

TELUS Corporation
Annual Information Form
for the year ended December 31, 2016

March 15, 2017

## 1. CAUTION REGARDING FORWARD-LOOKING STATEMENTS

This document contains forward-looking statements about expected events and the financial and operating performance of TELUS Corporation. 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.

Forward-looking statements include any statements that do not refer to historical facts. They include, but are not limited to, statements relating to our objectives and our strategies to achieve those objectives, our targets, outlook, updates, our multi-year dividend growth program, and our multi-year share purchase 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.

By their nature, forward-looking statements are subject to inherent risks and uncertainties and are based on assumptions, including assumptions about future economic conditions and courses of action. These assumptions may ultimately prove to have been inaccurate and, as a result, our actual results or events may differ materially from our expectations expressed in or implied by the forward-looking statements.

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

- Competition including: our ability to continue to retain customers through an enhanced customer service experience, including through the deployment and operation of new wireless networks; the ability of industry competitors to successfully launch their respective platforms and to combine a mix of residential local VoIP, long distance, HSIA and, in some cases, wireless services under one bundled and/or discounted monthly rate, along with their existing broadcast or satellite-based TV services, the success of new products, new services and supporting systems, such as Internet of Things (IoT) services for Internet-connected devices; continued intense rivalry across all services among wireless and wireline telecommunications companies including new or rebranded entrants, cable-TV providers, other communications companies and over-the-top (OTT) services, which, among other things, places pressures on average revenue per subscriber unit per month (ARPU) and churn for all services (wireless and wireline), as do customer usage patterns, flat-rate pricing trends for voice and data, inclusive rate plans for voice and data and increasing availability of Wi-Fi networks for data; mergers and acquisitions of industry competitors; pressures on high-speed Internet and TV ARPU and churn resulting from market conditions, government actions and customer usage patterns; residential and business network access line (NAL) losses; subscriber additions and retention volumes, and associated costs for wireless, TV and high-speed Internet services; and our ability to obtain and offer content on a timely basis across multiple devices on wireless and TV platforms at a reasonable cost.
- Technological substitution including: reduced utilization and increased commoditization of traditional wireline voice local and long distance services from impacts of OTT applications and wireless substitution, a declining overall market for paid TV services; the increasing number of households that have only wireless and/or Internet-based telephone services; continuation of wireless voice ARPU declines as a result of, among other factors, substitution to messaging and OTT applications; substitution to increasingly available Wi-Fi services from wireless services; and disruptive technologies such as OTT Internet protocol (IP) services that may displace our services including TV and entertainment services, and impact revenue.
- <u>Technology</u> including: subscriber demand for data that may challenge wireless networks and spectrum capacity levels in the future; our reliance on information technology and our need to understand and streamline our legacy systems; technology options, evolution paths and roll-out plans for wireless and wireline networks (including broadband initiatives, such as fibre to the premises (FTTP), wireless small-cell deployment, 5G wireless and availability of resources and ability to build out adequate broadband capacity); our reliance on wireless network access agreements, which have facilitated our deployment of wireless technologies; choice of suppliers and those suppliers' ability to maintain and service their product lines, which could affect the success of upgrades to and evolution of technology that we offer (such as TELUS TV); supplier concentration and market power for network equipment, TELUS TV and wireless handsets; the performance of wireless technology; our expected long-term need to acquire additional spectrum capacity through future spectrum auctions and from third parties to address increasing demand for data; deployment and operation of new wireline broadband networks at a reasonable cost and availability, and success of new products and services to be rolled out on such networks; network reliability and change management; and uncertainties around our strategy to replace certain legacy wireline networks, systems and services to reduce operating costs.
- Capital expenditure levels and potential outlays for spectrum licences in spectrum auctions or from third parties, due
  to: our broadband initiatives, including connecting more homes and businesses directly to fibre; our ongoing
  deployment of newer wireless technologies such as 5G; utilizing newly acquired spectrum; investments in network
  resiliency and reliability; subscriber demand for data; evolving systems and business processes; implementing



- efficiency initiatives; supporting large complex deals; and future wireless spectrum auctions held by Innovation, Science and Economic Development Canada (ISED). Our capital expenditure levels could be impacted if we do not achieve our targeted operational and financial results.
- Regulatory decisions and developments including: the potential of government intervention to further increase wireless competition; the Canadian Radio-television and Telecommunications Commission (CRTC) review of the Wireless Code; the CRTC wireless wholesale services review, in which it was determined that the CRTC will regulate wholesale GSM-based domestic roaming rates and the setting of such rates; future spectrum auctions (including limitations on established wireless providers, spectrum set-aside that favours certain carriers and other advantages provided to new and foreign participants, and the amount and cost of spectrum acquired); restrictions on the purchase, sale and transfer of spectrum licences; the undetermined long-term impact of the CRTC's wireline wholesale services review; the potential impacts from the CRTC's decision to require pro-rated refunds when customers terminate their services; the CRTC's examination of differential pricing practices related to Internet data plans; the impact from the review of Canada' cultural policies by the Minister of Canadian Heritage; vertical integration in the broadcasting industry resulting in competitors owning broadcast content services and timely and effective enforcement of related regulatory safeguards; and restrictions on non-Canadian ownership of TELUS Common Shares and the ongoing monitoring and compliance with such restrictions.
- <u>Human resource matters</u> including: recruitment, retention and appropriate training in a highly competitive industry, and the level of employee engagement.
- Process risks including: our reliance on legacy systems and ability to implement and support new products and services and business operations; our ability to implement effective change management for system replacements and upgrades, process redesigns and business integrations (including our ability to successfully integrate acquisitions, complete divestitures or establish partnerships in a timely manner, and realize expected strategic benefits), the risk that transaction with BCE Inc. to acquire a portion of Manitoba Telecom Services Inc.'s postpaid wireless customers and retail locations may not be completed and there being no assurance regarding the successful migration of such customers and dealers; the implementation of complex large enterprise deals that may be adversely impacted by available resources, system limitations and degree of co-operation from other service providers; our ability to successfully manage operations in foreign jurisdictions; information security and privacy breaches, including data loss or theft of data; intentional threats to our infrastructure and business operations; and real estate joint venture re-development risks.
- 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 earnings before interest, income taxes, depreciation and amortization (EBITDA) including the expected benefits of the immediately vesting transformative compensation initiative; business integrations; business process outsourcing; offshoring and reorganizations, including any FTE employee reduction programs; procurement initiatives; and real estate rationalization. Additional revenue and cost efficiency and effectiveness initiatives will continue to be assessed and implemented, as required.
- <u>Financing and debt requirements</u> including our ability to carry out financing activities and our ability to maintain investment grade credit ratings in the range of BBB+ or the equivalent.
- Ability to sustain our dividend growth program through 2019 and ability to sustain and complete our multi-year share purchase program through 2019. These programs may be affected by factors such as the competitive environment, economic performance in Canada, our earnings and free cash flow, our levels of capital expenditures and spectrum licence purchases, and regulatory decisions and developments. Quarterly dividend decisions are subject to assessment and determination by our Board of Directors (Board) based on the Company's financial position and outlook. The share purchase program may be affected by a change in our intention to purchase shares, and the assessment and determination of our Board from time to time, based on the Company's financial position and outlook, and the market price of TELUS shares. Consequently, there can be no assurance that these programs will be maintained through 2019.
- <u>Taxation matters</u> including: interpretation of complex tax laws by the tax authorities that may differ from our interpretations; changes in tax laws, including tax rates; tax expenses being materially different than anticipated; elimination of income tax deferrals through the use of different tax year-ends for operating partnerships and corporate partners; and tax collection authorities adopting more aggressive auditing practices.
- <u>Litigation and legal matters</u> including: our ability to defend successfully against investigations, regulatory
  proceedings, claims and lawsuits, including intellectual property infringement claims and class actions pending
  against us, as well as possible proceedings, intellectual property infringement claims and class actions based on
  consumer claims, data, privacy or security breaches and secondary market liability; and the complexity of legal
  compliance in domestic and foreign jurisdictions.



- Health, safety and the environment, including lost employee work time resulting from illness or injury, public
  concerns related to radio frequency emissions, environmental issues affecting our business including climate
  change, waste and waste recycling, risks relating to fuels systems on our properties, and changing government and
  public expectations regarding environmental matters and our responses.
- <u>Business continuity events</u> including: our ability to maintain customer service and operate our networks in the event of human error or human-caused threats, such as cyber attacks and equipment failures that could cause various degrees of network outages; supply chain disruptions; natural disaster threats; epidemics; pandemics; and the completeness and effectiveness of business continuity and disaster recovery plans and responses.
- <u>Economic growth and fluctuations</u> including: the state of the economy in Canada, which may be influenced by economic and other developments outside of Canada including potential outcomes of yet unknown policies and actions of the incoming U.S. administration; future interest rates; inflation; unemployment levels; effects of low oil prices; effects of low business spending (such as reducing investments and cost structure); pension investment returns, funding and discount rates; and Canadian/U.S. dollar exchange rates.

These risks are described in additional detail in *Section 10 Risks and risk management* in our 2016 Management's discussion and analysis (MD&A). That description is incorporated by reference in this cautionary statement but is not intended to be a complete list of the risks that could affect the Company.

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

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

This cautionary statement qualifies all of the forward-looking statements in this document.



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<sup>1</sup> As filed on SEDAR on February 9, 2017

Each Section of the Management's Discussion and Analysis for the fiscal year ended December 31, 2016 (2016 annual MD&A), as well as the Management's Discussion and Analysis for each of the years ended December 31, 2015 and 2014, that are referred to in this Annual Information Form (AIF) are incorporated by reference and filed on SEDAR at sedar.com. For greater certainty, notwithstanding references to TELUS' information circular, consolidated financial statements, sustainability report and the telus.com website, these documents and website are not incorporated into this AIF. In this AIF, unless otherwise stated, references to "TELUS", "the Company", "we", "us" or "our" are to TELUS

Corporation and all of its subsidiaries, except where it is clear that these terms mean only TELUS Corporation. In this AIF, except where otherwise indicated, all references to dollars or \$ are to Canadian dollars.



#### 3. CORPORATE STRUCTURE

## 3.1 Name, address and incorporation

TELUS was incorporated under the *Company Act* (British Columbia) (the B.C. Company Act) on October 26, 1998, under the name BCT.TELUS Communications Inc. (BCT). On January 31, 1999, pursuant to a court-approved plan of arrangement under the *Canada Business Corporations Act* among BCT, BC TELECOM Inc. (BC TELECOM) and the former Alberta-based TELUS Corporation (TC), BCT acquired all of the shares of BC TELECOM and TC in exchange for common shares and non-voting shares of BCT, and BC TELECOM was dissolved. On May 3, 2000, BCT changed its name to TELUS Corporation and in February 2005, the Company transitioned under the *Business Corporations Act* (British Columbia), successor to the B.C. Company Act. On February 4, 2013, in accordance with the terms of a court approved plan of arrangement under the *Business Corporations Act* (British Columbia), TELUS exchanged all of its issued and outstanding Non-Voting Shares into Common Shares on a one-for-one basis. On April 16, 2013, TELUS subdivided its Common Shares on a two-for-one basis.

