NETWORK OPERATION CENTER (NOC) OPTIMIZATION

DIGITAL TRANSFORMATION SOLUTIONS For Service providers

2021







A SASKTEL INTERNATIONAL PUBLICATION

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ABOUT OUR PARENT COMPANY

SaskTel is a Communications Service Provider (CSP) operating in the prairie province of Saskatchewan, Canada, with over 110 years of experience. SaskTel has over \$1.2 billion in annual revenue and approximately 1.35 million customer connections globally including nearly 300,000 FTTP homes passed, 611,000 wireless accesses, 338,000 wireline network accesses, and 283,000 internet accesses. SaskTel owns and operates Saskatchewan's largest network that connects 99% of the population over a vast area of 651,900 square kilometres.

Recognized as a global leader in fiber optics, SaskTel has completed many large-scale and innovative projects over its many decades in business. In 1984, SaskTel completed the world's longest fiber optic system at the time in its home province of Saskatchewan, spanning a distance of 3,268 kilometres and connecting 52 communities. SaskTel continues to lead global trends and collaborated on one of the largest construction projects of the 20th century, the English Channel Tunnel. The English Channel Tunnel is an underwater railway that spans over 50 kilometres and connects England to France. The tunnel is used by passenger trains and freight trains with average traffic of 60,000 passengers a day. SaskTel had a vital role in this project and was responsible for the design, installation, testing, and audit of the entire communications system.

\$1.2 BILLION ANNUAL REVENUE

110+ YEARS OF EXPERIENCE

> **300,000** HOMES PASSED

1.35 MILLION CONNECTIONS

ABOUT US

SaskTel International is a wholly-owned subsidiary of SaskTel. Leveraging resources from SaskTel's pool of highly skilled staff, SaskTel International collaborates with CSPs to develop custom network strategies. Unique to SaskTel International is its ability to manage fiber projects in their entirety from conception to completion. Building on SaskTel's experience, SaskTel International provides leadership for custom designs, engineering, construction, and overall management of the network.

With over 35 years of experience working with fiber, SaskTel International is proud to share this knowledge with clients around the world. In addition to its role in the English Channel Tunnel project, SaskTel International has provided fiber consulting services in several communities.



- Nassau, New Providence, Bahamas
- Port of Spain, Trinidad
- Madhyah Pradesh Province, India
- Seattle, Washington, USA
- Los Angeles, California, USA
- Salt Lake City, Utah, USA
- San Francisco, California, USA
- Atlanta, Georgia, USA
- Morogo, Dar Es Salaam, Dodoma, Tanzania
- Tete, Mozambique
- 550 communities in the Philippines

INDUSTRY FIRSTS

SaskTel is a leading-edge service provider with over 110 years of operating experience including several lessons-learned, development of best practices, successes, and industry firsts. As a consistent early adopter of new telecommunications technologies, SaskTel's history of firsts include:

The first telecom in the world to deploy an end-to-end backhaul fiber network.

The first telecom to deploy a Long Term Evolution (LTE) mobile network in North America.

One of the first in North America to offer IPTV & associated services such as VoD & PVR capabilities. Collaboration on one of the largest construction projects of the 20th century, the English Channel Tunnel.

NETWORK OPERATION CENTER (NOC) OPTIMIZATION

For service providers and many other businesses, establishing serviceenabling communications networks and optimizing the interpretation and actioning of data collected across them can be a daunting undertaking. As networks become increasingly incorporated into operations and continue to grow in complexity, a need has emerged to find new ways to best leverage and understand the information they generate.

Collaboration

Through collaboration with our parent company, SaskTel International (SI) offers a proven portfolio of network operational assessment and professional advisory services. SaskTel currently operates an extensive wireless and wireline network to provide essential voice, data, video, and security communications services within the Canadian province of Saskatchewan. SaskTel's century of experience in building, operating, and assuring telco-grade networks translates into a unique ability for SI to support businesses in their goals of utilizing network infrastructure to ensure availability and performance of their services.



