

ITW 2011

Extending services to the off-net enterprise



About TELUS

TELUS is a leading national telecommunications company in Canada

- 9.8 billion of annual revenue
- 12.3 million customer connections
- 7 million wireless subscribers
- 3.7 million wireline access lines
- 1.2 million Internet subscribers
- 330 thousand IPTV subscribers

We are your trusted partner of choice, enabling your business success through our:

- industry experts
- innovative technology
- seamless experience for your customers

We are committed to making a meaningful difference in our communities



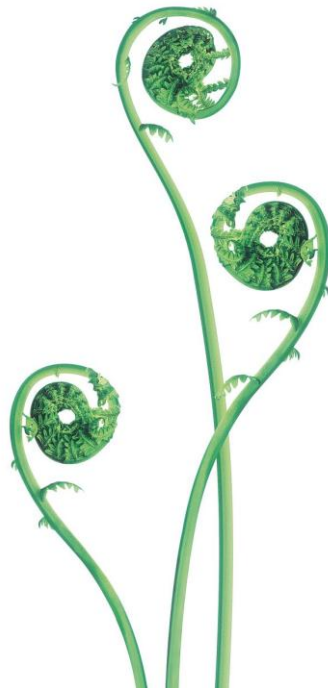
The Dow Jones Sustainability World Index has ranked TELUS among the world's economic, environmental and social leaders for nine consecutive years.



TELUS and our team will have contributed \$245 million to charitable organizations by year-end 2011 and volunteered 4.1 million hours of service to communities since 2000.