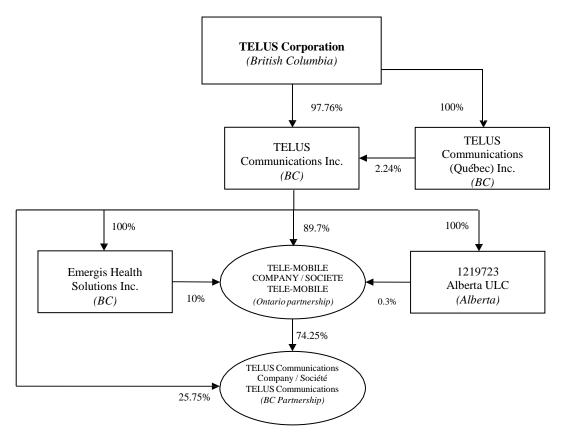
TELUS maintains its registered office at Floor 7, 510 West Georgia, Vancouver, British Columbia (B.C.) and its executive office at Floor 23, 510 West Georgia, Vancouver, B.C.

# 3.2 Intercorporate relationships and TELUS subsidiaries

TELUS' wireless and wireline businesses are primarily operated through TELUS Communications Company (TCC). TCC is a partnership organized under the laws of B.C. whose partners are TELUS Communications Inc. (TCI) and TELE-MOBILE Company (TELE-MOBILE).

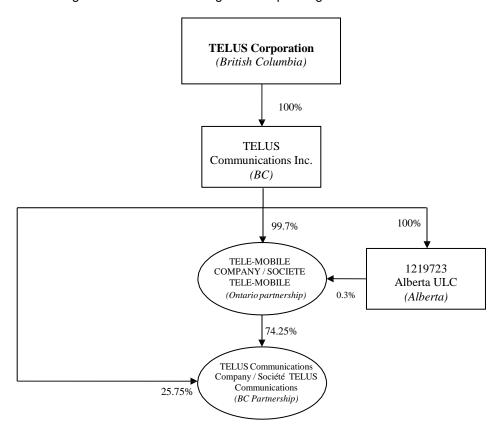
TCI, which holds direct and indirect interests in TCC and TELE-MOBILE, is the only subsidiary which owned assets that constitute more than 10% of the consolidated assets of TELUS and that generated sales and operating revenues that exceed 10% of the consolidated sales and operating revenues of TELUS for the year ended December 31, 2016. In addition, all of the assets, sales and operating revenues of TELUS' other subsidiaries (other than TCI), together do not exceed 20% of TELUS' total consolidated assets and 20% of TELUS' total consolidated sales and operating revenues as at December 31, 2016.

The following organization chart sets forth the relationships between the major subsidiaries and partnerships, as well as their respective jurisdictions of incorporation or establishment and TELUS ownership as at December 31, 2016.





Subsequent to year-end, TCI amalgamated with TELUS Communications (Quebec) Inc., Emergis Health Solutions Inc. and certain wholly-owned subsidiaries to form a newly amalgamated TCI on January 1, 2017. The following organization chart reflects this amalgamation and the resulting ownership changes:



#### 4. GENERAL DEVELOPMENT OF THE BUSINESS

#### 4.1 Three-year history

During the three-year period ended on December 31, 2016, we continued to advance our national growth strategy, guided by our six strategic imperatives and our corporate priorities.

# Focusing relentlessly on growth markets of data, IP and wireless

External wireless revenues and wireline data revenues were \$11.2 billion in 2016, up by \$469 million or 4.4% from 2015. The results for 2015 had increased by \$646 million or 6.4% from 2014. In total, 2016 external wireless revenues and wireline data revenues have grown by 11.1% since 2014. Wireless and wireline data revenues combined represented 87% of TELUS' consolidated revenues in 2016, up from 86% in 2015, and 84% in 2014.

The trend in wireless network revenue reflects growth in both our ARPU and subscriber base. This growth was partially offset by the decline in wireless equipment revenue, reflecting higher per-unit subsidies and lower retention volumes. Data network revenue increased in 2016 reflecting a number of factors including a larger proportion of higher-rate plans in the revenue mix, including the new Premium Plus plans launched in June 2016; a larger proportion of customers selecting plans with larger data buckets or periodically topping up their data buckets; growth in the subscriber base; a higher postpaid subscriber mix; and increasing data usage from data-intensive devices. Voice network revenue decreased due to the increased adoption of unlimited nationwide voice plans and continued but moderating substitution to data services. For further detail on our wireless growth trends, see *Section 5.4 Wireless segment* of our 2016 annual MD&A.

The trend of increasing wireline data service revenue reflects growth in business process outsourcing services, high-speed Internet and enhanced data services, TELUS TV revenues and TELUS Health revenues, and is partly offset by declining data equipment revenues. The increases in Internet and TV service revenues are being generated by higher revenue per customer and subscriber growth. The trend of declining wireline voice revenues is due to technological substitution, greater use of inclusive long distance and lower wholesale volumes competition from voice over IP (VoIP) service providers (including cable-TV competitors), resellers and facilities-based competitors, as well as technological substitution to wireless and IP-based services and applications, continuing increased competition in the small and medium-sized business market, and the impact of the economic slowdown. For further detail on our wireline growth trends, see *Section 5.5 Wireline segment* of our *2016 annual MD&A*.



## Providing integrated solutions that differentiate TELUS from our competitors

In 2014, we introduced Your Choice® rate plans based on our customers' feedback and added new options to provide enhanced flexibility for voice and data usage. Your Choice rate plans allows the customer to create a custom mobile phone plan tailored by the customer.

In late 2014, we introduced two new solutions aimed at leveraging cloud-based technology to enable Canadian businesses to deploy a range of unified communication and collaboration tools and help their employees work more efficiently and effectively, no matter where they are. Our Cloud Collaboration services include voice mail, integrated messaging, and voice and video-conferencing. Our Cloud Contact Centre, a contact centre for customer service calls for marketers, salespeople and customer service representatives, is an end-to-end enterprise-grade solution that can support up to several thousand agents and allows those agents to connect from the office, home or almost any remote location. In mid-2016, we announced the expansion of our cloud portfolio with the offer of a full suite of managed infrastructure as a service (laaS) solutions that include public, private and hybrid cloud options. This expansion of our cloud portfolio, paired with our Internet data centres (IDCs) and expertise in managed services, allows us to meet the growing Hybrid IT demands of Canadian businesses that are being driven by mobile, social, Internet of Things (IoT) and big data applications, as well as their growing IT security and privacy concerns.

In 2014, we launched the TELUS IoT Marketplace, an online space offering a suite of turnkey IoT solutions for Canadian businesses. IoT refers to technologies designed to make it simpler for businesses to incorporate Internet-connected devices and deploy solutions that can help reduce costs and enhance efficiency, productivity and profitability. IoT also comprises machine-to-machine communications as it usually involves one device connected with another, which is controlled through the Internet. Examples of IoT devices include connected cars and connected utility and security services. In 2015, we expanded our offerings to include 53 more solutions and 23 new partners. For example, we partnered with Jasper Technologies Inc. to implement the TELUS Control Centre, a self-service platform aimed at simplifying the deployment and management of IoT services by offering automated device provisioning, real-time diagnostics, integrated billing and cost-management features. Furthermore, in September 2015, we introduced the TELUS Global IoT Connectivity Platform, which enables businesses to scale their IoT operations globally. Through a network of more than 70 carriers, we can offer a global SIM card that delivers connectivity in nearly every country around the world. With respect to applications, we established a presence within the transportation sector with our Fleet Complete and GEOTrac Fleet solutions, which offer businesses productivity gains and cost efficiency.

In 2015, we further extended our leadership in our clear and simple approach, providing customers with improved visibility to their data usage, both with Your Choice and Share Plus plans. These plans allowed customers to access real-time rating information, receive notifications when they were at or approaching billing thresholds and control usage through our data manager (accessible through our website or app in order to improve billing transparency), and allowed customers to add data top-ups when desired to have a set rate for additional usage.

In 2015, we launched improved roaming plans for U.S. travel, both for businesses and consumers. Our consumer product, called Easy Roam®, allows our subscribers to access their domestic plan while roaming for a flat fee per 24 hours. For businesses, we have introduced Roam Ready U.S. ®, a feature that offers competitive, flat-fee rates for voice, text and data; only when the service is used. These changes improve billing transparency and respond to our customers' desire to use their devices anywhere, any time.

In 2015, we stopped charging the incoming short messaging service (SMS) fee for our wireless customers roaming outside Canada. Our customers can now receive unlimited incoming text messages free of charge while travelling abroad.

In early 2015, we redesigned our TV packaging to provide our customers with more choice and flexibility, allowing them to select from a wide variety of theme packs or customize their own, at competitive pricing. On March 1, 2016, we launched new Lite basic TV plans on both our Optik and satellite-TV services, offering another choice to customers looking for basic channel services at lower prices. These new plans, as well as our existing offers of small theme packs, align with the intent of the Canadian Radio-television and Telecommunications Commission (CRTC) to provide greater customer choice and provide more freedom for Canadian viewers to subscribe to the channels they want to watch.

In March 2015, we launched TELUS Business Connect®, an integrated business communications solution for small businesses across Canada. This cloud-based solution provides businesses with a full suite of communications tools for both office and mobile use, including an automated attendant, call routing, teleconferencing, video-conferencing, toll-free numbers and a wireless backup for office Internet access. Business Connect allows users to use a single number across their mobile phone, tablet, desk phone and computers through voice over IP (VoIP) technology.

In June 2015, we announced a free public Wi-Fi service available to both TELUS and non-TELUS customers at more than 8,000 hotspots across B.C. and Alberta. Since early 2014, we have been actively expanding our public Wi-Fi network by working with thousands of businesses and many major sports and entertainment venues. This public Wi-Fi service is part of our network strategy of deploying small cells that integrate seamlessly with our 4G wireless network, automatically shifting our smartphone customers to Wi-Fi and offloading data traffic from our wireless spectrum to increasingly available Wi-Fi hotspots.

In October 2016, we began offering high-speed internet access over wireless LTE to customers in select rural areas in our Western wireline markets, a significant speed and experience upgrade from dial-up internet.



We launched Optik TV® 4K in mid-2016 and were the first carrier in Western Canada to offer 4K programming to customers with an Optik TV 4K set-top box. Those customers who also have a Netflix Premium subscription can stream Netflix 4K content directly through their 4K set-top box.

In June 2016, we launched Premium Plus wireless plans – allowing customers to get more affordable high-end devices, which results in a greater subsidy but higher ARPU over time and further extended Easy Roam to over 100 international destinations.

