested restricted share units as at		
Restricted share units without market performance conditions		
Restricted share units with only service conditions	8,473,146	5,224,220
Notional subset affected by total customer connections performance condition	559,712	357,263
	9,032,858	5,581,483
Restricted share units with market performance conditions		
Notional subset affected by relative total shareholder return performance condition	1,745,262	1,071,789
	10,778,120	6,653,272

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

Periods ended June 30, 2023	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	8,535,166	—	\$ 28.31	5,581,483	—	\$ 30.62
Vested	—	35,897	\$ 26.98	—	35,819	\$ 27.00
Granted						
Initial award	480,079	—	\$ 27.15	3,519,510	—	\$ 27.38
In lieu of dividends	110,567	466	\$ 27.06	183,717	942	\$ 26.81
Vested	(26,309)	26,309	\$ 27.94	(68,923)	68,923	\$ 27.93
Settled – in cash	—	(26,310)	\$ 27.94	—	(69,322)	\$ 27.94
Forfeited	(66,645)	—	\$ 28.51	(182,929)	—	\$ 27.74
Outstanding, end of period						
Non-vested	9,032,858	—	\$ 28.23	9,032,858	—	\$ 28.23
Vested	—	36,362	\$ 26.98	—	36,362	\$ 26.98

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

TELUS International (Cda) Inc. restricted share units

We also award restricted share units that largely have the same features as the TELUS Corporation restricted share units, but have a variable payout (0% – 150%) that depends upon the achievement of TELUS International (Cda) Inc. financial performance and non-market quality-of-service performance conditions. Grants of restricted share units in 2023 and 2022 are accounted for as equity-settled, as that was the expected manner of their settlement when granted.

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

Periods ended June 30, 2023	Three months			Six months		
	Number of restricted share units		Weighted average grant-date fair value	Number of restricted share units		Weighted average grant-date fair value
	Non-vested	Vested		Non-vested	Vested	
Outstanding, beginning of period	2,427,873	—	US\$ 24.56	1,605,821	—	US\$ 27.10
Granted – initial award	9,034	270,223	US\$ 16.60	1,111,894	342,986	US\$ 20.30
Vested	(119,420)	119,420	US\$ 28.71	(396,444)	396,444	US\$ 26.67
Settled – in equity	—	(389,643)	US\$ 20.31	—	(739,430)	US\$ 22.45
Forfeited	(21,569)	—	US\$ 24.48	(25,353)	—	US\$ 24.93
Outstanding, end of period	2,295,918	—	US\$ 24.31	2,295,918	—	US\$ 24.31

(c) TELUS Corporation employee share purchase plan

We have an employee share purchase plan under which eligible employees can purchase TELUS Corporation Common Shares through regular payroll deductions. In respect of TELUS Corporation Common Shares held within the employee share purchase plan, TELUS Corporation Common Share dividends declared during the three-month and six-month periods ended June 30, 2023, of \$13 million (2022 – \$12 million) and \$26 million (2022 – \$23 million), respectively were to be reinvested in TELUS Corporation Common Shares acquired by the trustee from Treasury, with a discount applicable, as set out in Note 13(b).

(d) Share option awards

TELUS Corporation share options

Employees may be granted share option awards to purchase TELUS Corporation Common Shares at an exercise price equal to the fair market value at the time of grant. Share option awards granted under the plan may be exercised over specific periods not to exceed seven years from the date of grant.

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, 2023	Three months		Six months	
	Number of share options	Weighted average share option price ¹	Number of share options	Weighted average share option price ¹
Outstanding, beginning of period	2,627,925	\$ 22.08	2,755,300	\$ 22.05
Exercised ²	(403,775)	\$ 21.32	(492,750)	\$ 21.30
Forfeited	(24,300)	\$ 22.55	(62,700)	\$ 22.36
Outstanding, end of period	2,199,850	\$ 22.21	2,199,850	\$ 22.21
Exercisable, end of period			1,850,250	\$ 22.21

1 The weighted average remaining contractual life is 3.9 years.

2 For the three-month and six-month periods ended June 30, 2023, the weighted average prices at the dates of exercise were \$27.28 and \$27.26, respectively.

TELUS International (Cda) Inc. share options

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

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

Periods ended June 30, 2023	Three months		Six months	
	Number of share options	Weighted average share option price ¹	Number of share options	Weighted average share option price ¹
Outstanding, beginning of period	2,661,120	US\$ 11.35	2,677,297	US\$ 11.31
Forfeited	—	US\$ —	(16,177)	US\$ 5.77
Outstanding, end of period	2,661,120	US\$ 11.35	2,661,120	US\$ 11.35
Exercisable, end of period			2,316,682	US\$ 9.50

1 For 2,220,919 share options, the range of share option prices is US\$4.87 – US\$8.95 per TELUS International (Cda) Inc. subordinated voting share and the weighted average remaining contractual life is 3.7 years; for the balance of share options, the price is US\$25.00 and the weighted average remaining contractual life is 7.7 years.

15 employee future benefits

(a) Defined benefit pension plans – summary

Amounts in the primary financial statements relating to defined benefit pension plans

Three-month periods ended June 30		2023			2022		
(millions)	Note	Plan assets	Defined benefit obligations accrued ¹	Net	Plan assets	Defined benefit obligations accrued ¹	Net
Employee benefits expense	8						
Benefits earned for current service		\$ —	\$ (20)		\$ —	\$ (28)	
Benefits earned for past service		—	—		—	—	
Employees' contributions		5	—		5	—	
Administrative fees		(1)	—		(2)	—	
		4	(20)	\$ (16)	3	(28)	\$ (25)
Financing costs	9						
Notional income on plan assets ² and interest on defined benefit obligations accrued		109	(100)		74	(74)	
Interest effect on asset ceiling limit		(11)	—		(2)	—	
		98	(100)	(2)	72	(74)	(2)
DEFINED BENEFIT (COST) INCLUDED IN NET INCOME³				(18)			(27)
Other comprehensive income	11						
Difference between actual results and estimated plan assumptions ⁴		8	—		(875)	—	
Changes in plan financial assumptions		—	(9)		—	1,536	
Changes in the effect of limiting net defined benefit assets to the asset ceilings ⁵		6	—		(475)	—	
		14	(9)	5	(1,350)	1,536	186
DEFINED BENEFIT (COST) INCLUDED IN COMPREHENSIVE INCOME³				\$ (13)			\$ 159

Six-month periods ended June 30		2023			2022		
(millions)	Note	Plan assets	Defined benefit obligations accrued ¹	Net	Plan assets	Defined benefit obligations accrued ¹	Net
Employee benefits expense							
	8						
Benefits earned for current service		\$ —	\$ (38)		\$ —	\$ (55)	
Benefits earned for past service		—	—		—	(3)	
Employees' contributions		9	—		9	—	
Administrative fees		(2)	—		(3)	—	
		7	(38)	\$ (31)	6	(58)	\$ (52)
Financing costs							
	9						
Notional income on plan assets ² and interest on defined benefit obligations accrued		219	(200)		148	(149)	
Interest effect on asset ceiling limit		(23)	—		(3)	—	
		196	(200)	(4)	145	(149)	(4)
DEFINED BENEFIT (COST) INCLUDED IN NET INCOME³				(35)			(56)
Other comprehensive income							
	11						
Difference between actual results and estimated plan assumptions ⁴		234	—		(1,418)	—	
Changes in plan financial assumptions		—	(200)		—	3,027	
Changes in the effect of limiting net defined benefit assets to the asset ceilings		(35)	—		(1,209)	—	
		199	(200)	(1)	(2,627)	3,027	400
DEFINED BENEFIT (COST) INCLUDED IN COMPREHENSIVE INCOME³				(36)			344
AMOUNTS INCLUDED IN OPERATING ACTIVITIES CASH FLOWS							
Employer contributions		16	—	16	25	—	25
BENEFITS PAID BY PLANS		(234)	234	—	(234)	234	—
PLAN ACCOUNT BALANCES⁵							
Change in period		184	(204)	(20)	(2,685)	3,054	369
Balance, beginning of period		7,990	(8,075)	(85)	10,043	(10,233)	(190)
Balance, end of period		\$ 8,174	\$ (8,279)	\$ (105)	\$ 7,358	\$ (7,179)	\$ 179
FUNDED STATUS – PLAN SURPLUS (DEFICIT)							
Pension plans that have plan assets in excess of defined benefit obligations accrued							
	20	\$ 7,349	\$ (7,042)	\$ 307	\$ 7,354	\$ (6,832)	\$ 522
Pension plans that have defined benefit obligations accrued in excess of plan assets							
Funded		825	(1,029)	(204)	4	(162)	(158)
Unfunded		—	(208)	(208)	—	(185)	(185)
	27	825	(1,237)	(412)	4	(347)	(343)
		\$ 8,174	\$ (8,279)	\$ (105)	\$ 7,358	\$ (7,179)	\$ 179

- 1 Defined benefit obligations accrued are the actuarial present values of benefits attributed to employee services rendered to a particular date.
- 2 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 at the end of the immediately preceding fiscal year.
- 3 Excluding income taxes.
- 4 Financial assumptions in respect of plan assets (interest income on plan assets 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) and demographic assumptions in respect of the actuarial present values of the defined benefit obligations accrued, as at the end of the immediately preceding fiscal year for both.
- 5 Effect of asset ceiling limit at June 30, 2023, was \$976 (December 31, 2022 – \$918).