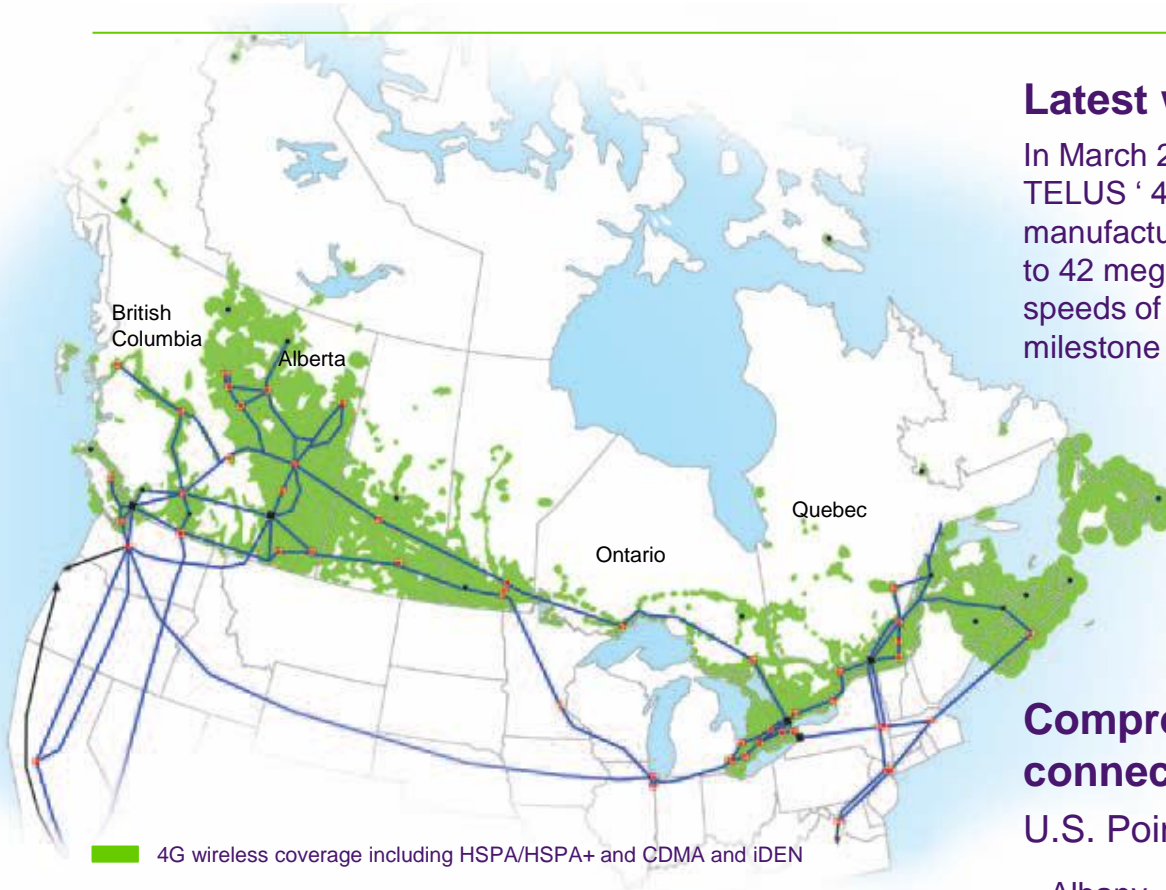
Our history

**For more than 100 years,
TELUS has been delivering
innovative telecommunications
solutions to Canadians.**



- 2007 TELUS acquires Emergis.
- 2006 TELUS acquires Assurent
- 2004 TELUS acquires ADCOM, Inc.
- 2001 TELUS acquires Arqana Technologies Inc.
- 2001 TELUS acquires Daedalian Solutions Inc.
- 2001 TELUS purchases PSINet Canada, and completes purchase of QuebecTel and Williams Communication Canada.
- 2000 TELUS acquires wireless company Clearnet
- 1998 TELUS Corporation and BC TELECOM announce merger.
- 1990 TELUS Corporation established, following the reorganization of the Alberta Government Telephones Commission,

The TELUS Network



- 4G wireless coverage including HSPA/HSPA+ and CDMA and iDEN
- Backbone optical and IP wireline network
- Interconnection with Canadian, U.S. and global carriers
- Wireline switching centres, and fibre and Internet backbone points of presence
- Intelligent Internet data centres, switching centres, and fibre and Internet backbone points of presence

Latest wireless network technology

In March 2011, launched a Dual Cell upgrade to TELUS' 4G (HSPA+) network supporting manufacturer's rated peak download speeds of up to 42 megabits per second (Mbps) and upload speeds of up to 11 Mbps, marking another milestone in the evolution to LTE.

Comprehensive cross-border connectivity

U.S. Points of Presence (PoPs)

Albany, Ashburn, Boston, Buffalo, Chicago, Miami, Minneapolis, Los Angeles, NYC, Palo Alto, Seattle

Integrated Solutions

TELUS delivers a full range of innovative and integrated data, voice, IP and outsourced solutions. We partner with Canadian, U.S. and international carriers, resellers, ISPs, wireless and cable providers.

Network & Infrastructure

Carrier Ethernet

MPLS and IP Voice

Content Delivery Networks

Enhanced Capabilities

M2M Wireless Data

One API

Contact Center Outsourcing

Directory Assistance (DA)

Toll Free and 1+ Services

Wireline Clearing

Conferencing / Video Conferencing

Reliable, high quality carrier connections

Carrier Ethernet opens new business opportunities

- **TELUS Carrier Ethernet** services are based on industry standards
- flexible QoS supports mission-critical applications