In 2016, we made a significant investment in our corporate stores, transforming over 100 to a new "digital life" format, featuring connected accessories and devices, and opening five "Connected Experience" flagship-style stores. These stores showcase TELUS' innovative products and services and strategically align to evolving retail needs and user experiences.

Growth continued for TELUS International in 2016, TELUS' global business process outsourcing (BPO) company. TELUS International now has more than 25,000 employees around the world, including in Canada, the United States, Europe, Central America and the Philippines and handles over 175 million BPO transactions annually via voice, email, chat, social media and back-office support across the telecommunications, utilities, high tech, gaming, finance, retail, e-commerce, travel and logistics and healthcare industries.

# Building national capabilities across data, IP, voice and wireless

In 2014, we acquired 30 wireless spectrum licences in Innovation, Science and Economic Development Canada's 700 MHz spectrum auction for \$1.14 billion and commenced its deployment across our network. Spectrum in the 700 MHz range has superior propagation capabilities that make it effective and efficient in covering Canada's expansive rural geography, as well as improving the quality of in-building coverage in urban areas.

In 2015, we acquired 21 AWS-3 wireless spectrum licences in the AWS-3 spectrum auction and the residual spectrum licences auction for \$1.5 billion, as well as 122 wireless spectrum licences in the 2500 MHz spectrum auction for \$479 million. The AWS-3 spectrum is well suited for delivering both coverage and added capacity in urban and rural environments. The 2500 MHz spectrum is ideal for carrying large amounts of data, making it especially valuable in urban centres, and complement TELUS' existing low band spectrum, which is able to penetrate farther into buildings and elevators and also travels farther in rural areas. The general deployment of the 2500 MHz spectrum licences into our network commenced in late 2015. We plan to utilize other spectrum licences purchased in recent years in combination with unlicensed supplementary spectrum, as network and device ecosystems evolve.

In June 2015, we announced a \$1 billion investment in the city of Edmonton to connect more than 90% of homes and businesses directly to our fibre-optic network over the next six years. In October 2015, we announced a \$1 billion investment in the city of Vancouver to connect the majority of homes and businesses directly to our fibre-optic network over the next five years. As the networks are launched, local residents and businesses will have access to much faster Internet speeds. These investments are part of our broader fibre-optic strategy to bring our fiber network to communities across B.C., Alberta and Eastern Quebec.

In May 2016, we concluded a spectrum licence assignment and rationalization agreement with Xplornet Communications Inc., a Canadian-based broadband Internet provider. Under this agreement, we transferred 3500 MHz fixed wireless access spectrum licences in certain of our secondary and tertiary regions, as well as monetary consideration, in exchange for Xplornet's 2300 MHz spectrum licences in similar regions. This spectrum licence exchange will allow for more robust mobile and fixed wireless broadband access for Canadians, as each party in the transaction can more effectively utilize these licences within its respective network. The 2300 MHz spectrum has a robust ecosystem of network infrastructure and devices, and complements our existing 2300 MHz spectrum holdings in Montreal, Quebec City and key markets in Western Canada, giving us use of the spectrum in this band in nearly every market.

Consistent with our network optimization strategy, we exchanged certain wireless telecommunication tower sites in 2016 with Bell Mobility. The exchange entailed the re-assignment of existing lease agreements for each tower site, as well as the transfer of all ownership of any leasehold construction on the leased premises, including tower structures, antennae and cabling. The exchange benefits both parties, as the tower sites are well positioned for utilization within each party's respective 4G long-term evolution (LTE) network footprint.

At the end of 2016, our 4G LTE network covered 97% of Canada's population, up from more than 96% at the end of 2015 and 89% at the end of 2014. Outside of LTE coverage areas, the LTE devices we offer also operate on our HSPA+ network, which covered 99% of the population at December 31, 2016. Our high-speed broadband coverage reached more than 2.9 million households and businesses in B.C., Alberta and Eastern Quebec at December 31, 2016, including approximately 1.08 million homes and businesses covered by fibre-optic cable, up from 0.69 million homes and businesses in 2015, which now provides those premises with immediate access to our gigabit-capable fibre-optic network.

Under an agreement with the Government of B.C., since 2011, we have been providing telecommunications and strategic services to the government and its public sector partners. By December 2016, we have extended wireless coverage along 1,720 km of primary and secondary highways in B.C. Additionally, we have upgraded service at 1,415 of 1,417 B.C. public schools from legacy networks to the province's next generation network.



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

On April 1, 2014, we acquired the business assets of Groupe Enode Inc., a Quebec-based security IT firm that specializes in providing businesses and government agencies with technologies and services for security and risk management. In January 2015, we announced an acquisition of a 20% stake in Alithya, a Quebec-based information technology and consulting services provider, with offices in Canada and France. This strategic investment complements TELUS' focus on information and communication technology and managed infrastructure solutions with a suite of professional services capabilities that combined can offer our clients and end-to-end digital transformation experience.

In June 2015, we announced the closure of the remaining 59 Black's Photography retail stores across Canada by August 2015. Technological innovations have changed the way Canadians take and share photographs, with fewer of them using retail photo outlets. As a result, we determined that Black's was not core to our future operations. We sold the Black's trademark and online and mobile businesses to Les Pros de la Photo (Les Pros), a Quebec-based photo imaging company, effective August 4, 2015. As a result, Les Pros will carry forward the Black's brand.

In July 2015, we announced that the TELUS Garden real estate joint venture, in which TELUS is a 50% partner and Westbank Projects Corp. is the other partner, had issued \$225 million of 3.4% green bonds, secured by the office tower, due in 2025. This is the first time in North America that green mortgage bonds have been used to support real estate financing. Proceeds of the issuance were primarily used to retire short-term construction financing for the office tower.

In September 2015, we announced the opening of the TELUS Garden™ office tower in Vancouver. The office tower houses our new global headquarters, as well as other tenants. The TELUS Garden development in the heart of downtown Vancouver includes a 24-storey office tower, as well as a 53-storey residential condominium tower built to LEED gold standards. In March 2016, the Canada Green Building Council awarded leadership in energy and environmental design (LEED) platinum certification to our office tower. This is the highest LEED rating a building can receive, demonstrating our commitment to technological innovation and environmental stewardship. In partnership with Westbank Projects Corp., the one-million-square-foot TELUS Garden development includes 450,000 square feet of office space, 65,000 square feet of retail space, and a 53-storey residential tower that was officially opened in June 2016.

TELUS continues to lead the industry with our small cell driven network strategy, seamlessly integrating small cells with the rest of our 4G wireless network, thus offloading traffic from our macro network and preserving capacity in high traffic areas or extending coverage at lower cost

Progress continued in 2016 on the TELUS Sky™ residential, retail and commercial real estate redevelopment project in Calgary, Alberta. The project will be constructed to LEED platinum standards and, when completed, will be one of the most technologically innovative and environmentally friendly buildings in North America. Construction is expected to be completed in 2018. In response to the economic conditions in Calgary, the TELUS Sky partnership has taken a number of steps to better position the development for success, including: moving to a single-phase occupancy to delay the start dates of any potential office leases from the first quarter of 2018 to the fourth quarter of 2018; revising revenue projections and adjusting tenant inducements to align with current market expectations; and evaluating various approaches to adjusting the mix between office and residential, as well as creating a wider range of residential offerings to address current market demand. See Section 7.11 Transactions between related parties – Transactions with real estate joint ventures in the 2016 annual MD&A for additional information.

In February 2016, we partnered with Microsoft and Avanade, a leading global provider of innovative digital business and technology services in the Microsoft ecosystem, to offer Skype for Business. Powered by TELUS, Skype for Business offers a full suite of enterprise-grade communication and collaboration tools that includes voice and video calls, instant messaging and online meetings. This service is delivered as a fully managed private cloud solution over our network of intelligent Internet data centres located across Canada, and is available through a single interface on almost all devices.

In May 2016, the Company announced an agreement with BCE Inc. ("BCE"), pursuant to which it would acquire a portion of Manitoba Telecom Services Inc.'s ("MTS") postpaid wireless subscribers and dealer locations in Manitoba, dependent on the successful completion of BCE's acquisition of MTS, and subject to regulatory approvals. On February 15, 2017, BCE announced that it had received approval from the Competition Bureau and ISED and that it expected to complete its transaction with MTS on March 17, 2017. BCE has agreed to divest approximately one-quarter of MTS' postpaid wireless subscribers (equivalent to approximately one per cent of TELUS' 8.6 million total wireless subscribers) and 13 MTS retail locations to TELUS (through one or more of its subsidiaries) for total proceeds of approximately \$300 million, subject to final adjustments. Although the transaction with TELUS is expected to close on or about April 1, 2017, customers will be actively migrated to TELUS over several months in a customer-friendly manner.

In June 2016, we announced the completion of an agreement with Baring Private Equity Asia (Baring Asia), under which it has acquired a 35% non-controlling interest in TELUS International (Cda) Inc. (TELUS International), a global provider of customer service, information technology (IT) and business process outsourcing services. See *Section 1.3 Highlights of 2016* in the 2016 annual MD&A for additional information.



During the past three years, we continued to advance our position in healthcare information management with the following acquisitions:

- In March 2014, we acquired Med Access Inc., a company based in Kelowna, B.C. providing EMR services to 2,000 specialty and general practice physicians in B.C., Alberta, Saskatchewan, Manitoba and Ontario.
- In September 2014, we acquired ZRx Prescriber from ZoomMed Inc., a web-based technology that allows
  physicians to write and deliver prescriptions while accessing a patient's insurance coverage information at the
  moment of prescription. With this technology, TELUS Health has become the first Canadian healthcare technology
  provider to offer online insurance coverage validation at the moment of prescribing to accelerate the reimbursement
  of insurance claims.
- In December 2014, we acquired XD<sup>3</sup> Solutions, a pharmacy management solution provider, which serves Quebecbased pharmacies. The company's software product is intended to enhance collaboration between pharmacists, physicians, other healthcare professionals and insurers to deliver a better patient care experience.
- In March 2015, we completed our acquisition of Medesync, a company whose certified EMR product will bring a bilingual web-based interface to our EMR portfolio in Quebec. Medesync uses cloud-based and mobile technologies to provide physicians with access to EMR from any computer or mobile device.
- Throughout 2015, we furthered our commitment to community engagement in Montreal by expanding the reach of a
  mobile health clinic powered by TELUS Health and Doctors of the World. Since its launch in June 2014, the clinic
  servicing Montreal's homeless population has enabled more than 3,000 medical acts such as vaccinations,
  screening tests and general health examinations; and has reintegrated more than 800 individuals of Montreal's
  disadvantaged community back into the public health system.
- In September 2016, TELUS acquired the Canadian business operations of Nightingale Informatix Corp., including its customer base and proprietary EMR software.
- In December 2016, TELUS acquired the business operations of Osler Systems Management, including its customer base and proprietary EMR software.

## Going to market as one team under a common brand, executing a single strategy

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

In the CCTS report for the 12-month period ended July 31, 2014, TELUS was the subject of 5.8% of the total complaints submitted to the CCTS for all providers, an amount that was lower than complaints reported for other national carriers, according to the CCTS' 2014 annual report. Additionally, complaints related to TELUS decreased by 26% in 2014, despite growth in our wireless and wireline subscriber base.

