Connecting you to the future

Telecommunications, Smart Systems & Industrial IoT, Security & Critical Infrastructure Protection, Outside Plant Design
A well-established connection between two worlds

Since the early 1970s, SNC-Lavalin’s Telecom team has been bridging the gap between technology and physical infrastructure, delivering state-of-the-art services and solutions for our clients across our four sectors: Power, Oil & Gas, Infrastructure and Mining & Metallurgy.

While keeping pace with the rapid changing world of digitalization, we have mastered the complex art of telecommunications and electronic capabilities, from network design and system architecture to integration of technological platforms and Industrial IoT. We offer a single source solution for all your telecom needs and can provide a range of real-time, targeted solutions to drive process improvements and increase productivity.

Multidisciplinary team

We provide cost-effective, innovative and secure industrial telecommunications solutions and consulting services across a broad platform that includes: energy, resources, utilities, industrial processes, manufacturing, transportation, urban development and aerospace.

Our customers rely on our world-class services across the project life-cycle—from advanced telecoms systems for pioneer camps to temporary systems for site establishment and construction phases, and permanent systems for the operating life of a plant, facility or building.

We partner with you to:
› Establish a connection between technology and physical infrastructure
› Provide integrated and turnkey solutions
› Lead operations and maintenance activities
› Unlock business value in communications

Our site services work includes new builds, systems/technology upgrades and overlays, integrations and commissioning. In parallel with our wireless expertise, our wireline experience includes deployment of long-haul fibre networks, metropolitan fibre rings, fibre-to-the-home (FTTH) networks, and data centres.

Our team has substantial expertise in four key areas:
1. Telecommunications & ICT systems
2. Smart Systems & Industrial IoT
4. Outside Plant Design

Global expertise, delivered locally

Together with world-class engineering and staging facilities, our dedicated regional experts are supported by our global network to deliver turnkey integrated technology-based solutions for a wide variety of operational requirements regardless of size, location or complexity.

With engineering offices and integration centres in Australia, Canada, Ireland, India and Qatar, our focus on safety and client values continues to strengthen our position in the market. Using our global resource centres and our local presence, we are proud to support you in realizing your strategic objectives in challenging local and remote locations.

SNC-Lavalin is one of the leading engineering and construction groups in the world, and a key player in the ownership and management of infrastructure. Founded in 1911, SNC-Lavalin is acknowledged for its world-class technical expertise and its services, including design, construction, project and construction management, procurement, financial modelling and operations and maintenance—all delivered locally to clients anywhere in the world through its extensive international network of offices, partners and suppliers.
Technology systems integration

We specialize in integrating many different telecoms systems from multiple vendors into a unified, fit-for-purpose solution. At the same time, we help clients manage all regulatory, technical, scheduling and ongoing interface requirements, and ensure users are trained and able to operate the solutions with maximum efficiency.

Our State-of-the-Art Services

**Telecommunications and ICT Systems**
- Turnkey projects
  - Project & interface management
  - Detailed engineering & design
  - Integration & testing
  - Procurement
  - Estimating
  - Construction & supervision
  - Power up & pre-commissioning
  - Commissioning & handover
  - Training
- Consulting services
  - Business & technological analysis
  - Feasibility studies
  - Conceptual design & proof of concept
  - Migration planning
- Engineering & electronics system integration
  - Design & deployment
  - Systems architecture
  - Plans & specifications
  - Integration & testing
  - Site technical support
  - Quality assurance & control

**Smart Systems & Industrial IoT**
- Network & systems monitoring and management
- Transportation systems (Operations & User Information)
- Smart grids
- Automation for oil & gas and industrial projects
- Proof of concept testing
- Converged networks configuration

**Security/Critical Infrastructure Protection (CIP)**
- Help power and utilities achieve and maintain compliance with regulatory boards
- Maintain Critical Infrastructure Protection (CIP) Reliability Standards
- Offer comprehensive set of services and solutions to maintain CIP compliance
- Critical cyber asset identification
- Security management tools
- Physical security
- Systems security management
- Electronic security perimeters (ESP)
- Incident reporting & response planning
- Recovery plans for critical cyber assets
- Cyber security audits

**Outside Plant Design**
- Network design (fibre, copper, coaxial)
- PTTx (Fibre to the home, premise, curb, cell site)
- Physical Asset Maintenance
- Data Migration
- Wireless/mobile network backhaul design

Global footprint

Our projects
Expertise at a glance

Hydro-Québec (Canada)
Telecom services to connect control and monitoring equipment of electrical system distribution (9000 automatons) to operating centres and regional distribution centres (CED). Planning process, surveys, plans and specifications, circuit pathways and purchase orders to commission the telecom infrastructures.

Gorgon Project (Australia)
Completed engineering, procurement and construction (EPC), including support of the telecommunications and electronic systems. These systems were maintained until the project was turned over to the Gorgon Project (operated by Chevron Australia) for locations in Western Australia, including Barrow Island, Dampier and Perth.

The iBus Project-Montreal transportation authority (Canada)
The iBus project included replacing the Montreal transportation authority’s radio communication system with a new operations support and user information system with a full global positioning system (GPS). The new system would enable the authority to better manage their fleet of 3850 buses and provide passengers with real time information via the Internet from a variety smart phones and tablets. A full service solution that encompassed concept proposals, studies and analysis, engineering and procurement, implementation and operationalizing of service.

Aviva Stadium (Ireland)
Engineering, procurement, installation and commissioning (EPC) and testing for electrical, telecommunications and security systems for a 48,000 seat stadium and conference centre. A total telecommunications solution including converged network services (data, audio/visual & entertainment), integrated safety & security systems, TV broadcast & press systems and more.

HFC & Optical Fibre Network for Videotron (Canada)
A framework agreement between SNC-Lavalin and Videotron, an integrated communications company, established a high-value engineering centre that executed more than 600 projects with over 2,000 work-orders for design services. This cooperative model succeeded in reducing costs by 40%, while maintaining speed and quality and a flexible work force.

Ambatovy Project (Madagascar)
Development of a mine near Moramanga, a 220 km pipeline, a process plant and associated infrastructures (port, power plant, tailings management facility, etc.). Engineering, procurement construction and management (EPCM) of HV, LAN, WAN, VSAT, wireless, radio, satellite phones and all associated copper and fibre infrastructure.

Multi-sector capabilities

> Data, Voice and Video
> Data transport/multiplexing
> Wireless communications
> Safety, security and asset protection
> Backbone cable infrastructure

> Equipment and control rooms
> Cabinets/termination equipment
> Power and UPS
> Towers/masts
> Fences/physical barriers

Power
> Data transport/network planning/migration
> Teleprotection/smart grid applications
> Optical attached cable (OPAC)
> Sub-station design and construction

Infrastructure
> Intelligent transport application – rail, road, aviation
> Rail signalling & communications
> Tunnel communications & coverage extension
> Public safety and security
> Cellular communications
> IP/Telco support services
> Complex facilities – hospitals, airports, stadiums
> Smart city solutions
> Data centres

Mining
> Above/below ground communications
> Ore transport/driverless applications
> Slurry pipeline control and communications
> Automation and telemetry
> Residential data and entertainment systems
> Personnel and asset tracking

Oil & Gas
> Onshore and offshore telecommunications systems
> Oilfield/pipeline communications
> SCADA and telemetry
> Pioneer/early communications
> MetOcean communications/SOLAS
> Residential data and entertainment systems