(b) Defined contribution plans – expense

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

Periods ended June 30 (millions)	Three months		Six months	
	2023	2022	2023	2022
Union pension plan and public service pension plan contributions	\$ 4	\$ 5	\$ 8	\$ 9
Other defined contribution pension plans	31	25	55	47
	\$ 35	\$ 30	\$ 63	\$ 56

16 restructuring and other costs

(a) Details of restructuring and other costs

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

Periods ended June 30 (millions)	Restructuring ¹ (b)		Other (c)		Total	
	2023	2022	2023	2022	2023	2022
THREE-MONTH						
Goods and services purchased	\$ 9	\$ 11	\$ 4	\$ 5	\$ 13	\$ 16
Employee benefits expense	95	13	7	—	102	13
	\$ 104	\$ 24	\$ 11	\$ 5	\$ 115	\$ 29
SIX-MONTH						
Goods and services purchased	\$ 51	\$ 37	\$ 6	\$ 8	\$ 57	\$ 45
Employee benefits expense	143	23	74	—	217	23
	\$ 194	\$ 60	\$ 80	\$ 8	\$ 274	\$ 68

1 For the three-month and six-month periods ended June 30, 2023, excludes real estate rationalization-related restructuring impairments of property, plant and equipment of \$NIL (2022 – \$NIL) and \$52 (2022 – \$1), respectively, which are included in depreciation.

(b) Restructuring provisions

Employee-related provisions and other provisions, as presented in Note 25, include amounts in respect of restructuring activities. In 2023, restructuring activities included ongoing and incremental efficiency initiatives, some of which involved personnel-related costs and rationalization of real estate. These initiatives were intended to improve our long-term operating productivity and competitiveness.

(c) Other

During the three-month and six-month periods ended June 30, 2023, incremental external costs were incurred in connection with business acquisition and collective bargaining activities. 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. Employee benefits expense is in respect of lump sum payments to substantially all of our existing unionized members of Telecommunications Workers Union, United Steelworkers Local 1944 (TWU), for the ratification of the new collective agreement between the TWU and ourselves, as discussed in Note 29(b).

17 property, plant and equipment

(millions)	Note	Owned assets						Right-of-use lease assets (Note 19)				Total
		Network assets	Buildings and leasehold improvements	Computer hardware and other	Land	Assets under construction	Total	Network assets	Real estate	Other	Total	
AT COST												
As at January 1, 2023		\$ 36,036	\$ 3,746	\$ 1,772	\$ 83	\$ 815	\$ 42,452	\$ 835	\$ 2,095	\$ 122	\$ 3,052	\$ 45,504
Additions		477	15	27	—	527	1,046	138	179	8	325	1,371
Additions arising from business acquisitions	18(b)	36	13	3	—	—	52	—	28	—	28	80
Assets under construction put into service		324	71	51	—	(446)	—	—	—	—	—	—
Dispositions, retirements and other		(317)	(56)	(16)	—	—	(389)	—	(14)	(6)	(20)	(409)
Net foreign exchange differences		(2)	(4)	(9)	—	(1)	(16)	—	(15)	—	(15)	(31)
As at June 30, 2023		\$ 36,554	\$ 3,785	\$ 1,828	\$ 83	\$ 895	\$ 43,145	\$ 973	\$ 2,273	\$ 124	\$ 3,370	\$ 46,515
ACCUMULATED DEPRECIATION												
As at January 1, 2023		\$ 24,112	\$ 2,322	\$ 1,094	\$ —	\$ —	\$ 27,528	\$ 50	\$ 795	\$ 47	\$ 892	\$ 28,420
Depreciation ¹		805	109	107	—	—	1,021	53	154	10	217	1,238
Dispositions, retirements and other		(324)	(46)	(44)	—	—	(414)	—	(9)	(4)	(13)	(427)
Net foreign exchange differences		(1)	(1)	(3)	—	—	(5)	—	(8)	—	(8)	(13)
As at June 30, 2023		\$ 24,592	\$ 2,384	\$ 1,154	\$ —	\$ —	\$ 28,130	\$ 103	\$ 932	\$ 53	\$ 1,088	\$ 29,218
NET BOOK VALUE												
As at December 31, 2022		\$ 11,924	\$ 1,424	\$ 678	\$ 83	\$ 815	\$ 14,924	\$ 785	\$ 1,300	\$ 75	\$ 2,160	\$ 17,084
As at June 30, 2023		\$ 11,962	\$ 1,401	\$ 674	\$ 83	\$ 895	\$ 15,015	\$ 870	\$ 1,341	\$ 71	\$ 2,282	\$ 17,297

1 For the six-month period ended June 30, 2023, depreciation includes \$28 in respect of impairment of real estate right-of-use lease assets.

As at June 30, 2023, our contractual commitments for the acquisition of property, plant and equipment totalled \$385 million over a period ending December 31, 2027 (December 31, 2022 – \$275 million over a period ending December 31, 2027).

18 intangible assets and goodwill

(a) Intangible assets and goodwill, net

(millions)	Note	Intangible assets subject to amortization				Total	Intangible assets with indefinite lives Spectrum licences	Total intangible assets	Goodwill 1,2	Total intangible assets and goodwill
		Customer contracts, related customer relationships and subscriber base 1	Software 1	Access to rights-of-way, crowdsource assets and other	Assets under construction					
AT COST										
As at January 1, 2023		\$ 4,489	\$ 7,522	\$ 498	\$ 535	\$ 13,044	\$ 12,215	\$ 25,259	\$ 9,489	\$ 34,748
Additions		—	109	2	363	474	6	480	—	480
Additions arising from business acquisitions	(b)	836	—	128	—	964	—	964	933	1,897
Assets under construction put into service		—	437	17	(454)	—	—	—	—	—
Dispositions, retirements and other (including capitalized interest)	9	20	(322)	(52)	—	(354)	3	(351)	—	(351)
Net foreign exchange differences		(45)	(1)	(4)	—	(50)	—	(50)	(43)	(93)
As at June 30, 2023		\$ 5,300	\$ 7,745	\$ 589	\$ 444	\$ 14,078	\$ 12,224	\$ 26,302	\$ 10,379	\$ 36,681
ACCUMULATED AMORTIZATION										
As at January 1, 2023		\$ 1,082	\$ 4,713	\$ 225	\$ —	\$ 6,020	\$ —	\$ 6,020	\$ 364	\$ 6,384
Amortization		234	508	48	—	790	—	790	—	790
Dispositions, retirements and other		(12)	(329)	(32)	—	(373)	—	(373)	—	(373)
Net foreign exchange differences		(5)	(1)	—	—	(6)	—	(6)	—	(6)
As at June 30, 2023		\$ 1,299	\$ 4,891	\$ 241	\$ —	\$ 6,431	\$ —	\$ 6,431	\$ 364	\$ 6,795
NET BOOK VALUE										
As at December 31, 2022		\$ 3,407	\$ 2,809	\$ 273	\$ 535	\$ 7,024	\$ 12,215	\$ 19,239	\$ 9,125	\$ 28,364
As at June 30, 2023		\$ 4,001	\$ 2,854	\$ 348	\$ 444	\$ 7,647	\$ 12,224	\$ 19,871	\$ 10,015	\$ 29,886

- 1 The amounts for customer relationships, software and goodwill arising from business acquisitions for the year ended December 31, 2022, 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, 2023, our contractual commitments for the acquisition of intangible assets totalled \$22 million over a period ending December 31, 2025 (December 31, 2022 – \$14 million over a period ending December 31, 2023).

(b) Business acquisitions

WillowTree

On October 27, 2022, we announced a definitive agreement to acquire WillowTree, a full-service digital product provider focused on end-user experiences, such as native mobile applications and unified web interfaces. On

January 3, 2023, subsequent to the satisfaction of the closing conditions, WillowTree was acquired through our TELUS International (Cda) Inc. subsidiary and is consolidated in our digitally-led customer experiences – TELUS International segment.