In the December 2015 CCTS report for the 12-month period ended July 31, 2015, TELUS had the lowest number of complaints among national wireless carriers at 4.7% of total complaints submitted to the CCTS. Complaints related to Koodo Mobile® increased by 1.7% from 2014, while Public Mobile achieved a 57% reduction in complaints compared to 2014. With only 1.8% and 0.6% of the total complaints, respectively, Koodo Mobile and Public Mobile continued to lead their peer group of national carrier flanker brands with the lowest number of complaints submitted to the CCTS in 2015.

In the November 2016 CCTS report for the 12-month period ended July 31, 2016, TELUS once again received the fewest customer complaints among all national carriers. TELUS, Koodo® and Public Mobile were the subjects of 7.0%, 2.5% and 0.6% of the total customer complaints submitted to the CCTS, respectively, or 10.1% of total customer complaints in the aggregate. In addition, we recorded the lowest postpaid churn among our peers of 0.95% in 2016.

## Investing in internal capabilities to build a high-performance culture and efficient operation

On August 10, 2015, we announced leadership changes following an extensive review by our Board of Directors (Board), which included the resignation of Joe Natale as President and Chief Executive Officer (CEO) and as a member of the Board, with Darren Entwistle resuming the role of President and CEO and Dick Auchinleck being named independent Chair of the Board. Darren and Dick have both agreed to serve in these capacities on a long-term basis.

We incur incremental, non-recurring restructuring and other costs with the objectives of improving our operating efficiency and effectiveness and addressing the ongoing decline in profitability in certain areas of our business. In 2015, our restructuring and other costs totalled \$226 million, increasing from \$75 million in 2014, mainly reflecting our initiative to reduce approximately 1,500 net full-time positions over several quarters beginning in the fourth quarter of 2015, as well as the closure of Black's Photography retail stores and real estate rationalization. In 2016, we incurred \$479 million of restructuring and other costs which includes the \$305 million immediately vesting transformative compensation described below.

In 2015, we commenced collective bargaining with the Telecommunications Workers Union (TWU), United Steel Workers Local Union 1944, to renew the collective agreement that expired on December 31, 2015. On October 3, 2016, TELUS and the TWU announced that they had reached a tentative five-year collective agreement which would be subject to ratification by members of the TWU. The ratification process was completed in November 2016, with a majority of TWU



members who cast their ballots voting to accept the tentative agreement. The new collective agreement with the TWU is in place through to December 31, 2021, and covers approximately 37% of our Canadian workforce as at December 31, 2016.

In December 2016, a new collective agreement between TELUS and the Syndicat des agents de maîtrise de TELUS (SAMT) was ratified by a majority of the SAMT members. This collective agreement will take effect on April 1, 2017, and will expire on March 31, 2022. A new collective agreement between TELUS and the Syndicat québécois des employés de TELUS (SQET) was also ratified in December 2016. The new agreement will be effective from January 1, 2018, to December 31, 2022. The current SQET collective agreement will remain in effect until it expires on December 31, 2017.

In the fourth quarter of 2016, we recorded an expense of \$305 million in respect of immediately vesting transformative compensation paid to substantially all of our existing unionized and non-unionized Canadian-situated workforces; a portion of the after-tax value for certain lump-sum recipients was paid in Common Shares purchased in the market for that purpose under our normal course issuer bid (NCIB) by an employee benefit plan trust. The one-time payment to unionized employees in the fourth quarter of 2016 represents both a one-time payment in lieu of wage increases for the period July 1, 2016, to December 31, 2018 (a period of 30 months) and a one-time payment as compensation for reductions in certain premium payments and paid time-off provisions that underpin future productivity improvements. A similar approach with respect to salary increases was adopted for management employees. For most of our current Canadian-situated management employees, there was a one-time payment in the fourth guarter of 2016 in lieu of general salary increases for 2017 and 2018. For the unionized and non-unionized workforces, approximately 40% of the after-tax value of such qualifying lump-sum payments was paid in our Common Shares.

Annually, we conduct team member Pulsecheck engagement surveys, administered by Aon Hewitt, to gather confidential team member feedback about TELUS as a place to work and measure our progress in establishing a high performance culture. Following each survey, business units and departments use their Pulsecheck results to create and review their current action plans and prioritize their ongoing actions. In 2015, our employee engagement score remained in the top quartile of all employers surveyed, elevating our high-performance culture and realizing world-leading engagement results for the third year in a row. Significant improvements in employee engagement have helped us focus on putting customers first. In 2016, our employee engagement levels continue to place our organization within the top quartile.

For additional details on 2016 developments and other events or conditions that influenced our general development, see Section 2.2 Strategic imperatives, as well as progress on our corporate priorities in Section 3 Corporate priorities in the 2016 annual MD&A. For a discussion of changes in our business expected in 2017, see Section 9 General trends, outlook and assumptions in the 2016 annual MD&A.

For a review of the events and conditions that influenced our general development during 2014 and 2015, and how our business developed over those two years, see each of the 2014 and 2015 annual Management's Discussion and Analysis, Section 1.2 The environment in which we operate, Section 2.2 Strategic imperatives, as well as progress on our corporate priorities for the relevant year in Section 3 Progress on 2014 corporate priorities (2014) and Section 3 Progress on 2015 corporate priorities (2015).

# 5. DESCRIPTION OF BUSINESS

## 5.1 Who we are

TELUS is one of Canada's largest telecommunications companies, providing a wide range of telecommunications services and products, including wireless and wireline voice and data. Data services include: internet protocol (IP); television; hosting, managed information technology, security and cloud-based services; healthcare solutions; and business process outsourcing. In 2016, we generated \$12.8 billion in revenue and had 12.7 million subscriber connections. This included 8.6 million wireless subscribers, 1.7 million Internet subscribers, 1.4 million wireline residential network access lines, and 1.1 million TV subscribers.

# (a) Organization

Our wireless and wireline businesses are organized to leverage the convergence of technologies, to provide integrated solutions differentiating us from our competitors and to improve operating efficiency and effectiveness. The operating segments that are regularly reported to our Chief Executive Officer (our chief operating decision-maker) are wireless and wireline. 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 operating results of which are regularly reviewed by a chief operating decision-maker to make resource allocation decisions and to assess performance. As we do not currently aggregate operating segments, our reportable segments are also wireless and wireline. Segmentation is based on similarities in technology, the technical expertise required to deliver the services and products, customer characteristics, the distribution channels used and regulatory treatment. We offer our wireless and wireline services primarily through TCC.

A significant judgment we make is in respect of distinguishing between our wireless and wireline operations and cash flows, such distinction having been significantly affected by the convergence and integration of our wireless and wireline telecommunications infrastructure technology and operations.



Through December 31, 2015, our judgment was that our wireless and wireline telecommunications infrastructure technology and operations had not experienced sufficient convergence to objectively make their respective operations and cash flows practically indistinguishable. The continued build-out of our technology-agnostic fibre-optic infrastructure, in combination with converged edge network technology, has significantly affected this judgment, as has the commercialization of fixed-wireless solutions.

It has become increasingly impractical to objectively distinguish between our wireless and wireline operations and cash flows, and the assets from which those cash flows arise. Our judgment as to whether these operations can continue to be judged to be individual components of the business and discrete operating segments may change in the future.

The increasing impracticality of objectively distinguishing between our wireless and wireline cash flows, and the assets from which those cash flows arise, is evidence of their increasing interdependence; this may result in the unification of the wireless cash-generating unit and the wireline cash-generating unit as a single cash-generating unit for impairment testing purposes in the future.

# (b) Our strategy

Our strategic intent is to unleash the power of the Internet to deliver the best solutions to Canadians at home, in the workplace and on the move. Our focus is on our core telecommunications business in Canada supported by our international contact centres and outsourcing capabilities.

We developed six strategic imperatives in 2000 that remain relevant for future growth, despite changing regulatory, technological and competitive environments. The six strategic imperatives are:

- Focusing relentlessly on growth markets of data, IP and wireless;
- Providing integrated solutions that differentiate TELUS from our competitors;
- Building national capabilities across data, IP, voice and wireless;
- Partnering, acquiring and divesting to accelerate the implementation of TELUS' strategy and focus TELUS' resources on core business;
- · Going to market as one team under a common brand, executing a single strategy; and
- Investing in internal capabilities to build a high-performance culture and efficient operation.

A consistent focus on the strategic imperatives guides our actions and contributes to the achievement of our financial goals. See our discussion in *Section 2.2 Strategic imperatives* in the 2016 annual MD&A. To advance our long-term strategic initiatives and address near-term opportunities and challenges, we set new corporate priorities each year. See *Section 3 Corporate priorities* in the 2016 annual MD&A for progress on our 2016 corporate priorities, as well as our 2017 corporate priorities.

## (c) Business overview

Our principal markets, services and products and competition overview are described in *Section 4.1 Principal markets* addressed and competition in the 2016 annual MD&A. Further details related to competition can be found in *Section 10.2 Competition* in the 2016 annual MD&A.

Our assets and resources, including employees, brand and distribution methods, tangible properties (such as our telecommunications networks and network facilities), intangible properties (such as brand and wireless spectrum licences) and an overview of foreign operations are discussed in *Section 4.2 Operational resources* in the 2016 annual MD&A. Further details on our employees are provided below under *Employee relations* and further details on our wireless spectrum licences are provided below under *Regulation - Radiocommunications authorizations and spectrum licences*.

Intellectual property, which we own or which we have been granted the right to use, is an essential asset for TELUS. Intellectual property enables us to be known and recognized in the marketplace through our brand style, trade dress, domain names and trademarks. It protects our know-how and software, systems, processes and method of doing business through copyrights, patents and information treated as confidential. It also helps us to increase our competitiveness by fostering an innovative work environment. Each form of intellectual property is important to our success. For instance, the TELUS brand plays a key role in product positioning and our Company's reputation. TELUS aims to maximize the value of TELUS' intangible assets in the areas of innovation and invention by ensuring that they are adequately used, protected and valued. To protect our intellectual property assets, we rely on a combination of legal protections afforded under copyright, trade-mark, patent and other intellectual property laws as well as contractual provisions under licensing arrangements. Further information on recognized tangible and intangible properties can be found in Section 8.1 Critical accounting estimates in the 2016 annual MD&A.

We depend on various key third-party suppliers and vendors to provide us with equipment and services, such as network equipment and handsets that we need in order to operate our business and provide products and services to our customers. If these suppliers or vendors fail to provide equipment or service on a timely basis or fail to meet our performance expectations, we may be unable to provide our products and services as and when requested by customers. We also may be unable to continue to maintain or upgrade our networks. Our dependence on suppliers and vendors is described in *Section 10.3 Technology - Supplier risks* in the 2016 annual MD&A. Reciprocal network access agreements, principally with Bell Canada, have facilitated our deployment of wireless technologies and provided the



means for us to better manage our capital expenditures. These agreements are expected to provide ongoing cost savings beyond the initial network build, as well as the flexibility to invest in service differentiation and support systems.