TELUS Service Name	Metro Ethernet Forum (MEF)	Topology	Characteristics
100% Dedicated, Strict priority QoS with no oversubscription – over SONET and DWDM			
Carrier Ethernet Optical	Ethernet Private Line (EPL)	Layer 2 point-to-point (port based)	Dedicated Ethernet services up to 10Gbps over the TELUS national optical network. Ideal for mission critical and high bandwidth, applications sensitive to jitter.
Optical Carrier-to-Carrier Interface (CCI)	Ethernet Network-to-Network Interface (NNI)	Gigabit Ethernet (GigE) Ethernet NNI (ENNI)	Aggregation of Carrier Ethernet Optical circuits providing a single GE aggregation interface to our customer
Cost-effective, flexible QoS (Standard, Priority) allows for efficient utilization of bandwidth			
Ethernet Private Line Switched	Ethernet Private Line (EPL)	Layer 2 point-to-point Ethernet Virtual Circuits (EVCs) (port-based)	Switched bandwidth from 3 Mbps to 1000 Mbps. QoS available for application flexibility and network convergence. Dedicated network resource similar to Private Lines.
Ethernet Virtual Private Line Switched	Ethernet Virtual Private Line (EVPL)	Layer 2 point-to-point EVCs (VLAN based)	Switched bandwidth from 3 Mbps to 1000 Mbps. QoS available for application flexibility and network convergence. Shared network resource – multiplexed UNI similar to ATM or Frame Relay
Switched CCI	ENNI	GigE ENNI	Aggregation of EPL and EVPL circuits providing a single aggregation interface to the customer using QinQ or 802.1ad

Seamlessly extend the value and performance of your networks

Machine to Machine wireless data transfer

Customer Management, Network and Billing support for Embedded Wireless Data Devices

- high-speed wireless access into TELUS' 4G network at an attractive wholesale rate
- support remote equipment monitoring and streamline resulting service activities
- IP-based communication with IP addressing flexibility and security capabilities (MPLS and Closed User Groups) supports:
 - Data Network monitoring
 - Point of Sale (POS) applications
 - ATM applications
 - Location -based services
- self-manage and control M2M units using the TELUS/Sierra AirVantage Management platform

M2M is a rapidly emerging opportunity across industries:

- GPS vehicle tracking
- Alarm and video security systems
- Utility smart grid and meter reading
- Vending networks
- Patient health monitoring
- Home entertainment



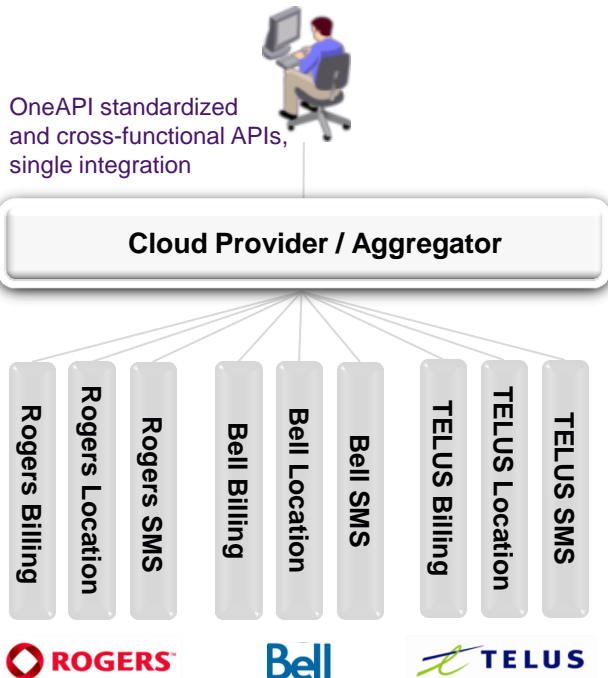
OneAPI



Wholesale API – messaging + location + payment

Open and standardized Network APIs enabling developers to access major Canadian Operators

Create new revenue streams and monetize your Network as a Service



- enable the mobile payment market
- rapid service introduction, faster time to market, quicker concept-to-cash
- embrace new OTT opportunities
- access to a broader base of apps and services

What do OneAPI services look like?

Guy fishing – location based dating app, receive alerts and send virtual gifts

Appointment Filler – sends SMS to potential customers in close proximity with available timeslots (physiotherapist, psychologist, hospitals, spas)

Retail Loyalty Application – Just-in-Time (JIT) advertising

Find my phone – login online to track on a map where their phone is located



the future is friendly®