The acquisition brings key talent and diversity to our segment's portfolio of next-generation solutions, and further augments its digital consulting and client-centric software development capabilities. The primary factor that gave rise 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 low level of tangible assets relative to the earnings capacity of the business). A portion of the amounts assigned to goodwill may be deductible for income tax purposes.

In respect of the acquired business, we concurrently provided written put options to the remaining selling shareholders for their approximate 14% economic interest, which will be settled subject to certain performance-based criteria and will become exercisable in tranches over a three-year period starting in 2026. The acquisition-date fair value of the puttable shares held by the non-controlling shareholders was recorded as a provision in the three-month period ended March 31, 2023. The provision may be settled in cash or, at our option, in a combination of cash and up to 70% in TELUS International (Cda) Inc. subordinate voting shares. Concurrent with this acquisition, the non-controlling shareholders provided us with purchased call options, which substantially mirror the written put options.

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 WillowTree. Upon having sufficient time to review the books and records of WillowTree, as well as obtaining new and additional information about the related facts and circumstances as of the acquisition date, we will adjust provisional amounts for identifiable assets acquired and liabilities assumed and thus finalize our purchase price allocation.

Individually immaterial transactions

During the six-month period ended June 30, 2023, we acquired 100% ownership of businesses that were 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 capacity of the businesses). A portion of the amount assigned to goodwill may be deductible for income tax purposes.

Acquisition-date fair values

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

(millions)	WillowTree ¹	Individually immaterial transactions ¹	Total
Assets			
Current assets			
Cash	\$ 7	\$ 6	\$ 13
Accounts receivable ²	84	2	86
Other	3	2	5
	94	10	104
Non-current assets			
Property, plant and equipment			
Owned assets	20	32	52
Right-of-use lease assets	27	1	28
Intangible assets subject to amortization ³	947	17	964
	994	50	1,044
Total identifiable assets acquired	1,088	60	1,148
Liabilities			
Current liabilities			
Accounts payable and accrued liabilities	50	7	57
Income and other taxes payable	16	—	16
Advance billings and customer deposits	5	2	7
Current maturities of long-term debt	126	1	127
	197	10	207
Non-current liabilities			
Long-term debt	22	28	50
Deferred income taxes	94	—	94
	116	28	144
Total liabilities assumed	313	38	351
Net identifiable assets acquired	775	22	797
Goodwill	831	102	933
Net assets acquired	\$ 1,606	\$ 124	\$ 1,730
Acquisition effected by way of:			
Cash consideration	\$ 1,169	\$ 106	\$ 1,275
Accounts payable and accrued liabilities	—	18	18
Provisions	266	—	266
Issue of shares by a subsidiary to a non-controlling interest ⁴	171	—	171
	\$ 1,606	\$ 124	\$ 1,730

- 1 The purchase price allocation, primarily in respect of customer contracts, related customer relationships 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 estimate at the acquisition date 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 a period of 15 years; and other intangible assets are expected to be amortized over a period of 4-10 years.
- 4 The fair value of the TELUS International (Cda) Inc. subordinate voting shares was measured based upon market prices observed at the date of acquisition of control.

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 2023 year.

Periods ended June 30, 2023 (millions except per share amounts)	Three months		Six months	
	As reported ¹	Pro forma ²	As reported ¹	Pro forma ²
Operating revenues and other income	\$ 4,946	\$ 4,946	\$ 9,910	\$ 9,916
Net income	\$ 196	\$ 196	\$ 420	\$ 420
Net income per Common Share				
Basic	\$ 0.14	\$ 0.14	\$ 0.29	\$ 0.29
Diluted	\$ 0.14	\$ 0.14	\$ 0.29	\$ 0.29

- 1 Operating revenues and other income and net income (loss) for the three-month period ended June 30, 2023, include: \$61 and \$(41), respectively, in respect of WillowTree. Operating revenues and other income and net income (loss) for the six-month period ended June 30, 2023, include: \$138 and \$(69), respectively, in respect of WillowTree.
- 2 Pro forma amounts for the three-month and six-month periods ended June 30, 2023, 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 acquisitions – prior period

In 2022, we acquired businesses that were complementary to our existing lines of business. As at December 31, 2022, purchase price allocations had not been finalized. During the six-month period ended June 30, 2023, the preliminary acquisition-date fair values for accounts receivable, income and other taxes receivable, customer relationships, software, goodwill and deferred income tax liabilities were increased by \$19 million, decreased by \$19 million, decreased by \$118 million, increased by \$179 million, decreased by \$44 million and increased by \$17 million, respectively; as required by IFRS-IASB, comparative amounts have been adjusted so as to reflect those increases (decreases) effective the dates of acquisition.

19 leases

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

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Income from subleasing right-of-use lease assets					
Co-location sublet revenue included in operating service revenues		\$ 5	\$ 5	\$ 9	\$ 9
Other sublet revenue included in other income	7	\$ 2	\$ 2	\$ 3	\$ 3
Lease payments		\$ 159	\$ 143	\$ 319	\$ 282

20 other long-term assets

As at (millions)	Note	June 30, 2023	December 31, 2022
Pension assets	15	\$ 307	\$ 307
Unbilled customer finance receivables	4(a)	593	571
Derivative assets	4(d)	154	250
Deferred income taxes		33	19
Costs incurred to obtain or fulfill contracts with customers		173	154
Real estate joint venture advances	21(a)	114	114
Investment in real estate joint venture	21(a)	1	1
Investment in associates	21(b)	219	120
Portfolio investments ¹			
At fair value through net income		26	21
At fair value through other comprehensive income		465	467
Prepaid maintenance		53	61
Refundable security deposits and other		138	118
		\$ 2,276	\$ 2,203

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, 2023 (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	\$ 400	\$ 20	\$ 420	\$ 404	\$ 15	\$ 419
Additions	87	8	95	156	14	170
Amortization	(75)	(1)	(76)	(148)	(2)	(150)
Balance, end of period	\$ 412	\$ 27	\$ 439	\$ 412	\$ 27	\$ 439
Current ¹				\$ 258	\$ 8	\$ 266
Non-current				154	19	173
				\$ 412	\$ 27	\$ 439

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

21 real estate joint ventures and investments in associates

(a) Real estate joint ventures

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

Summarized financial information

As at (millions)	June 30, 2023	December 31, 2022	As at (millions)	June 30, 2023	December 31, 2022
ASSETS			LIABILITIES AND OWNERS' EQUITY		
Current assets			Current liabilities		
Cash and temporary investments, net	\$ 9	\$ 8	Accounts payable and accrued liabilities	\$ 10	\$ 18
Other	30	27	Construction credit facilities	342	342
	39	35		352	360
Non-current assets			Owners' equity		
Investment property	327	330	TELUS ¹	8	5
Other	10	10	Other partners	16	10
	337	340		24	15
	\$ 376	\$ 375		\$ 376	\$ 375

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		Six months	
	2023	2022	2023	2022
Revenue	\$ 7	\$ 6	\$ 13	\$ 10
Depreciation and amortization	\$ 2	\$ 2	\$ 4	\$ 4
Interest expense	\$ 2	\$ 1	\$ 5	\$ 4
Net income (loss) and comprehensive income (loss) ¹	\$ (5)	\$ (2)	\$ (11)	\$ (6)

1 As the real estate joint ventures are partnerships, no provision for income taxes of the partners is made in determining the real estate joint ventures' net income and comprehensive income.

Our real estate joint ventures activity

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

Three-month periods ended June 30 (millions)	2023			2022		
	Loans and receivables ¹	Equity ²	Total	Loans and receivables ¹	Equity ²	Total
Related to real estate joint ventures' statements of income and other comprehensive income						
Comprehensive income (loss) attributable to us ³	\$ —	\$ (1)	\$ (1)	\$ —	\$ (1)	\$ (1)
Related to real estate joint ventures' statements of financial position						
<i>Items not affecting currently reported cash flows</i>						
Construction credit facilities financing costs charged by us (Note 7)	2	—	2	—	—	—
<i>Cash flows in the current reporting period</i>						
Construction credit facilities						
Financing costs paid to us	(2)	—	(2)	—	—	—
Funds we advanced or contributed, excluding construction credit facilities	—	1	1	—	2	2
Funds repaid to us and earnings distributed	—	—	—	—	(1)	(1)
Net increase (decrease)	—	—	—	—	—	—
Real estate joint ventures carrying amounts						
Balance, beginning of period	114	(8)	106	114	(8)	106
Balance, end of period	\$ 114	\$ (8)	\$ 106	\$ 114	\$ (8)	\$ 106

Six-month periods ended June 30 (millions)	2023			2022		
	Loans and receivables ¹	Equity ²	Total	Loans and receivables ¹	Equity ²	Total
Related to real estate joint ventures' statements of income and other comprehensive income						
Comprehensive income (loss) attributable to us ³	\$ —	\$ (2)	\$ (2)	\$ —	\$ (1)	\$ (1)
Related to real estate joint ventures' statements of financial position						
<i>Items not affecting currently reported cash flows</i>						
Construction credit facilities financing costs charged by us (Note 7)	4	—	4	1	—	1
<i>Cash flows in the current reporting period</i>						
Construction credit facilities						
Financing costs paid to us	(4)	—	(4)	(1)	—	(1)
Funds we advanced or contributed, excluding construction credit facilities	—	2	2	—	2	2
Funds repaid to us and earnings distributed	—	—	—	—	(1)	(1)
Net increase (decrease)	—	—	—	—	—	—
Real estate joint ventures carrying amounts						
Balance, beginning of period	114	(8)	106	114	(8)	106
Balance, end of period	\$ 114	\$ (8)	\$ 106	\$ 114	\$ (8)	\$ 106

1 Loans and receivables are included in our Consolidated statements of financial position as Real estate joint venture advances and are comprised of advances under construction credit facilities.