For revenue and other financial information on the two most recently completed financial years with respect to our wireless and wireline businesses, see *Section 5.4 Wireless segment* and *Section 5.5 Wireline segment* in the 2016 annual MD&A.

An overview of the Canadian economic environment and the telecommunications industry can be found in Section 1.2 The environment in which we operate and Section 9 General trends, outlook and assumptions in the 2016 annual MD&A. Seasonal trends that have impacted us are described in Section 5.2 Summary of consolidated quarterly results, trends and fourth quarter recap and in Section 5.4 Wireless segment in the 2016 annual MD&A.

## (d) Competition

In 2016, the wireless industry continued to adjust to the highly competitive and capital intensive landscape in Canada. Small independent new entrants continued to be consolidated with cable-TV provider Shaw Communications Inc. acquiring Wind Mobile Corp. in March 2016 for \$1.6 billion. Wind Mobile was subsequently rebranded as Freedom Mobile in November 2016. Videotron continues to operate as a wireless provider in Quebec, and Eastlink continues to operate as a wireless provider in Atlantic Canada. These cable-TV based wireless providers, in addition to carriers present in Manitoba and Saskatchewan, represent a fourth carrier in all major markets. In January 2016, Shaw Communications Inc. also sold its wholly owned broadcasting subsidiary, Shaw Media Inc., to Corus Entertainment for \$2.65 billion.

In May 2016, the Company announced an agreement with BCE Inc. ("BCE"), pursuant to which it would acquire a portion of Manitoba Telecom Services Inc.'s ("MTS") postpaid wireless subscribers and dealer locations in Manitoba, dependent on the successful completion of BCE's acquisition of MTS, and subject to regulatory approvals. On February 15, 2017, BCE announced that it had received approval from the Competition Bureau and ISED and that it expected to complete its transaction with MTS on March 17, 2017. BCE has agreed to divest approximately one-quarter of MTS' postpaid wireless subscribers (equivalent to approximately one per cent of TELUS' 8.6 million total wireless subscribers) and 13 MTS retail locations to TELUS (through one or more of its subsidiaries) for total proceeds of approximately \$300 million, subject to final adjustments. Although the transaction with TELUS is expected to close on or about April 1, 2017, customers will be actively migrated to TELUS over several months in a customer-friendly manner. On February 15, 2017, BCE also announced that BCE and MTS had agreed to transfer to Xplornet Communications Inc. ("Xplornet") a total of 40 MHz of 700 MHz, AWS-1 and 2500 MHz wireless spectrum currently held by MTS, 24,700 wireless customers and 6 dealer locations, and that Xplornet will receive transitional remedy network access from Bell MTS in urban areas of Manitoba for three years and other operational benefits as Xplornet builds out its own wireless network in Manitoba.

Competition in the wireline sector remained strong with cable-TV providers offering High Speed Internet Access (HSIA) services between 150 Mbps and 1 Gbps to compete with telecom service providers. At the same time telecom service providers such as TELUS Communications and Bell Canada Enterprises Inc. continued to expand their fibre-to-the-home networks allowing them to offer higher speed symmetrical HSIA services and support high resolution services such as 4K TV. In early 2017, Shaw Communications Inc. rolled out BlueSky TV, their next generation TV service, licensing an existing platform developed by Comcast, a U.S.-based cable company. Competitors of TELUS International include other business process outsourcers such as Convergys, Sitel, Genpact and Sutherland.

Competitors for TELUS Health include providers of EMR and pharmacy management products, such as Omnimed, Familiprix, Kroll, Fillware and ARI. Competitors also include systems integrators, health service providers, such as Loblaws and McKesson that have also become vertically integrated and own a mix of health services delivery, IT solutions and related services, and potentially, global providers such as ATEB that could achieve expanded Canadian footprints.

We expect continued strong competition in the wireline and wireless businesses in all principal markets and geographic areas.

See Section 4.1 Principal markets addressed and competition in the 2016 annual MD&A for a summary of the competitive environment in each of our principal markets and geographic areas. Also refer to Section 10.2 Competition for further details on the risks associated with our competitive environment and Section 9 General trends, outlook and assumptions in the 2016 annual MD&A for an assessment of our competitive position as it relates to the telecommunications industry generally, and specifically as it relates to the wireless and wireline industries.

# (e) Corporate social responsibility and environment

We are committed to following sustainable and responsible business practices and to making decisions that balance economic growth with social and environmental benefits. More information about corporate social responsibility at TELUS can be found in our Sustainability Report at **sustainability.telus.com**.

TELUS has a strong foundation of sustainability governance which supports our commitment to environmental stewardship and responsible corporate citizenship. We advance this responsibility through our balanced approach to business, focusing on the social, economic and environmental impact of the technology solutions we provide to Canadians. TELUS values are reflected in our Environmental Policy and our commitment to:

 comply with applicable environmental legal requirements and meet voluntary requirements that are endorsed by our senior leaders;



- strive to prevent pollution using standards, procedures or other controls and by minimizing energy consumption and greenhouse gas emissions, waste generation, and spills and releases;
- continually improve our environmental performance through establishing environmental and sustainability objectives, targets, and programs, reviewing and updating our ISO 14001:2004 certified Environmental Management System, and disclosing our performance in our Sustainability Report.
- build an environmentally future friendly culture through education and communications.

Our environmental objectives, targets and performance are monitored and reported yearly through our Sustainability Report. Compliance with applicable environmental legislation and regulations does not and is not expected to have, a material effect upon our capital expenditures, net income or competitive position. However, environmental legislation and regulation and its interpretation is constantly evolving, which we expect will continue in the future. The Company monitors changes closely and modifies its practices where necessary and appropriate. A detailed report of our environmental risk mitigation activities can be found in our Sustainability Report and concerns related to the environment can be found in *Section 10.10 Health*, *safety and environment* in the 2016 annual MD&A.

The Company's properties and neighbouring sites, particularly those in areas of long-term industrial use, may have had historic uses, or may have current uses, in the case of neighbouring sites, which may affect our properties and require further study or remedial measures. The Company allocates budget on a yearly basis to monitor and manage properties with known environmental impacts and utilizes a risk matrix based on the Canadian Council of Ministers of the Environment methodology to prioritize funding. The Company cannot provide assurance that all environmental liabilities have been identified or that all remedial measures will be effective.

Our commitment to our communities is evidenced by our desire to give where we live, to help our fellow citizens in need to build stronger communities and create a stronger bond with our customers. We accomplish this through a range of initiatives, such as the TELUS Days of Giving®, TELUS Match, TELUS Volunteer Awards and grants to local not-for-profit organizations through local community boards, both domestically and internationally. Details about our community investment program can be found at **community.telus.com**.

# (f) Employee relations

As at December 31, 2016, we employed approximately 51,250 employees, including approximately 25,500 employees in TELUS International who are located outside of Canada. Approximately 11,000 of our employees in Canada are represented by a trade union and covered by a collective agreement.

We are signatories to five collective agreements. The largest agreement is with the Telecommunications Workers Union (TWU), United Steelworkers Union Local 1944 covering approximately 9,500 clerical, operator services and technical employees in the wireless and wireline segments across Canada. In November of 2016, TELUS and the TWU, USW agreed to a new collective agreement that is effective from November 27, 2016, to December 31, 2021. In the province of Quebec, in addition to employees covered by the TWU agreement, there are approximately 1,400 employees in the wireline segment covered by two separate collective agreements. The agreement with the Syndicat Québécois des employés de TELUS (SQET) which covers approximately 800 trades, clerical and operator services employees expires on December 31, 2017. Of note, TELUS and the SQET entered into collective bargaining in late 2016 and signed a new collective agreement that comes into effect on January 1, 2018, and expires on December 31, 2022. The second wireline agreement in Quebec is with the Syndicat des agents de maîtres de TELUS (SAMT) which covers approximately 600 professional and supervisory employees, and expires on March 31, 2017. The SAMT also agreed to enter into early negotiations with TELUS and the parties agreed to a collective agreement that comes into effect on April 1, 2017 and expires on March 31, 2021. The SAMT also represents a small number of employees in the wireless segment under a separate collective agreement.

Our subsidiary, TELUS Sourcing Solutions Inc., is a signatory to a collective agreement with the B.C. Government and Services Employees' Union which covers less than 100 employees. That agreement came into effect on May 1, 2016, and expires on April 30, 2019.

See also Section 4.2 Operational resources and Section 10.5 Human resources – Employee retention, recruitment and engagement in the 2016 annual MD&A.

#### 5.2 Risk factors

The risk factors in Section 10 Risks and risk management in the 2016 annual MD&A are hereby incorporated by reference.

# 5.3 Regulation

#### General

Telecommunications services, broadcasting services and radiocommunications services in Canada are regulated under federal legislation by the CRTC, the Minister of Canadian Heritage and the Minister of Innovation, Science and Economic Development pursuant to the Telecommunications Act, the Broadcasting Act and the Radiocommunication Act.

The Telecommunications Act gives the CRTC the power to regulate the provision of telecommunications services, and to forbear from regulating (e.g. not requiring carriers to file tariffs) certain services or classes of services if they are or will be subject to a degree of competition sufficient to protect the interests of customers. The CRTC may refrain, in whole or in part,



and conditionally or unconditionally, from regulating a telecommunications service. For example, even when the CRTC forbears from rate regulation in respect of a service, it can continue to regulate the service in other respects, including with respect to the conditions under which it is offered, for example, to ensure network access and interconnection.

See Section 10.4 Regulatory matters – Changes to our regulatory regime in the 2016 annual MD&A for further details related to regulation generally.

## Regulation of wireless services

Wireless telecommunications services depend on the use of radio frequencies. The use of radio spectrum and radio apparatus is subject to licensing by the Minister of Innovation, Science and Economic Development pursuant to the Radiocommunication Act. The CRTC has jurisdiction over the rates, terms and conditions applicable to the provision of wireless service. The CRTC and the Minister of Innovation, Science and Economic Development exercise complementary, non-overlapping jurisdiction over wireless service – each regulating different aspects of the same service. The Minister of Innovation, Science and Economic Development has the authority to suspend or revoke radio authorizations (i) with the consent of the holder, (ii) where the holder has contravened the Radiocommunication Act, the regulations or terms and conditions of its radio authorization, or where the radio authorization was obtained through misrepresentation, and (iii) where the holder has failed to comply with a request to pay fees or interest due. Licence revocation is rare; licences are usually renewed upon expiration. Commercial mobile radio spectrum licences are typically issued for durations of 10 or 20 years with a high expectation of renewal where all conditions of licence, including deployment, have been met.

See Section 9.4 Telecommunications industry regulatory developments and proceedings in the 2016 annual MD&A for further details related to regulation of wireless services generally and specifically in relation to the review of Wireless Code and the wireless wholesale services review.

