



Delivering Effective Broadband Internet to Remote Oil & Gas Production Facilities

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Introduction

Managing the infrastructure at a remote production facility and in the field is a challenge. Cost-effectively implementing all the services needed to enhance operational productivity and to support on-site workers is critical to the success of the business. No infrastructure service may be more critical than providing high-performing broadband Internet to support business applications and workers' personal needs.

Here's a working list of key communications infrastructure challenges. We're going to do a deeper dive on each one and discuss options for accomplishing your goals through a cloud-driven 4G+ broadband Internet service:

- Cost-effectively deploying and managing broadband services
- Delivering high-performing, reliable and consistent fixed services across the business area
- Scaling services up and down based on business needs and workforce size
- Insuring worker satisfaction and on-site quality of life

How Will You Meet the Challenges of Broadband Service Provisioning?

Challenge #1: Cost-effectively deploying and managing broadband services

Remote facility infrastructure provisioning has unique challenges. Quick and cost-effective deployment is likely one of your first.

- You need to avoid large capital expenses during early stage development so capital can be used to fund oil and gas exploration and recovery. Investments in infrastructure should be minimized until revenue is strong and predictable.
- You need to quickly deploy communications technology which supports your business applications. Even smaller scale businesses have major communications challenges based on data needs and content-rich applications.
- A communications strategy which can leverage existing towers or structures is preferred to one which requires additional structures.
- You need a communications strategy which fits the needs of both the business and your workers, whether they are employees or contractors.

Once you've deployed broadband Internet services, your next challenge is how to manage services in a rugged environment and without easy access to technical skill sets.

- The need for a communications strategy which reduces or even eliminates the need for on-site IT support resources is a priority, since these resources may be difficult to locate, hire, maintain, and retain.

Recommendations:

- A communications platform which can be quickly deployed, is cloud-based, and is scalable based on the number of workers employed meets all of these challenges.
 - Starting with only one antenna/tower site, you can support early stage drilling operations with full capabilities.
 - Cloud-based operation of network management, business management, and subscriber and touch point management means that the services are hosted in secure, clean, cloud center.
 - Cloud-based services are operated by technology professionals who are focused on delivering high-performing, reliable services. They have the knowledge and resources to maintain 24x7 broadband Internet communications services.
- **Challenge #2: Delivering high-performing, reliable, consistent, and fixed services across the business area**

Providing high-performing and reliable fixed broadband Internet across the entire footprint of your coverage area, regardless of geography or physical size, can be difficult.

- Support everyone at every location, regardless of how far they might be away from an operations center or a headquarters location.
- Support access to business applications in fixed locations and in the field.
- Provide your workers with the ability to stay connected wherever they are in the coverage area for business and personal communications needs.
- Your network must be high-performing, delivering large volumes of data for real time content-rich applications.
- Your network must deliver all the time as your operations require 24x7 support.
- Insure delivery of a satisfactory subscriber experience, to insure worker satisfaction and keeping them both connected and focused.

Recommendations:

- Select a cloud driven broadband Internet service solution, which supports fixed broadband Internet and local business area Wi-Fi coverage. This will minimize the complexity of your business while maximizing coverage and productivity.
- Chose a proven fixed 4G+ technology which meets global industry standards and part of a cloud platform which ensures "future-proofing" to help insure your investment is protected over time.
- Specify a 4G+ network that supports strong download and upload speeds and is there when your business and your workers need it.

- **Challenge #3: Scaling services up and down based on business needs and workforce size**

The inherent risks, time pressures, and need to “right-size” your infrastructure are common for all oil and gas field operators. Until you know that you have long-term producing fields, over-investing in infrastructure is a risk that needs to be managed. And, having a scalable communications infrastructure is important as your business operations and as workforce scales up, and then potentially scales back down the road.

- A broadband Internet service that lets you get started with a minimal investment in equipment is preferred. Less capital upfront helps you mitigate financial risks.
- A service which scales as your business operations and workforce scales, and one that supports your highest data needs can help you avoid changing suppliers and technologies.

Recommendations:

- Specify a service solution that also scales as your workforce scales. A business model where costs are tied to number of subscribers or well-heads insures that your costs scale as your business scales. This avoids paying for unused services or getting into fixed contracts which may turn out to be undesirable.

- **Challenge #4: Insuring worker satisfaction and on-site quality of life**

No one needs to educate you on the personnel challenges involved in recruiting, training, and retaining a workforce—especially a workforce based in remote areas.

- Worker productivity is directly tied to their quality of life. Quality of life is enhanced by the ability to stay in touch with family and friends, especially when physical distance is an issue.
- Workers who feel that they can stay connected are more likely to focus on their jobs with less concern and distraction about events or situations which they are physically removed from.

Recommendations:

- Broadband Internet services which are built around creating a quality subscriber experience recognize these unique challenges.
- Services which support email, real-time streaming applications for TV/video, gaming and other web apps; which support voice over IP, personal real-time phone/video communications like Skype will help your workforce feel like they are being supported by the company and that you have their communications needs covered.

What Advantages Does LocalLoop and Our synKro™ 4G+ Broadband Internet Service Offer You?

LocalLoop offers remote oil and gas field operators a turnkey solution for fixed broadband Internet service. LocalLoop specializes in providing 4G+ high-performing, reliable, cloud-based services to remote operations in rural markets.

LocalLoop's "4G+ Business In A Box" synKro™ service delivers multiple benefits:

- Economically viable 4G+ coverage in remote areas.
- Fixed broadband Internet service with local extension through Wi-Fi across your local business coverage area.
- Fast deployment and low support operation through a cloud-based architecture.
- Support for content-rich business and personal Internet applications.
- Full technical competencies in new 4G+ technologies so that your upfront and operating costs and business risks are substantially reduced.

LocalLoop can be your solution to the business and operational challenges you face today. Your business requires faster turnaround of decisions and information than ever before. It also requires richer/higher volumes of data. So, don't rely on labor intensive manual solutions or less substantial broadband solutions like those offered by satellite providers. Cloud-driven real time 4G+ capability should be a part of your remote communications platform.

For More Information:

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