2 We account for our interests in the real estate joint ventures using the equity method of accounting. As at June 30, 2023, and December 31, 2022, we had recorded equity losses in excess of our recorded equity investment in respect of one of the real estate joint ventures; such resulting balance has been included in other long-term liabilities (Note 27).

3 As the real estate joint ventures are partnerships, no provision for income taxes of the partners is made in determining the real estate joint ventures' net income and comprehensive income.

We have entered into lease agreements with the TELUS Sky real estate joint venture. During the three-month and six-month periods ended June 30, 2023, the TELUS Sky real estate joint venture recognized \$2 million (2022 – \$2 million) and \$4 million (2022 – \$4 million), respectively, of revenue from our office tenancy; of this amount, one-third was due to our economic interest and two-thirds was due to our partners' economic interests.

Construction credit facilities

Subsequent to June 30, 2023, the TELUS Sky real estate joint venture extended its credit agreement with Canadian financial institutions (as 66-2/3% lender) and TELUS Corporation (as 33-1/3% lender), providing \$282 million (December 31, 2022 – \$342 million) of construction financing for the project and maturing July 12, 2024 (December 31, 2022 – July 15, 2023). 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.

(b) Investments in associates

We had, as at June 30, 2023, a 43% (December 31, 2022 – 32%) equity interest in Miovision Technologies Incorporated, an associate that is incorporated in Canada and is complementary to, and is viewed to grow, our existing Internet of Things business; our judgment is that we obtained significant influence over the associate concurrent with acquiring our initial equity interest. Miovision Technologies Incorporated develops a suite of hardware and cloud-based solutions that provide cities with the data and tools they need to reduce traffic congestion, make better urban planning decisions and improve safety on their roads. Our aggregate interests in Miovision Technologies Incorporated and in individually immaterial associates as at June 30, 2023, totalled \$181 million (December 31, 2022 – \$75 million) and totalled \$38 million (December 31, 2022 – \$45 million), respectively.

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 currently able to sell an interest in certain trade receivables up to a maximum of \$600 million (unchanged from December 31, 2022). The term of this revolving-period securitization agreement ends December 31, 2024 (unchanged from December 31, 2022), 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 (unchanged from December 31, 2022) from DBRS Limited or the securitization trust may require that the sale program 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, 2023, we had sold to the trust (but continued to recognize) trade receivables of \$708 million (December 31, 2022 – \$118 million). Short-term borrowings of \$590 million (December 31, 2022 – \$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 bilateral bank facilities and/or other.

23 accounts payable and accrued liabilities

As at (millions)	June 30, 2023	December 31, 2022
Accrued liabilities	\$ 1,371	\$ 1,593
Payroll and other employee-related liabilities	604	656
Restricted share units liability	1	1
	1,976	2,250
Trade accounts payable ¹	936	1,382
Interest payable	214	206
Indirect taxes payable and other	123	109
	\$ 3,249	\$ 3,947

1 The composition of trade accounts payable varies due to factors including suppliers' invoice timing, data processing cycle timing, the seasonal nature of some of business activities and whether the statement of financial position date is a business day. Trade accounts payable represent future payments for invoices received in respect of both operating and capital activities, and may include amounts for assessed and self-assessed government remittances.

Initiated in 2023, we have a supply chain financing program which allows suppliers of qualifying trade accounts payable to choose to be paid in advance of industry-standard payment terms by an arm's-length third party; in turn, we reimburse the arm's-length third party, for the amounts they funded, when the trade accounts payable were otherwise due.

24 advance billings and customer deposits

As at (millions)	June 30, 2023	December 31, 2022
Advance billings	\$ 714	\$ 662
Deferred customer activation and connection fees	4	5
Customer deposits	21	12
Contract liabilities	739	679
Other	203	212
	\$ 942	\$ 891

Contract liabilities represent our future performance obligations to customers in respect of services and/or equipment for which we have received consideration from the customer or for which an amount is due from the customer. Our contract liability balances, and the changes in those balances, are set out in the following table:

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
Balance, beginning of period		\$ 965	\$ 883	\$ 914	\$ 870
Revenue deferred in previous period and recognized in current period		(661)	(644)	(625)	(630)
Net additions arising from operations		670	638	678	631
Additions arising from business acquisitions		—	6	7	12
Balance, end of period		\$ 974	\$ 883	\$ 974	\$ 883
Current				\$ 879	\$ 791
Non-current	27				
Deferred revenues				89	85
Deferred customer activation and connection fees				6	7
				\$ 974	\$ 883
Reconciliation of contract liabilities presented in the Consolidated statements of financial position – current					
Gross contract liabilities				\$ 879	\$ 791
Reclassification to contract assets of contracts with contract liabilities less than contract assets	6(c)			(126)	(114)
Reclassification from contract assets of contracts with contract assets less than contract liabilities	6(c)			(14)	(16)
				\$ 739	\$ 661

25 provisions

(millions)	Asset retirement obligation	Employee-related	Written put options and contingent consideration	Other	Total
As at April 1, 2023	\$ 317	\$ 142	\$ 281	\$ 173	\$ 913
Additions	—	87	2	22	111
Reversals	—	—	(3)	—	(3)
Uses	(2)	(84)	—	(29)	(115)
Interest effects	3	—	4	—	7
Effects of foreign exchange, net	—	—	(9)	—	(9)
As at June 30, 2023	\$ 318	\$ 145	\$ 275	\$ 166	\$ 904
As at January 1, 2023	\$ 316	\$ 84	\$ 157	\$ 147	\$ 704
Additions	—	202	268	85	555
Reversals	—	—	(41)	—	(41)
Uses ¹	(5)	(141)	(108)	(66)	(320)
Interest effects	7	—	8	—	15
Effects of foreign exchange, net	—	—	(9)	—	(9)
As at June 30, 2023	\$ 318	\$ 145	\$ 275	\$ 166	\$ 904
Current	\$ 10	\$ 134	\$ 2	\$ 94	\$ 240
Non-current	308	11	273	72	664
As at June 30, 2023	\$ 318	\$ 145	\$ 275	\$ 166	\$ 904

1 Written put options and contingent consideration uses include \$54 satisfied by way of Common Shares issued.

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 associated 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 associated cash outflows in respect of the balance accrued as at the financial statement date is substantially short-term in nature.

Written put options and contingent consideration

In connection with certain business acquisitions, we have established provisions for written put options in respect of non-controlling interests. Provisions for some written put options are determined based on the net present value of estimated future earnings, and such provisions require us to make key economic assumptions about the future. Similarly, we have established provisions for contingent consideration. No cash outflows in respect of the written put options are expected prior to their initial exercisability, and no cash outflows in respect of contingent consideration are expected prior to completion of the periods during which the contingent consideration can be earned.

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 associated 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, 2023	December 31, 2022
Senior unsecured			
TELUS Corporation senior notes	(b)	\$ 18,564	\$ 18,660
TELUS Corporation commercial paper	(c)	1,944	1,458
TELUS Corporation credit facilities	(d)	1,144	1,145
TELUS Communications Inc. debentures		199	199
Secured			
TELUS International (Cda) Inc. credit facility	(e)	2,023	914
Other	(f)	298	321
		24,172	22,697
Lease liabilities	(g)	2,416	2,340
Long-term debt		\$ 26,588	\$ 25,037
Current		\$ 3,716	\$ 2,541
Non-current		22,872	22,496
Long-term debt		\$ 26,588	\$ 25,037

(b) TELUS Corporation senior notes

The notes are senior unsecured and unsubordinated obligations and rank equally in right of payment with all of our existing and future unsecured unsubordinated obligations, are senior in right of payment to all of our existing and future subordinated indebtedness, and are effectively subordinated to all existing and future obligations of, or guaranteed by, our subsidiaries. The indentures governing the notes contain covenants that, among other things, place limitations on our ability, and the ability of certain of our subsidiaries, to: grant security in respect of indebtedness; enter into sale-leaseback transactions; and incur new indebtedness.