# Radiocommunications authorizations and spectrum licences

TELUS subsidiaries hold radio authorizations for a variety of wireless services and applications, both mobile and fixed, including for 1.9 GHz personal communications services (PCS) spectrum throughout Canada, 800 MHz SMR/ESMR spectrum in all of the major Canadian markets, cellular 850 MHz spectrum in Alberta, B.C. and Eastern Québec, AWS-1 spectrum nationally, 700 MHz spectrum nationally, 2500 MHz spectrum nationally, and AWS-3 spectrum in major Canadian markets. TELUS subsidiaries hold various radio spectrum licences in the 2.3 GHz, 3.5 GHz and 24/38 GHz bands throughout Canada, as well as other spectrum licences used for other miscellaneous wireless services.

## **Broadcasting services**

TCC holds Class 1 Regional broadcasting distribution licences to serve areas in each of B.C., Alberta and Quebec. TCC also holds a national licence to operate a video-on-demand programming service and a broadcasting licence to operate a national terrestrial pay-per-view service.

See Section 10.4 Regulatory matters – Changes to our regulatory regime in the 2016 annual MD&A for further details related to regulation generally, Section 9.4 Telecommunications industry regulatory developments and proceedings in relation to TELUS broadcasting distribution undertakings including with respect to broadcasting distribution undertaking licences held TELUS, enforcement of the CRTC's vertical integration framework and the Minister of Canadian Heritage's review of Canada's cultural policies, and Section 10.2 Competition for further details in relation to vertical integration into broadcast content ownership by competitors.

# 6. DIVIDENDS AND DISTRIBUTIONS

The dividends per Common Share declared with respect to each quarter by TELUS, during the three-year period ended December 31, 2016, are shown below:

Quarter ended <sup>1</sup>	2016	2015	2014
March 31	\$0.44	\$0.40	\$0.36
June 30	\$0.46	\$0.42	\$0.38
September 30	\$0.46	\$0.42	\$0.38
December 31	\$0.48	\$0.44	\$0.40
Total	\$1.84	\$1.68	\$1.52

<sup>1</sup> Paid on or about the first business day of the next month.

Our shareholders received a total of \$1.84 per share in declared dividends in 2016, an increase of 9.5% from 2015. Our Board reviews the dividend rate quarterly. Our quarterly dividend rate will depend on an ongoing assessment of free cash flow generation and financial indicators including leverage, dividend yield and payout ratio. On February 8, 2017, a first quarter dividend of \$0.48 per share was declared, payable on April 3, 2017, to shareholders of record at the close of business on March 10, 2017. The first quarter dividend for 2017 reflects a cumulative increase of \$0.04 per share or 9.1% from the \$0.44 per share dividend paid in April 2016, consistent with our multi-year dividend growth program.

We first announced our dividend growth program in May 2011. In May 2016, we announced our intention to target ongoing semi-annual dividend increases, with the annual increase in the range of 7 to 10% from 2017 through to the end



of 2019, 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 Board's assessments have resulted in 12 semi-annual dividend increases from 2011 to 2016, with annual increases being approximately 10%. Our long-term dividend payout ratio guideline is 65 to 75% of prospective net earnings per share. Based on dividends announced as of February 8, 2017, and 590 million shares outstanding at December 31, 2016, dividend declarations would total approximately \$1.13 billion in 2017, before taking into account any Common Shares purchased and cancelled under our 2017 NCIB. There can be no assurance that we will maintain a dividend growth program through 2019.

## 7. DESCRIPTION OF CAPITAL STRUCTURE

## 7.1 General description of capital structure

The authorized capital of TELUS consists of 4,000,000,000 shares, divided into: (1) 2,000,000,000 Common Shares without par value; (2) 1,000,000,000 First Preferred shares without par value, issuable in series and; (3) 1,000,000,000 Second Preferred shares without par value, issuable in series. The Common Shares are listed for trading on the Toronto Stock Exchange (TSX) and the New York Stock Exchange (NYSE). The replacement of our dual share class structure with a single class of issued and outstanding voting shares became effective February 4, 2013, pursuant to a plan of arrangement under the provision of Division 5 of Part 9 of the *Business Corporations Act* (British Columbia). Consistent with TELUS' move to a single class share structure, at the 2013 annual and special meeting, shareholders approved alterations to the Notice of Articles and the Articles of TELUS to eliminate the class of Non-Voting Shares and increase the maximum number of Common Shares that the Company is authorized to issue from 1,000,000,000,000 to 2,000,000,000, in order to keep the aggregate number of equity shares authorized for issuance the same. Shareholders also approved amendments at the same meeting to modernize the Articles, address statutory and regulatory changes and reflect best practice.

Also, a subdivision of the issued and outstanding Common Shares on a two-for-one basis was effected April 16, 2013.

#### **Common Shares**

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

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

The Common Shares are subject to constraints on transfer to ensure our ongoing compliance with the foreign ownership provisions of the Telecommunications Act, the Radiocommunication Act and the Broadcasting Act. See 7.2 Constraints – Canadian ownership requirements in this AIF.

#### First Preferred shares

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

# Second Preferred shares

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

# Shareholder rights plan

We first adopted a shareholder rights plan in March 2000, which expired on March 20, 2010. The TELUS Board of Directors adopted a substantially similar shareholder rights plan (Rights Plan) on March 12, 2010 (Effective Date), which



was ratified by shareholders of both share classes at the May 2010 annual and special meeting. On May 9, 2013, the holders of the Common Shares approved the amendment of, and reconfirmation of, the Rights Plan, which among other things, reflected the elimination of the Non-Voting Share class from TELUS' authorized share structure, and at the annual general meeting held on May 5, 2016, the holders of the Common Shares approved the reconfirmation of the Rights Plan. The Rights Plan has a term expiring upon the conclusion of the Company's annual meeting in 2019.

Under the current Rights Plan, TELUS issued one right (Right) in respect of each Common Share outstanding as at the Effective Date. The Rights Plan has a term of just over nine years, subject to shareholder confirmation every three years. Each Right, other than those held by an Acquiring Person (as defined in the Rights Plan) and certain of its related parties, entitles the holder in certain circumstances following the acquisition by an Acquiring Person of 20% or more of the Common Shares of TELUS (otherwise than through the "Permitted Bid" requirements of the Rights Plan) to purchase from TELUS \$320 worth of Common Shares for \$160 (i.e. at a 50% discount) respectively.

#### Normal course issuer bid and shelf prospectus

On September 14, 2016, we successfully completed our 2016 normal course issuer bid (2016 NCIB), purchasing and cancelling approximately 9,691,400 Common Shares and returning \$379 million to shareholders. The purchased shares represent 1.6% of the Common Shares outstanding prior to commencement of the 2016 NCIB. With the conclusion of the 2016 NCIB, TELUS has purchased and cancelled 66 million shares for \$2.4 billion since its multi-year share purchase program began in 2013, reducing shares outstanding by 10.1 per cent.

In addition, we received approval from the TSX for a new NCIB program (2017 NCIB) to purchase and cancel up to 8 million Common Shares with a value of up to \$250 million over a 12-month period, commencing September 30, 2016. Such purchases may be made through the facilities of the TSX, the NYSE and alternative trading platforms or otherwise as may be permitted by applicable securities laws and regulations. This represents up to 1.4% of outstanding TELUS Common Shares prior to the commencement of the 2017 NCIB. Other than as noted below, all Common Shares purchased by TELUS will be cancelled. In lieu of purchasing and cancelling shares, an employee benefit plan trust for non-executive TELUS employees received regulatory approval to purchase up to 25 per cent of the Common Shares under the 2017 NCIB for distribution to non-executive TELUS employees. Shares will be purchased only when and if we consider it opportunistic. There can be no assurance that we will complete our 2017 NCIB program or that we will renew and complete our NCIB program in each of the next two years, as any decision to purchase shares will depend on the assessment by our Board and the determination of the Company's financial position and outlook, and the market price of TELUS Common Shares. See risk discussion in Section 10.7 Financing, debt requirements and returning cash to shareholders of our 2016 annual MD&A.

On March 29, 2016, we filed a shelf prospectus, which was amended and restated on August 30, 2016, in effect until April 2018, pursuant to which we may offer up to \$3 billion of long-term debt or equity securities. On September 19, 2016, we issued U.S.\$600 million of senior unsecured notes with a 10-year maturity at 2.80%. On March 6, 2017, we issued U.S.\$500 million of senior unsecured notes with a 10-year maturity at 3.70% and \$325 million of senior unsecured notes with a 31-year maturity at 4.70%. As of March 15, 2017, we can offer up to \$1.2 billion of debt or equity securities under the existing shelf prospectus.

#### 7.2 Constraints

## Canadian ownership requirements

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

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

Substantially the same rules apply under the Broadcasting Act, but an additional requirement under the Broadcasting Act is that the chief executive officer of a company that is a licensed broadcasting undertaking must be a Canadian citizen or a permanent resident of Canada. TELUS Corporation has filed with the CRTC the requisite documentation affirming TCC's status as a Canadian carrier. We further intend that TCC will remain controlled by TELUS Corporation and that it will remain "Canadian" for the purposes of Canadian ownership requirements.

The Canadian Telecommunications Common Carrier Ownership and Control Regulations (Ownership and Control Regulations), made pursuant to the Telecommunications Act further provide that in order for a company that holds shares in a carrier (carrier holding corporation) to be considered Canadian, not less than 66-2/3% of the issued and outstanding voting shares of that company must be beneficially owned by Canadians and that such company must not otherwise be controlled in fact by non-Canadians. To the best of our knowledge, Canadians beneficially own and control



in the aggregate not less than 66-2/3% of the issued and outstanding Common Shares of TELUS Corporation and TELUS Corporation is not otherwise controlled in fact by non-Canadians. For the purposes of these regulations, "Canadian" means among other things:

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

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

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

To ensure that TELUS Corporation remains Canadian and that any subsidiary of TELUS Corporation, including TCC, is and continues to be eligible to operate as a Canadian carrier under the Telecommunications Act, to be issued radio authorizations under the *Radiocommunication Act* (Canada) (Radiocommunication Act), or to be issued broadcasting licences under the Broadcasting Act, provisions substantially similar to the foregoing have been incorporated into the Articles of TELUS Corporation permitting its directors to make determinations to effect any of the foregoing actions.

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

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

See Section 10.4 Regulatory matters in the 2016 annual MD&A for further details related to regulation generally and specifically in relation to Canadian ownership requirements applicable to Canadian common carriers (Restrictions on foreign ownership).

#### 7.3 Ratings

The following information relating to our credit ratings is provided as it relates to our financing costs, liquidity and operations. Additional information relating to credit ratings is contained in Section 7.5 - Liquidity and capital resource measures to Section 7.8 - Credit ratings in the 2016 annual MD&A.