In the age of interconnectedness, many businesses have begun to leverage the increased reliance on communications networks to enable day-to-day operations and to empower the fulfillment of services. Utilities, communication service providers (CSPs), oil and gas providers, and financial institutions are some examples of service-providing businesses that have placed an emphasis on implementing and operating network infrastructure. For these service providers, communications networks have emerged as a key component in the service delivery equation, serving as the platform which empowers the fulfillment and assurance of the services they provide.



Reliability

While not all businesses deliver services over the network itself, many rely on communications networks for real-time visibility into the operation and performance of key service-enabling elements. For these service providers, the goal is utilizing networks to ensure high availability and optimized performance of the services they provide. Incidents leading to downtime or a compromised quality of service lead to negative customer experiences. The result is not only dissatisfied customers, but potentially significant losses in revenue.

Connection

Ensuring the uninterrupted availability and optimal operation of the network and the services it supports is of the essence. As networks become increasingly intertwined into operations and service delivery, there exists a greater need to ensure their optimal operation to avoid costly inefficiencies. When networks are ineffectively set-up or utilized a service provider's ability to deliver can be severely hampered, increasing the risk for service-affecting performance degradation issues or worse, downtime. In many instances, increased pressure on behalf of industry regulators has also required businesses to be diligent in overseeing and adhering performance to predefined operational metrics and reliability

standards.

Mission Critical

For service providers operating a significant network infrastructure, a NOC is a critical central component in overseeing operations and ensuring availability and high performance. A NOC serves as a business's 'mission control', providing visibility and management of a large network of equipment, information or facilities. With a NOC in place, businesses can adopt a proactive approach to monitoring network performance to ensure optimal operation and prevent service-affecting issues before they occur. Should an incident arise, a NOC enables real-time visibility into the issue to support informed decision making and empower effective trouble resolution.

Optimization

For an in-depth analysis of operational capacities, SI's network operational assessments provide a systematic consultation into the people, tools, processes, system elements, and infrastructure used to operate and oversee the network. Based upon this audit, SI strategically builds detailed design, implementation, and operational plans for further enhancing the network environment. Leveraging SaskTel's experience and expertise in operating an internal NOC to oversee its own network, SI can also strategically advise upon the design and implementation of NOC environments and evolution plans based upon best practice and proven methodologies. SI has already conducted such assessments for a range of CSPs as well as utility and oil and gas providers.



Customer

Regardless of industry, service providers share the universal goal of empowering the availability and high performance of their services. As networks and the critical information they generate become increasingly intertwined into the service delivery equation, businesses must adopt a proactive approach to capitalizing on their insights in order to optimize operations and enhance the customer experience.

Strategy

YOUR PROFESSIONAL SERVICES PARTNER

SaskTel International provides a wide-range of professional services for Communication Service Providers and Information Communication Technology (ICT) companies. Alongside our customers, we provide strategic planning from concept through deployment working through their business lifecycle to provide advice, prepare ideas, develop a plan, design a solution, implement the solution, monitor operations, and optimize processes. Our qualified resources are not only sourced internally but also from our parent service provider, SaskTel. This translates into an ability to understand the unique challenges of our customers and leverage over a century of insight, expertise, experience, and lessons-learned from someone who has been there before.



LET'S WORK TOGETHER

In partnership with SaskTel, SaskTel International works with service providers to provide strategic consulting and insights into developing network solutions. With over a century of experience, SaskTel can leverage its subsidiary companies to provide remote NOC services to companies around the globe. If your business is looking for remote NOC services, SaskTel International can help. We will work with your business to provide a customized roadmap with strategies to develop your own NOC or secure a remote NOC solution.

SaskTel International is a qualified vendor that provides varying scopes of work and levels of service to fit every budget. Contact us today if you want to:Analyze processes or operations to identify gaps, areas for improvement,

- Analyze processes or operations to identify gaps, a and new solutions to transform operations;
- Build strategies to help you develop operational efficiencies; or
- Innovate to drive new levels of efficiency into operations and reduce operating expenses.

For more information on how SaskTel International can help your business achieve its strategic network goals e-mail <u>info@sasktelinternational.com</u> or visit our website at <u>www.sasktelinternational.com</u>.

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