Interest is payable semi-annually. The notes require us to make an offer to repurchase them at a price equal to 101% of their principal amount plus accrued and unpaid interest to the date of repurchase upon the occurrence of a change in control triggering event, as defined in the supplemental trust indenture.

At any time prior to the respective maturity dates set out in the table below, the notes are redeemable at our option, in whole at any time, or in part from time to time, on not fewer than 30 days' and not more than 60 days' prior notice. On or after the respective redemption present value spread cessation dates set out in the table below, the notes are redeemable at our option, in whole but not in part, on not fewer than 30 days' and not more than 60 days' prior notice, at redemption prices equal to 100% of the principal amounts thereof. In addition, accrued and unpaid interest, if any, will be paid to the date fixed for redemption.

Series	Issued	Maturity	Issue price	Effective interest rate ¹	Principal face amount		Redemption present value spread	
					Originally issued	Outstanding at financial statement date	Basis points ²	Cessation date
3.35% Notes, Series CJ	December 2012	March 2023	\$998.83	3.36%	\$500 million	\$NIL	40	Dec. 15, 2022
3.35% Notes, Series CK	April 2013	April 2024	\$994.35	3.41%	\$1.1 billion	\$1.1 billion	36	Jan. 2, 2024
3.75% Notes, Series CQ	September 2014	January 2025	\$997.75	3.78%	\$800 million	\$800 million	38.5	Oct. 17, 2024
3.75% Notes, Series CV	December 2015	March 2026	\$992.14	3.84%	\$600 million	\$600 million	53.5	Dec. 10, 2025
2.75% Notes, Series CZ	July 2019	July 2026	\$998.73	2.77%	\$800 million	\$800 million	33	May 8, 2026
2.80% U.S. Dollar Notes ³	September 2016	February 2027	US\$991.89	2.89%	US\$600 million	US\$600 million	20	Nov. 16, 2026
3.70% U.S. Dollar Notes ³	March 2017	September 2027	US\$998.95	3.71%	US\$500 million	US\$500 million	20	June 15, 2027
2.35% Notes, Series CAC	May 2020	January 2028	\$997.25	2.39%	\$600 million	\$600 million	48	Nov. 27, 2027
3.625% Notes, Series CX	March 2018	March 2028	\$989.49	3.75%	\$600 million	\$600 million	37	Dec. 1, 2027
3.30% Notes, Series CY	April 2019	May 2029	\$991.75	3.40%	\$1.0 billion	\$1.0 billion	43.5	Feb. 2, 2029
5.00% Notes, Series CAI	September 2022	September 2029	\$995.69	5.07%	\$350 million	\$350 million	46.5	July 13, 2029
3.15% Notes, Series CAA	December 2019	February 2030	\$996.49	3.19%	\$600 million	\$600 million	39.5	Nov. 19, 2029
2.05% Notes, Series CAD	October 2020	October 2030	\$997.93	2.07%	\$500 million	\$500 million	38	July 7, 2030
2.85% Sustainability-Linked Notes, Series CAF	June 2021	November 2031	\$997.52	2.88% ⁴	\$750 million	\$750 million	34	Aug. 13, 2031
3.40% U.S. Dollar Sustainability-Linked Notes ³	February 2022	May 2032	US\$997.13	3.43% ⁴	US\$900 million	US\$900 million	25	Feb. 13, 2032
5.25% Sustainability-Linked Notes, Series CAG	September 2022	November 2032	\$996.73	5.29% ⁴	\$1.1 billion	\$1.1 billion	51.5	Aug. 15, 2032

Series	Issued	Maturity	Issue price	Effective interest rate ¹	Principal face amount		Redemption present value spread	
					Originally issued	Outstanding at financial statement date	Basis points ²	Cessation date
4.95% Sustainability-Linked Notes, Series CAJ	March 2023	March 2033	\$998.28	4.97%	\$500 million	\$500 million	54.5	Dec. 28, 2032
4.40% Notes, Series CL	April 2013	April 2043	\$997.68	4.41%	\$600 million	\$600 million	47	Oct. 1, 2042
5.15% Notes, Series CN	November 2013	November 2043	\$995.00	5.18%	\$400 million	\$400 million	50	May 26, 2043
4.85% Notes, Series CP	Multiple ⁵	April 2044	\$987.91 ⁵	4.93% ⁵	\$500 million ⁵	\$900 million ⁵	46	Oct. 5, 2043
4.75% Notes, Series CR	September 2014	January 2045	\$992.91	4.80%	\$400 million	\$400 million	51.5	July 17, 2044
4.40% Notes, Series CU	March 2015	January 2046	\$999.72	4.40%	\$500 million	\$500 million	60.5	July 29, 2045
4.70% Notes, Series CW	Multiple ⁶	March 2048	\$998.06 ⁶	4.71% ⁶	\$325 million ⁶	\$475 million ⁶	58.5	Sept. 6, 2047
4.60% U.S. Dollar Notes ³	June 2018	November 2048	US\$987.60	4.68%	US\$750 million	US\$750 million	25	May 16, 2048
4.30% U.S. Dollar Notes ³	May 2019	June 2049	US\$990.48	4.36%	US\$500 million	US\$500 million	25	Dec. 15, 2048
3.95% Notes, Series CAB	Multiple ⁷	February 2050	\$997.54 ⁷	3.97% ⁷	\$400 million ⁷	\$800 million ⁷	57.5	Aug. 16, 2049
4.10% Notes, Series CAE	April 2021	April 2051	\$994.70	4.13%	\$500 million	\$500 million	53	Oct. 5, 2050
5.65% Notes, Series CAH	September 2022	September 2052	\$996.13	5.68%	\$550 million	\$550 million	61.5	Mar. 13, 2052

- The effective interest rate is that which the notes would yield to an initial debt holder if held to maturity.
- For Canadian dollar-denominated notes, 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 the redemption present value spread cessation date, or (ii) 100% of the principal amount thereof.
For U.S. dollar-denominated notes, the redemption price is equal to the greater of (i) the present value of the notes discounted at the U.S. Adjusted Treasury Rate (at the U.S. Treasury Rate for the 3.40% U.S. Dollar Sustainability-Linked Notes) 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.
- We have entered into foreign exchange derivatives (cross currency interest rate exchange agreements) that effectively converted the principal payments and interest obligations to Canadian dollar obligations as follows:

Series	Interest rate fixed at	Canadian dollar equivalent principal	Exchange rate
2.80% U.S. Dollar Notes	2.95%	\$792 million	\$1.3205
3.70% U.S. Dollar Notes	3.41%	\$667 million	\$1.3348
3.40% U.S. Dollar Sustainability-Linked Notes	3.89%	\$1,148 million	\$1.2753
4.60% U.S. Dollar Notes	4.41%	\$974 million	\$1.2985
4.30% U.S. Dollar Notes	4.27%	\$672 million	\$1.3435

- If we have not obtained a sustainability performance target verification assurance certificate for the fiscal year ended December 31, 2030, the sustainability-linked notes will bear interest at an increased rate from the trigger date through to their individual maturities. The interest rate on certain of the sustainability-linked notes may also increase (MFN step-up) in certain circumstances if we fail to meet additional sustainability and/or environmental, social or governance targets as may be provided for in a sustainability-linked bond; the interest rate on the sustainability-linked notes, however, in no event can exceed the initial rate by more than the aggregate MFN step-up and trigger event limit, whether as a result of not obtaining a sustainability performance target verification assurance certificate and/or any targets provided for in one or more future sustainability-linked bonds. Similarly, if we redeem any of the sustainability-linked notes and we have not obtained a sustainability performance target verification assurance certificate at the end of the fiscal year immediately preceding the date fixed for redemption, the interest accrued (if any) will be determined using the rates set out in the following table.

Series	Sustainability performance target verification assurance certificate			Aggregate MFN step-up and trigger event limit	Redemption interest accrual rate if certificate not obtained
	Fiscal year	Trigger date	Post-trigger event interest rate		
2.85% Sustainability-Linked Notes, Series CAF	2030	Nov. 14, 2030	3.85%	N/A	3.85%
3.40% U.S. Dollar Sustainability-Linked Notes	2030	Nov. 14, 2030	4.40%	1.50%	4.40%
5.25% Sustainability-Linked Notes, Series CAG	2030	Nov. 15, 2030	6.00%	1.50%	6.00%
4.95% Sustainability-Linked Notes, Series CAJ	2030	Mar. 28, 2031	5.70%	1.50%	5.70%

- \$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%.
- \$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 in March 2018 at an issue price of \$1,014.11 and an effective interest rate of 4.61%.
- \$400 million of 3.95% Notes, Series CAB were issued in December 2019 at an issue price of \$991.54 and an effective interest rate of 4.00%. This series of notes was reopened in May 2020 and a further \$400 million of notes were issued at an issue price of \$1,003.53 and an effective interest rate of 3.93%.