Credit ratings are important to our borrowing costs and ability to obtain short-term and long-term financing and the cost of such financing. Credit ratings are intended to provide investors with an independent measure of the credit quality of an issue of securities and are indicators of the likelihood of payment and of the capacity of a company to meet its financial commitment on the rated obligation in accordance with the terms of the rated obligation. A reduction in the current rating on our debt by rating agencies, particularly a downgrade below investment grade ratings or a negative change in ratings outlook could adversely affect our cost of financing and our access to sources of liquidity and capital. We believe our investment grade credit ratings, coupled with our efforts to maintain constructive relationships with banks, investors and credit rating agencies, continue to provide TELUS with reasonable access to capital markets. In addition, credit ratings may be important to customers or counterparties when we compete in certain markets and when we seek to engage in certain transactions including transactions involving over-the-counter derivatives. As at December 31, 2016, TCI is a party to an agreement expiring in December 2018, with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain trade receivables up to a maximum of \$500



million. TCI is required to maintain at least a BB credit rating by DBRS Ltd. (DBRS) or the securitization trust may require the sale program to be wound down.

The rating agencies regularly evaluate TELUS and TCI, and their ratings of our long-term and short-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, including conditions affecting the telecommunications industry generally, and the wider state of the economy. The Company's credit ratings are outlined in the chart below. Credit ratings are not recommendations to purchase, hold or sell securities and do not address the market price or suitability of a specific security for a particular investor. In addition, real or anticipated changes in the rating assigned to a security will generally affect the market value of that security. There can be no assurance that a rating will remain in effect for any given period of time or that a rating will not be revised or withdrawn entirely by a rating agency in the future.

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

Institution	Rating
DBRS	The DBRS® long-term rating scale provides an opinion on the risk of default. That is, the risk that an issuer will fail to satisfy its financial obligations in accordance with the terms under which an obligation has been issued. Ratings are based on quantitative and qualitative considerations relevant to the issuer, and the relative ranking of claims. All rating categories, other than "AAA" and "D", also contain subcategories "(high)" and "(low)". The absence of either a "(high)" or "(low)" designation indicates the rating is in the middle of the category.  A "BBB" rating denotes adequate credit quality. The capacity for the payment of financial obligations is considered acceptable. May be vulnerable to future events.
A S&P issue credit rating is a forward-looking opinion about the creditworthiness of an observed to a specific financial obligation, a specific class of financial obligations, or a specific program (including ratings on medium-term note programs and commercial paper programs into consideration the creditworthiness of guarantors, insurers, or other forms of credit enhances the obligation and takes into account the currency in which the obligation is denominated. The reflects S&P's view of the obligor's capacity and willingness to meet its financial commitment come due, and may assess terms, such as collateral security and subordination, which coultimate payment in the event of default.  An obligation rated "BBB" exhibits adequate protection parameters. However, adverse conditions or changing circumstances are more likely to lead to a weakened capacity of the meet its financial commitment on the obligation.  The ratings from "AA" to "CCC" may be modified by the addition of a plus (+) or minus show relative standing within the major rating categories.	
Moody's	Moody's long-term ratings are assigned to issuers or obligations with an original maturity of one year or more and reflect both on the likelihood of a default on contractually promised payments and the expected financial loss suffered in the event of default.  Obligations rated "Baa" are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.  Moody's appends numerical modifiers 1, 2, and 3 to each generic rating classification from "Aa" through "Caa". The modifier 1 indicates that the obligation ranks in the higher end of its generic rating category; the modifier 2 indicates a mid-range ranking; and the modifier 3 indicates a ranking in the lower end of that generic rating category.  A Moody's rating outlook is an opinion regarding the likely rating direction over the medium term. A stable outlook indicates a low likelihood of a rating change over the medium term. A negative, positive or developing outlook indicates a higher likelihood of a rating change over the medium term.



Institution	Rating
Fitch	Rated entities in a number of sectors, including financial and non-financial corporations, sovereigns and insurance companies are generally assigned issuer default ratings ("IDRs"). IDRs opine on an entity's relative vulnerability to default on financial obligations. The "threshold" default risk addressed by the IDR is generally that of the financial obligations whose non-payment would best reflect the uncured failure of that entity. As such, IDRs also address relative vulnerability to bankruptcy, administrative receivership or similar concepts, although the agency recognizes that issuers may also make pre-emptive and therefore voluntary use of such mechanisms. In aggregate, IDRs provide an ordinal ranking of issuers based on the agency's view of their relative vulnerability to default, rather than a prediction of a specific percentage likelihood of default.  "BBB" ratings indicate that expectations of default risk are currently low. The capacity for payment of financial commitments is considered adequate but adverse business or economic conditions are more likely to impair this capacity.  The modifiers "+" or "-" may be appended to a rating to denote relative status within major rating
	categories. Such suffixes are not added to the "AAA" Long-Term IDR category, or to Long-Term IDR categories below "B".

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

## 8. MARKET FOR SECURITIES

## 8.1 Trading Price and Volume

TELUS' Common Shares are listed on the TSX under the symbol "T" and on the NYSE under the symbol "TU". Monthly share prices and volumes for 2016 are listed below:

	TS	TSX – Common Shares		
Month	High(\$)	Low(\$)	Volume	
January	39.44	35.51	31,478,362	
February	40.56	38.08	33,611,872	
March	42.59	38.88	28,157,803	
April	42.38	39.11	27,860,471	
May	41.80	39.30	23,030,678	
June	42.00	40.10	23,038,888	
July	44.15	41.70	16,228,603	
August	44.39	42.46	15,082,194	
September	44.05	41.54	17,449,536	
October	43.68	41.96	17,244,225	
November	43.56	40.97	22,488,338	
December	43.12	41.52	23,805,626	

NYSE – Common Shares				
High (\$U.S.)	Low (\$U.S.)	Volume		
28.05	24.34	6,345,849		
29.42	27.35	6,112,672		
32.96	28.92	4,824,985		
32.51	30.90	4,698,407		
32.16	30.64	4,344,204		
32.82	31.07	3,619,766		
33.74	32.22	3,572,188		
34.07	32.56	4,069,516		
34.12	31.50	3,717,389		
33.22	31.54	3,454,297		
32.54	30.31	5,021,763		
32.86	31.18	5,851,969		

#### 8.2 Prior Sales

On September 19, 2016, under a short form base shelf prospectus filed on August 30, 2016 with securities regulatory authorities in Canada and the United States, TELUS completed a debt offering: U.S.\$600 million 2.80% notes due February 16, 2027.

Please refer to TELUS Corporation 2016 year-end audited consolidated financial statements - *Note 26(b) TELUS Corporation Notes* for details on our past debt offerings.

In addition, in the ordinary course of business, the Company has the capability to issue commercial paper with maturities of less than 12 months. As at December 31, 2016, the Company had \$613 million of commercial paper outstanding, all of which was denominated in U.S. dollars (U.S.\$456 million).

On March 6, 2017, under a short form base shelf prospectus filed on August 30, 2016, with securities regulatory authorities in Canada and the United States, TELUS completed two debt offerings: 1) a U.S.\$500 million offering of 3.70% notes due September 15, 2027; and 2) a \$325 million offering consisting of 4.70% Notes, Series CW, due March 6, 2048.



#### 9. DIRECTORS AND OFFICERS

# 9.1 Name, occupation and security holding

#### **Directors**

The names, municipalities of residence and principal occupations of the directors of TELUS as at March 15, 2017, the date each such person became a director of TELUS and committee membership are as set out below. Currently, there are 12 directors on the Board. Each was elected at TELUS' annual general meeting on May 5, 2016. Each director's term of office will expire immediately before the election of directors at the upcoming annual general meeting on May 11, 2017. They have, however, all been nominated for re-election at the upcoming meeting except for Micheline Bouchard who has decided to retire and will not be seeking re-election at the 2017 annual general meeting. There will be 13 directors nominated for election to the Board at the 2017 annual general meeting, including two new nominees.

Directors of TELUS (Name and municipality of residence)	Director since	Principal occupation
R.H. (Dick) Auchinleck <sup>1</sup> Victoria, B.C.	2003	Chair, TELUS Corporation
Micheline Bouchard <sup>2, 4</sup> Montréal, Québec	2004	Corporate Director
Raymond T. Chan <sup>1, 2</sup> Calgary, Alberta	2013	Chair, Baytex Energy Corp. (oil and natural gas corporation)
Stockwell Day <sup>2, 4 – Chair</sup> Vancouver, B.C.	2011	Advisor and Consultant
Lisa de Wilde <sup>3,4</sup> Toronto, Ontario	2015	CEO, Ontario Educational Communications Authority (TVO)
Darren Entwistle Vancouver, B.C.	2000	President and Chief Executive Officer, TELUS Corporation
Mary Jo Haddad <sup>2,3</sup> Oakville, Ontario	2014	Corporate Director
John S. Lacey <sup>2 – Chair</sup> Thornhill, Ontario	2000	Corporate Director
William (Bill) MacKinnon <sup>1 - Chair</sup> Toronto, Ontario	2009	Corporate Director
John Manley <sup>3 - Chair, 4</sup> Ottawa, Ontario	2012	President & Chief Executive Officer, Business Council of Canada (previously the Canadian Council of Chief Executives)
Sabi Marwah <sup>1,3</sup> Toronto, Ontario	2015	Senator, Senate of Canada
David Mowat <sup>1</sup> Edmonton, Alberta	2016	President and Chief Executive Officer, ATB Financial

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

All of the directors of TELUS have held the principal occupations set forth above or executive positions with the same companies or firms referred to, or with affiliates or predecessors thereof, for the past five years except as follows:

Mary Jo Haddad was President and CEO of The Hospital for Sick Children (SickKids) in Toronto from 2004 until 2013;

Sabi Marwah was Vice Chairman and Chief Operating Officer of the Bank of Nova Scotia from 2008 until 2014.



#### Executive officers

Oakville, Ontario

The name, municipality of residence and principal occupations of each of the executive officers of TELUS, as of March 15, 2017, are as follows:

## **Executive Officers of TELUS**

(Name and municipality of residence)	Position held with TELUS
Darren Entwistle Vancouver, B.C.	President and Chief Executive Officer
Doug French Vancouver, B.C.	Executive Vice President and Chief Financial Officer
Phil Bates Vancouver, B.C.	Executive Vice President, Business Transformation and Operations
Josh Blair Vancouver, B.C.	Chief Corporate Officer and Executive Vice President-TELUS Health, President, Business Solutions West and Chair-TELUS International
David Fuller Toronto, Ontario	Executive Vice President and President, TELUS Consumer and Small Business Solutions
Tony Geheran Vancouver, B.C.	Executive Vice President and President, Broadband Networks
Francois Gratton Montreal, Quebec	Executive Vice President, TELUS Partner Solutions and President, Business Solutions East and TELUS Québec
Stephen Lewis Vancouver, B.C.	Senior Vice President and Treasurer
Sandy McIntosh Toronto, Ontario	Executive Vice President, People and Culture and Chief Human Resources Officer
Monique Mercier Vancouver, B.C.	Executive Vice President, Corporate Affairs, and Chief Legal and Governance Officer
Eros Spadotto	Executive Vice President, Technology Strategy

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

# TELUS shares held by directors and executive officers

As at March 10, 2017, the directors and executive officers of TELUS, as a group, beneficially owned, directly or indirectly, or exercised control or direction over 804,003 Common Shares, which represented approximately 0.14% of the outstanding Common Shares.