(c) TELUS Corporation commercial paper

TELUS Corporation has an unsecured commercial paper program, which is backstopped by our revolving \$2.75 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 equivalent amount at any one time of \$2.0 billion (US\$1.5 billion maximum). 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, 2023, we had \$1.9 billion (December 31, 2022 – \$1.5 billion) of commercial paper outstanding, all of which was denominated in U.S. dollars (US\$1.5 billion; December 31, 2022 – US\$1.1 billion), with an effective average interest rate of 5.6%, maturing through December 2023.

(d) TELUS Corporation credit facilities

As at June 30, 2023, TELUS Corporation had an unsecured revolving \$2.75 billion bank credit facility, expiring on April 6, 2026 (unchanged from December 31, 2022), with a syndicate of financial institutions, which is to be used for general corporate purposes, including the backstopping of commercial paper. Subsequent to June 30, 2023, the credit facility was renewed for \$2.75 billion with an expiry date of July 14, 2028.

As at June 30, 2023, TELUS Corporation had an unsecured non-revolving \$1.1 billion bank credit facility, maturing July 9, 2024, with a syndicate of financial institutions, which is to be used for general corporate purposes. As at June 30, 2023, we had drawn \$1.1 billion on the non-revolving bank credit facility, with an effective average interest rate of 5.9% through July 2023.

The TELUS Corporation credit facilities bear interest at prime rate, U.S. Dollar Base Rate, a bankers' acceptance rate or term secured overnight financing rate (SOFR) (as such terms are used or defined in the credit facilities), plus applicable margins. The credit facilities contain customary representations, warranties and covenants, including two financial quarter-end ratio tests. These tests are that our leverage ratio must not exceed 4.25:1.00 and our operating cash flow to interest expense ratio must not be less than 2.00:1.00, all as defined in the credit facilities.

Continued access to the TELUS Corporation credit facilities is not contingent upon TELUS Corporation maintaining a specific credit rating.

As at (millions)	June 30, 2023	December 31, 2022
Net available	\$ 806	\$ 1,292
Backstop of commercial paper	1,944	1,458
Gross available revolving \$2.75 billion bank credit facility	\$ 2,750	\$ 2,750

We had \$62 million of letters of credit outstanding as at June 30, 2023 (December 31, 2022 – \$119 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 revolving bank credit facility. We have arranged incremental letters of credit to allow us to participate in Innovation, Science and Economic Development Canada's 3800 MHz wireless spectrum auction that is to commence in October 2023. Under the terms of the auction, communications between bidders that would provide insights into bidding strategies, including reference to preferred blocks, technologies or valuations, are precluded until the deadline for the final payment in the auction. Disclosure of the precise amount of our letters of credit could be interpreted as a signal of bidding intentions. The maximum amount of letters of credit that any national incumbent could be required to deliver is approximately \$350 million.

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

As at June 30, 2023, and December 31, 2022, TELUS International (Cda) Inc. had a credit facility, secured by its assets, expiring on January 3, 2028, with a syndicate of financial institutions, including TELUS Corporation. The credit facility is comprised of revolving components totalling US\$800 million, with TELUS Corporation as approximately 7.2% lender and amortizing term loan components totalling US\$1.2 billion, with TELUS Corporation as approximately 7.2% lender. The credit facility is non-recourse to TELUS Corporation. The outstanding revolving components and term loan components had a weighted average interest rate of 7.2% as at June 30, 2023.

As at (millions)	June 30, 2023			December 31, 2022		
	Revolving components	Term loan components ¹	Total	Revolving components	Term loan components ¹	Total
Available²	US\$ 325	US\$ —	US\$ 325	US\$ 658	US\$ 600	US\$ 1,258
Outstanding						
Due to other	441	1,100	1,541	132	557	689
Due to TELUS Corporation	34	85	119	10	43	53
	US\$ 800	US\$ 1,185	US\$ 1,985	US\$ 800	US\$ 1,200	US\$ 2,000

¹ Relative to amounts owed to the syndicate of financial institutions, excluding TELUS Corporation, we have entered into foreign exchange derivatives (cross currency interest rate exchange agreements) that effectively convert an amortizing amount of US\$443 of the principal payments, and associated interest

obligations, to European euro obligations with an effective fixed interest rate of 2.6% and an effective fixed economic exchange rate of US\$1.088:€1.00.

These have been accounted for as a net investment hedge in a foreign operation (see Note 4).

- 2 Of the amounts available at December 31, 2022, US\$525 of the revolving components and US\$600 of the term loan components had a condition precedent of consummating the WillowTree acquisition, which occurred on January 3, 2023 (see Note 18(b)).

The TELUS International (Cda) Inc. credit facility bears interest at prime rate, U.S. Dollar Base Rate, a bankers' acceptance rate or term secured overnight financing rate (SOFR) (all such terms as used or defined in the credit facility), plus applicable margins. The credit facility contains customary representations, warranties and covenants, including two financial quarter-end ratio tests: the TELUS International (Cda) Inc. quarter-end net debt to operating cash flow ratio must not exceed 4.25:1.00 through fiscal 2023, 3.75:1.00 through fiscal 2024, and 3.25:1.00 subsequently; and the quarter-end operating cash flow to debt service (interest and scheduled principal repayment) ratio must not be less than 1.50:1.00; all as defined in the credit facility.

The term loan components are subject to amortization schedules 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) Other

Other liabilities bear interest at 3.3%, are secured by the AWS-4 spectrum licences associated with these other liabilities, and are subject to amortization schedules, so that the principal is repaid over the periods to maturity, the last period ending March 31, 2035.

(g) Lease liabilities

Lease liabilities are subject to amortization schedules, so that the principal is repaid over various periods, including reasonably expected renewals. The weighted average interest rate on lease liabilities was approximately 5.0% as at June 30, 2023.

(h) Long-term debt maturities

Anticipated requirements to meet long-term debt repayments, calculated for long-term debt owing as at June 30, 2023, are as follows:

Composite long-term debt denominated in	Canadian dollars			U.S. dollars					Other currencies	
	Years ending December 31 (millions)	Long-term debt, excluding leases	Leases (Note 19)	Total	Long-term debt, excluding leases	Leases (Note 19)	Currency swap agreement amounts to be exchanged		Leases (Note 19)	Total
						(Receive) ¹	Pay			
2023 (remainder of year)	\$ 9	\$ 225	\$ 234	\$ 1,981	\$ 14	\$ (2,001)	\$ 2,030	\$ 2,024	\$ 31	\$ 2,289
2024	2,266	428	2,694	74	24	(28)	28	98	55	2,847
2025	1,023	323	1,346	74	25	(28)	28	99	43	1,488
2026	1,461	224	1,685	37	26	(28)	28	63	34	1,782
2027	62	185	247	1,493	21	(1,485)	1,489	1,518	18	1,783
2028-2032	5,628	340	5,968	2,900	32	(1,644)	1,602	2,890	42	8,900
Thereafter	5,613	285	5,898	1,729	—	(1,655)	1,646	1,720	15	7,633
Future cash outflows in respect of composite long-term debt principal repayments	16,062	2,010	18,072	8,288	142	(6,869)	6,851	8,412	238	26,722
Future cash outflows in respect of associated interest and like carrying costs ²	7,800	435	8,235	3,114	62	(2,604)	2,503	3,075	47	11,357
Undiscounted contractual maturities (Note 4(b))	\$ 23,862	\$ 2,445	\$ 26,307	\$ 11,402	\$ 204	\$ (9,473)	\$ 9,354	\$ 11,487	\$ 285	\$ 38,079

1 Where applicable, cash flows reflect foreign exchange rates as at June 30, 2023.

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, 2023.

27 other long-term liabilities

As at (millions)	Note	June 30, 2023	December 31, 2022
Contract liabilities	24	\$ 89	\$ 82
Other		2	2
Deferred revenues		91	84
Pension benefit liabilities	15	412	392
Other post-employment benefit liabilities		73	68
Derivative liabilities	4(d)	76	24
Investment in real estate joint ventures	21(a)	8	9
Other		56	53
		716	630
Deferred customer activation and connection fees	24	6	6
		\$ 722	\$ 636

28 owners' equity

(a) TELUS Corporation Common Share capital – general

Our authorized share capital is as follows:

As at	June 30, 2023	December 31, 2022
First Preferred Shares	1 billion	1 billion
Second Preferred Shares	1 billion	1 billion
Common Shares	4 billion	4 billion

Only holders of Common Shares may vote at our general meetings, with each holder of Common Shares entitled to one vote per Common Share held at all such meetings so long as not less than 66-2/3% of the issued and outstanding Common Shares are owned by Canadians. With respect to priority in the payment of dividends and in the distribution of assets in the event of our liquidation, dissolution or winding-up, whether voluntary or involuntary, or any other distribution 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, 2023, approximately 25 million Common Shares were reserved for issuance from Treasury under a dividend reinvestment and share purchase plan (see *Note 13(b)*); approximately 49 million Common Shares were reserved for issuance from Treasury under a restricted share unit plan (see *Note 14(b)*); and approximately 12 million Common Shares were reserved for issuance from Treasury under a share option plan (see *Note 14(d)*).

(b) Purchase of TELUS Corporation Common Shares for cancellation pursuant to normal course issuer bid

As referred to in *Note 3*, we may purchase a portion of our Common Shares for cancellation pursuant to normal course issuer bids in order to maintain or adjust our capital structure. In June 2022, we received approval for a normal course issuer bid to purchase and cancel up to 10 million of our Common Shares (up to a maximum amount of \$250 million) from June 6, 2022, to June 5, 2023. During the six-month periods ending June 30, 2023 and 2022, we did not purchase or cancel any shares pursuant to normal course issuer bids.

(c) Subsidiary with significant non-controlling interest

Our TELUS International (Cda) Inc. subsidiary is incorporated under the *Business Corporations Act* (British Columbia) and has geographically dispersed operations with principal places of business in Asia, Central America, Europe and North America.

Changes in interests during the six-month periods ended June 30, 2023 and 2022, and which are reflected in the Consolidated statement of changes in owners' equity, are set out in the following table.

Six-month periods ended June 30	Economic interest ¹		Voting interest ¹	
	2023	2022	2023	2022
Interest in TELUS International (Cda) Inc., beginning of period	56.6%	55.1%	72.4%	70.9%
Effect of				
Issue of subordinate voting shares as consideration in business acquisition (Note 18(b))	(1.4)	—	(0.2)	—
TELUS Corporation acquisition of shares from non-controlling interests ²	0.9	1.0	1.2	1.5
Interest in TELUS International (Cda) Inc., end of period	56.1%	56.1%	73.4%	72.4%

1 Due to the voting rights associated with the multiple voting shares held by TELUS Corporation, our economic and voting interests subsequent to the initial public offering differ.

2 Acquisition of shares from non-controlling interests for \$57 million (2022 – \$85 million), of which \$32 million (2022 – \$61 million) was charged to amounts recorded in owners' equity for contributed surplus and the balance was charged to non-controlling interests.

Summarized financial information

Summarized financial information of our TELUS International (Cda) Inc. subsidiary is set out in the following table.

As at, or for the periods ended, (millions) ¹	Three months		Six months		December 31, 2022
	June 30, 2023	June 30, 2022	June 30, 2023	June 30, 2022	
Statement of financial position					
Current assets			\$ 1,080		\$ 926
Non-current assets			\$ 5,486		\$ 3,875
Current liabilities			\$ 843		\$ 733
Non-current liabilities			\$ 3,076		\$ 1,581
Statement of income and other comprehensive income					
Revenue and other income	\$ 896	\$ 797	\$ 1,824	\$ 1,556	
Net income (loss)	\$ (8)	\$ 70	\$ 10	\$ 115	
Comprehensive income (loss)	\$ (67)	\$ 75	\$ (31)	\$ 77	
Statement of cash flows					
Cash provided by operating activities	\$ 78	\$ 108	\$ 143	\$ 261	
Cash used by investing activities	\$ (34)	\$ (63)	\$ (1,203)	\$ (90)	
Cash provided (used) by financing activities	\$ (43)	\$ (87)	\$ 1,082	\$ (153)	

1 As required by IFRS-IASB, this summarized financial information excludes inter-company eliminations.

29 contingent liabilities

(a) Claims and lawsuits

General

A number of claims and lawsuits (including class actions and intellectual property infringement claims) seeking damages and other relief are pending against us and, in some cases, other mobile 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 mobile 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" mobile 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. Notice of this certified class action was provided to potential class members in 2022.

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 mobile services with us in the period from January 21, 1999, to April 2010. We have appealed the certification decision. A companion class action was brought against us in Alberta at the same time as the British Columbia class action. The Alberta class action duplicates the allegations in the British Columbia action, but has not proceeded to date and is not certified. Subject to a number of conditions, including court approval, we have now settled both the British Columbia and the Alberta class actions.

Uncertified class actions

Uncertified class actions against us include:

9-1-1 class actions

In 2008, a class action was brought in Saskatchewan against us and other Canadian telecommunications carriers alleging that, among other matters, we failed to provide proper notice of 9-1-1 charges to the public, have been deceitfully passing them off as government charges, and have charged 9-1-1 fees to customers who reside in areas where 9-1-1 service is not available. The plaintiffs advance causes of action in breach of contract, misrepresentation and false advertising and seek certification of a national class. A virtually identical class action was filed in Alberta at the same time, but the Alberta Court of Queen's Bench declared that class action expired against us as of 2009. No steps have been taken in this proceeding since 2016.

Public Mobile class actions

In 2014, class actions were brought against us in Quebec and Ontario on behalf of Public Mobile's customers, alleging that changes to the technology, services and rate plans made by us contravene our statutory and common law obligations. In particular, the Quebec action alleges that our actions constitute a breach of the Quebec *Consumer Protection Act*, the Quebec *Civil Code*, and the Ontario *Consumer Protection Act*. On June 28, 2021, the Quebec Superior Court approved the discontinuance of this claim against TELUS. 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.

Summary

We believe that we have good defences to the above matters. Should the ultimate resolution of these matters differ from management's assessments and assumptions, a material adjustment to our financial position and the results of our operations, including cash flows, could result. Management's assessments and assumptions include that reliable estimates of any such exposure cannot be made considering the continued uncertainty about: the nature of the damages that may be sought by the plaintiffs; the causes of action that are being, or may ultimately be, pursued; and, in the case of the uncertified class actions, the causes of action that may ultimately be certified.

(b) Concentration of labour

In October 2021, we commenced collective bargaining with the Telecommunications Workers Union, United Steelworkers Local 1944 (TWU), to renew the collective agreement that expired on December 31, 2021. In early March 2023, the TWU and ourselves reached a tentative four-year collective agreement which would be subject to ratification by members of the TWU. On March 17, 2023, the TWU and ourselves announced that the ratification process was completed with a majority of the TWU members who cast their ballots voting to accept the tentative agreement. The new collective agreement with the TWU is effective from April 16, 2023, to March 31, 2027, and currently covers more than 6,500 team members nationally.

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 Team.

Total compensation expense for key management personnel, and the composition thereof, is as follows:

Periods ended June 30 (millions)	Three months		Six months	
	2023	2022	2023	2022
Short-term benefits	\$ 6	\$ 4	\$ 11	\$ 8
Post-employment pension ¹ and other benefits	2	2	4	7
Share-based compensation ²	10	22	27	40
	\$ 18	\$ 28	\$ 42	\$ 55

1 Our Executive 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 and defined contribution pension plans.

2 We accrue an expense for the notional subset of our restricted share units with market performance conditions using a fair value determined by a Monte Carlo simulation. Restricted share units with an equity settlement feature are accounted for as equity instruments. The expense for restricted share units that do not ultimately vest is reversed against the expense that was previously recorded in their respect.

As disclosed in *Note 14*, we made initial awards of share-based compensation in 2023 and 2022, including, as set out in the following table, to our key management personnel. As most of these awards are cliff-vesting or graded-vesting and have multi-year requisite service periods, the related expense is being recognized rateably over a period of years and thus only a portion of the 2023 and 2022 initial awards are included in the amounts in the table above.

Six-month periods ended June 30 (\$ in millions)	2023			2022		
	Number of units	Notional value ¹	Grant-date fair value ¹	Number of units	Notional value ¹	Grant-date fair value ¹
TELUS Corporation						
Restricted share units	1,220,549	\$ 33	\$ 35	1,007,431	\$ 32	\$ 39
TELUS International (Cda) Inc.						
Restricted share units	353,789	10	10	265,617	9	9
		\$ 43	\$ 45		\$ 41	\$ 48

1 The notional value of restricted share units is determined by multiplying the equity 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 notional value of share options has been determined using an option pricing model.