## 9.2 Cease trade orders, bankruptcies, penalties or sanctions

Other than as disclosed below, for the 10 years ended March 15, 2017, we are not aware that any current director or executive officer of TELUS had been a director or executive officer of any issuer which, while that person was acting in that capacity, or within a year of that person ceasing to act in that capacity, became bankrupt or made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

John Manley was a director of Nortel Networks Corporation and Nortel Networks Limited (together, the Nortel Companies) when the Nortel Companies and certain other Canadian subsidiaries initiated creditor protection proceedings under the CCAA in Canada on January 14, 2009. Certain U.S. subsidiaries filed voluntary petitions in the United States under Chapter 11 of the U.S. Bankruptcy Code, and certain European, Middle Eastern and African subsidiaries made consequential filings in Europe and the Middle East. These proceedings are ongoing. Mr. Manley resigned as a director of the Nortel Companies on August 10, 2009.

For the 10 years ended March 15, 2017, we are not aware that any current director or executive officer of TELUS had been a director, chief executive officer or chief financial officer of any issuer which was the subject of a cease trade or similar order while that person was acting in that capacity, or was subject to such an order issued after the director or executive officer ceased to be a director, chief executive officer or chief financial officer and resulted from an event that occurred while that person was acting in that capacity, or any order which denied such company access to any exemption under securities legislation for a period of more than 30 consecutive days.



#### 10. LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Legal proceedings are described in Section 10.9 Litigation and legal matters in the 2016 annual MD&A and in the Company's December 31, 2016, consolidated financial statements Note 29(a) Claims and lawsuits.

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

## 11. INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

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

## 12. TRANSFER AGENT AND REGISTRAR

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

## 13. MATERIAL CONTRACTS

As at December 31, 2016, TCI is a party to a three-year agreement (expiry December 31, 2018) with an arm's-length securitization trust associated with a major Schedule I bank, under which TCI is able to sell an interest in certain of its trade receivables up to a maximum of \$500 million. TCl is required to maintain at least a BB credit rating by DBRS Ltd. or the securitization trust may require the sale program to be wound down. The necessary credit rating was exceeded throughout its term.

On May 4, 2016, TELUS entered into a replacement five-year \$2.25 billion unsecured credit facility (2016 Credit Facility) with a syndicate of financial institutions. The 2016 Credit Facility replaces TELUS' previous \$2.25 billion facility which would have matured in the second quarter of 2019. The 2016 Credit Facility may be used for general corporate purposes including the backstop of commercial paper. The material terms of the 2016 Credit Facility are substantively the same as TELUS' previous credit facility other than an extension of the term to May 2021.

# 14. INTERESTS OF EXPERT

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

#### 15. AUDIT COMMITTEE

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

The current members of the Audit Committee are Bill MacKinnon (Chair), Dick Auchinleck, Ray Chan, Sabi Marwah and David Mowat. Each member of the Audit Committee is independent and financially literate within the meaning of Multilateral Instrument 52-110 "Audit Committees" and the Board has determined that Bill MacKinnon is an audit committee financial expert and has accounting or related financial management expertise. The following lists the relevant education and experience of the members of TELUS' Audit Committee that is relevant to their role on the committee.

Bill MacKinnon chairs the Audit Committee. He is the former Chief Executive Officer of KPMG Canada, serving from April 1999, to December 31, 2008. He first joined KPMG Canada in 1971, serving the company in numerous roles of increasing leadership for 37 years, including his membership on the board of directors of each of KPMG Canada, KPMG International and KPMG Americas. Mr. MacKinnon obtained a Bachelor of Commerce with Honours from the University of Manitoba in 1967. He is a Chartered Professional Accountant and holds his FCPA designation from the Institute of Chartered Professional Accountants of Ontario.



**Dick Auchinleck** is a corporate director and Chair of the Board of TELUS Corporation. He was Lead Director of TELUS from May 2014 to August 2015. He is also currently the lead director of ConocoPhillips, an oil and gas company. Dick was employed by Gulf Canada Resources Limited for 25 years, retiring in 2001 as President and Chief Executive Officer after the sale of the company to Conoco Inc. Dick has a Bachelor of Applied Science (Chemical Engineering) from the University of British Columbia.

Ray Chan is Chair of Baytex Energy Corp. (formerly Baytex Energy Trust). He was Chief Financial Officer of Baytex from 1998 to 2003 and Chief Executive Officer until 2008, when he assumed the role of Executive Chair. In 2014, he became Chair of Baytex in a non-executive capacity. Mr. Chan obtained a Bachelor of Commerce degree (with a major in accounting) from the University of Saskatchewan in 1977 and he became a Chartered Professional Accountant in 1980. Mr. Chan has served as CEO and CFO of public companies for over 25 years and has served on public company boards, in most instances chairing the audit committee, for over 15 years.

Sabi Marwah retired as the Vice Chairman and Chief Operating Officer of the Bank of Nova Scotia (Scotiabank) in 2014, a position he held since 2008. As Vice Chairman, Sabi was responsible for many of Scotiabank's corporate financial and administrative functions and was actively involved in developing the bank's strategic plans and priorities, including acquisitions both in Canada and internationally. His career with Scotiabank spanned 35 years, during which he held several senior positions including Senior Vice-President and Comptroller and Executive Vice-President. He was appointed Chief Financial Officer (CFO) in 1998 and Senior Executive Vice-President and CFO in 2002. Sabi holds a Bachelor of Arts (Economics - Honours) from the University of Calcutta, a Master of Economics from the University of Delhi and an MBA (Finance) from the University of California, Los Angeles (UCLA). In 2012, he received an Honorary Doctorate of Laws from Ryerson University. In November 2016, Sabi was appointed as a Senator to the Senate of Canada.

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

# Audit, audit-related and non-audit services

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

The following table is a summary of billings by Deloitte LLP (Deloitte), as external auditor of TELUS, during each of the years ended December 31, 2016 and 2015.

	Year ended Decembe	er 31, 2016	Year ended December 31, 2015		
Type of work	\$ millions	%	\$ millions	%	
Audit fees 1	4.138	92.2	3.844	88.6	
Audit-related fees 2	0.133	3.0	0.140	3.2	
Tax fees <sup>3</sup>	0.017	0.4	0.103	2.4	
All other fees 4	0.197	4.4	0.254	5.8	
Total	4.485	100.0	4.341	100.0	

- 1 Includes fees for services rendered by Deloitte in relation to the audit and review of our financial statements and in connection with our statutory and regulatory filings.
- 2 Includes fees for translation services rendered by Deloitte in relation to the audit or review of our financial statements that were not part of audit fees.
- 3 Relates to tax compliance, tax advice and tax planning.
- 4 Includes fees for services rendered by Deloitte that were not in relation to the audit or review of our financial statements, such as the community investment impact measurement (2015/2016) and privacy data insights (2016).

## **16. ADDITIONAL INFORMATION**

Additional information relating to TELUS may be found on SEDAR at <u>sedar.com</u> and EDGAR at <u>sec.gov</u>. Additional information regarding directors' and officers' remuneration, and securities authorized for issuance under equity compensation plans, will be contained in TELUS' information circular for the annual meeting to be held on May 11, 2017. Additional financial information is provided in the Company's consolidated financial statements and MD&A for the year ended December 31, 2016. All of the above information can also be found at telus.com.



#### APPENDIX A: TERMS OF REFERENCE FOR THE AUDIT COMMITTEE

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

#### 1. MEMBERSHIP

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

#### 2. MEETINGS

- 2.1 The Committee will meet at least once each quarter and otherwise as necessary. Any member of the Committee may call meetings of the Committee.
- 2.2 All directors of the Company, including management directors, may attend meetings of the Committee provided, however, that no director is entitled to vote at such meetings and is not counted as part of the quorum for the Committee if he or she is not a member of the Committee.
- 2.3 Notwithstanding section 2.2 above, the Committee will, as a regular feature of each regularly scheduled meeting, hold an in-camera session with the external auditors and separately with the internal auditors, and an in-camera session without management or management directors present at each meeting. The Committee may, however, hold other in-camera sessions with such members of management present as the Committee deems appropriate.
- 2.4 The Corporate Secretary or his or her nominee will act as Secretary to the Committee.
- 2.5 The Committee will report to the Board on its meetings and each member of the Board will have access to the minutes of the Committee's meetings, regardless of whether the director is a member of the Committee.
- 2.6 The external auditors of the Company will receive notice of every meeting of the Committee and may request a meeting of the Committee be called by notifying the chair of the Committee of such request.

# 3. QUORUM

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

#### 4. DUTIES

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

## 4.1 Financial Reporting

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

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



#### 4.2 External Auditors

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

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

# 4.3 Internal Auditors

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

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

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



## 4.4 Whistleblower, Ethics and Internal Controls Processes

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

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

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

The Committee will review:

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

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

# 4.5 Accounting and Financial Management

The Committee will review:

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

# 4.6 Credit Worthiness, Treasury Plans and Financial Policy

The Committee will review with management:

- (a) the Company's financial policies and compliance with such policies;
- (b) the credit worthiness of the Company;
- (c) the liquidity of the Company; and
- (d) important treasury matters including financing plans.

# 4.7 Legal/Regulatory Matters

The Committee will review:

- (a) with management, the external auditors and legal counsel, any litigation, claim or other contingency, including any tax assessment, that could have a material effect upon the financial position or operating results of the Company;
- (b) annually, management's relationships with regulators, and the accuracy and timeliness of filings with regulatory authorities;
- (c) quarterly reports from the Chief Legal Officer on compliance with laws and regulations; and
- (d) quarterly reports from the chief compliance officer on legal, privacy and regulatory compliance activities.

## 4.8 Risk Management

The Committee will:

- (a) consider reports on the annual enterprise business risk assessment and updates thereto;
- (b) except to the extent that responsibility is reserved to the Board or delegated to another Board committee, review management's implementation of risk policies and procedures, and assess the appropriateness and comprehensiveness of those policies and procedures;
- (c) consider reports on security;
- (d) consider reports on financial risk management including derivative exposure and policies;
- (e) consider reports on tax risk management and governance; and
- (f) review other risk management matters from time to time as the Committee may consider suitable or the Board may specifically direct.



#### 4.9 Other

The Committee will review:

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

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

## 5. AUTHORITY

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

- (a) engage and set compensation for independent counsel and other advisors;
- (b) communicate directly with the Chief Financial Officer, internal and external auditors, chief compliance officer and Chief General Counsel;
- (c) delegate tasks to Committee members or subcommittees of the Committee; and access appropriate funding as determined by the Committee.