The amount recorded for liability-accounted restricted share units and share options outstanding as at June 30, 2023, was \$1 million (December 31, 2022 – \$1 million).

Our *Directors' Deferred Share Unit Plan* provides that, in addition to his or her annual equity grant of deferred share units, a director may elect to receive his or her annual retainer and meeting fees in deferred share units, TELUS Corporation Common Shares or cash. Deferred share units entitle directors to a specified number of TELUS Corporation Common Shares. Deferred share units accounted for as liabilities have been paid out when a director ceased 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, 2023 and 2022, no amounts were paid out. As at June 30, 2023, and December 31, 2022, no liability-accounted share-based compensation awards were outstanding.

Employment agreements with members of the Executive 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 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, 2023, we provided our defined benefit pension plans with management and administrative services on a cost recovery basis and actuarial services on an arm's-length basis; the charges for these services amounted to \$2 million (2022 – \$2 million) and \$5 million (2022 – \$4 million), respectively.

(c) Transactions with real estate joint venture and associate

During the three-month and six-month periods ended June 30, 2023 and 2022, we had transactions with the TELUS Sky real estate joint venture, which is a related party, as set out in *Note 21*. As at June 30, 2023, we had recorded lease

liabilities of \$86 million (December 31, 2022 – \$87 million) in respect of our TELUS Sky lease, and monthly cash payments are made in accordance with the lease agreement; one-third of those amounts is due to our economic interest in the real estate joint venture.

During the three-month and six-month periods ended June 30, 2023, we increased our investment in Miovision Technologies Incorporated, as set out in *Note 21(b)*.

31 additional statement of cash flow information

(a) Statements of cash flows – operating activities and investing activities

Periods ended June 30 (millions)	Note	Three months		Six months	
		2023	2022	2023	2022
OPERATING ACTIVITIES					
Net change in non-cash operating working capital					
Accounts receivable		\$ (8)	\$ (206)	\$ 164	\$ 29
Inventories		4	76	(43)	11
Contract assets		10	21	14	38
Prepaid expenses		(50)	(30)	(186)	(172)
Accounts payable and accrued liabilities		18	(2)	(525)	(157)
Income and other taxes receivable and payable, net		(47)	46	(55)	70
Advance billings and customer deposits		13	(22)	44	(7)
Provisions		32	5	74	(14)
		\$ (28)	\$ (112)	\$ (513)	\$ (202)
INVESTING ACTIVITIES					
Cash payments for capital assets, excluding spectrum licences					
Capital asset additions					
Gross capital expenditures					
Property, plant and equipment	17	\$ (829)	\$ (881)	\$ (1,371)	\$ (1,590)
Intangible assets subject to amortization	18	(258)	(250)	(474)	(448)
		(1,087)	(1,131)	(1,845)	(2,038)
Additions arising from leases	17	280	77	325	151
Capital expenditures	5	(807)	(1,054)	(1,520)	(1,887)
Effect of asset retirement obligations		—	222	—	222
		(807)	(832)	(1,520)	(1,665)
Other non-cash items included above					
Change in associated non-cash investing working capital		30	38	(233)	(142)
Non-cash change in asset retirement obligation		—	(222)	—	(222)
		30	(184)	(233)	(364)
		\$ (777)	\$ (1,016)	\$ (1,753)	\$ (2,029)

(b) Changes in liabilities arising from financing activities

(millions)	Three-month period ended June 30, 2022						Three-month period ended June 30, 2023					
	Beginning of period	Statement of cash flows		Non-cash changes		End of period	Beginning of period	Statement of cash flows		Non-cash changes		End of period
		Issued or received	Redemptions, repayments or payments	Foreign exchange movement (Note 4(e))	Other			Issued or received	Redemptions, repayments or payments	Foreign exchange movement (Note 4(e))	Other	
Dividends payable to holders of Common Shares	\$ 450	\$ —	\$ (450)	\$ —	\$ 467	\$ 467	\$ 506	\$ —	\$ (506)	\$ —	\$ 526	\$ 526
Dividends reinvested in shares from Treasury	—	—	160	—	(160)	—	—	186	—	(186)	—	—
	\$ 450	\$ —	\$ (290)	\$ —	\$ 307	\$ 467	\$ 506	\$ —	\$ (320)	\$ —	\$ 340	\$ 526
Short-term borrowings	\$ 108	\$ 175	\$ (4)	\$ —	\$ —	\$ 279	\$ 593	\$ 101	\$ (100)	\$ —	\$ —	\$ 594
Long-term debt												
TELUS Corporation senior notes	\$ 16,328	\$ —	\$ —	\$ 127	\$ 4	\$ 16,459	\$ 18,656	\$ —	\$ —	\$ (95)	\$ 3	\$ 18,564
TELUS Corporation commercial paper	1,414	1,759	(1,296)	45	—	1,922	1,874	1,744	(1,630)	(44)	—	1,944
TELUS Corporation credit facilities	—	—	—	—	—	—	1,145	—	—	—	(1)	1,144
TELUS Communications Inc. debentures	448	—	(249)	—	—	199	199	—	—	—	—	199
TELUS International (Cda) Inc. credit facility	1,009	11	(68)	32	—	984	2,086	92	(110)	(46)	1	2,023
Other	304	—	(39)	—	35	300	317	—	(21)	—	2	298
Lease liabilities	1,816	—	(125)	1	72	1,764	2,289	—	(129)	(6)	262	2,416
Derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt – liability (asset)	(12)	1,303	(1,296)	(198)	31	(172)	(79)	1,648	(1,656)	148	11	72
	21,307	3,073	(3,073)	7	142	21,456	26,487	3,484	(3,546)	(43)	278	26,660
To eliminate effect of gross settlement of derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt	—	(1,303)	1,303	—	—	—	—	(1,648)	1,648	—	—	—
	\$ 21,307	\$ 1,770	\$ (1,770)	\$ 7	\$ 142	\$ 21,456	\$ 26,487	\$ 1,836	\$ (1,898)	\$ (43)	\$ 278	\$ 26,660

(millions)	Six-month period ended June 30, 2022						Six-month period ended June 30, 2023					
	Beginning of period	Statement of cash flows		Non-cash changes			Beginning of period	Statement of cash flows		Non-cash changes		
		Issued or received	Redemptions, repayments or payments	Foreign exchange movement (Note 4(e))	Other	End of period		Issued or received	Redemptions, repayments or payments	Foreign exchange movement (Note 4(e))	Other	End of period
Dividends payable to holders of Common Shares	\$ 449	\$ —	\$ (899)	\$ —	\$ 917	\$ 467	\$ 502	\$ —	\$ (1,008)	\$ —	\$ 1,032	\$ 526
Dividends reinvested in shares from Treasury	—	—	316	—	(316)	—	—	370	—	(370)	—	—
	\$ 449	\$ —	\$ (583)	\$ —	\$ 601	\$ 467	\$ 502	\$ —	\$ (638)	\$ —	\$ 662	\$ 526
Short-term borrowings	\$ 114	\$ 175	\$ (10)	\$ —	\$ —	\$ 279	\$ 104	\$ 590	\$ (100)	\$ —	\$ —	\$ 594
Long-term debt												
TELUS Corporation senior notes	\$ 15,258	\$ 1,143	\$ —	\$ 66	\$ (8)	\$ 16,459	\$ 18,660	\$ 500	\$ (500)	\$ (99)	\$ 3	\$ 18,564
TELUS Corporation commercial paper	1,900	2,903	(2,912)	31	—	1,922	1,458	3,704	(3,176)	(42)	—	1,944
TELUS Corporation credit facilities	—	—	—	—	—	—	1,145	—	—	—	(1)	1,144
TELUS Communications Inc. debentures	448	—	(249)	—	—	199	199	—	—	—	—	199
TELUS International (Cda) Inc. credit facility	1,062	11	(107)	17	1	984	914	1,313	(148)	(57)	1	2,023
Other	308	—	(114)	—	106	300	321	—	(173)	—	150	298
Lease liabilities	1,876	—	(248)	(5)	141	1,764	2,340	—	(259)	6	329	2,416
Derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt – liability (asset)	4	2,926	(2,925)	(135)	(42)	(172)	(80)	3,194	(3,208)	160	6	72
	20,856	6,983	(6,555)	(26)	198	21,456	24,957	8,711	(7,464)	(32)	488	26,660
To eliminate effect of gross settlement of derivatives used to manage currency risk arising from U.S. dollar-denominated long-term debt	—	(2,926)	2,926	—	—	—	—	(3,194)	3,194	—	—	—
	\$ 20,856	\$ 4,057	\$ (3,629)	\$ (26)	\$ 198	\$ 21,456	\$ 24,957	\$ 5,517	\$ (4,270)	\$ (32)	\$ 488	\$ 26,660