



Connecting Businesses in the Field

The tyranny of distance use to be bridged by cash – now we use satellite

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Customer constants

- There has always been a requirement for instant access to data, communications and connectivity.
- No one likes to be on the edge of the network – but unfortunately for many businesses – this is where they operate.
- More often than not, operating on the edge of terrestrial networks means accepting limited services and facing less than desirable pricing
- More often than not, the edge of the terrestrial network is a rugged and challenging place to carry out a commercial or social enterprise.

Satellite offers businesses options

- Short timeframes from initial requirement scope to full implementation of a broadband / communication solution
- Flexibility and mobility subject only by line of sight constraints
- True diversity for Disaster Recovery (DR) options without the need to drag in a second physical cable.
- Commercial grade upload and download speeds that will allow most businesses to operate without impediment
- Hardware and bandwidth prices that will not make your eyes water

Case studies

- Todd Petroleum
- New Zealand Fire Service
- Mobile medical imaging

Onshore Drilling – a harsh environment

(even on a good day)



Onshore Drilling – requirements, hardware, solutions provided

Site requirements

- Reliable broadband connection with speeds in excess of 2Mb/down and 1 Mb , 100 Gb data transfer, IP telephony to satisfy 50 plus staff on site, - audio conferencing, access to telecom pager network for emergency notification. The ability to relocate every 70 days.

Hardware

- Erect single 1.2 m satellite dish, single UT, multiple port switch for IP phones, 9 IP phones / ATA.

Solutions provided

- Single day implementation, 9 separate prepaid telephone lines, hardware costs under 3k with access costs of less that 4k per month. Customer operational within 24 hours of request.

Specific considerations for drilling

- Access to telephony is imperative – without it the rig cannot run at full capacity as it is a health and safety issue
- Continuity of data streaming important as the rig and its outputs are monitored from several locations around the world
- Speed of delivery – approximate cost of down time for rig is \$200k USD per day
- Remote location of these sites requires great field staff to ensure installation is robust
- When things don't go well – drilling managers can swear better than politicians!

NZ Fire Service – mobile HAZMAT



HAZMAT– requirements, hardware, solutions provided

Site requirements

- Mobile sites, rapid deployment of satellite connection – to be performed by non technical staff, broadband connection to allow for high data transfer applications (video, audio, detailed terrain photos etc).

Hardware

- Purpose built HAZMAT vehicle – fitted with self acquiring iNetVu 980 Ku 98cm dish. – 5000 series controller - 1Watt BUC

Solutions provided

- Single day to install – customer training and commissioning in single day. Simple point and shoot satellite deployment – from stowed to sending in under 3 mins. Dedicated bandwidth to be shared across the fleet to allow for high data throughput at low cost per vehicle.

Special considerations for HAZMAT

- Simplicity in deployment and multiple users will use the platform
- Low cost of access required at a per truck level otherwise the solution would not be accepted
- Standardized application across all vehicles to reduce maintenance costs and to assist with customer lead troubleshooting
- Multiple solutions to be accommodated at one time – that being mother nature will try her best to have bad things happening in unison across the country

Mobile Medical Imaging

- Similar to HAZMAT in that the site is mobile and requires a point and shoot solution for satellite deployment.
- Added complexity surrounding the privacy / ipsec requirements of medical images and the fact that these files are relatively large in nature
- Acceleration devices used to compress images and therefore optimize the bandwidth purchased. Again, the customer is very price sensitive and has used the accelerators to gain an effective 7Mb upload at the 512Kb price.
- Actual product not launched until next week so will remain under wraps until then – will keep you posted.

Wrap up

- Satellite offers business customers the ability to work in remote locations or mobile platforms whilst still enjoying commercial grade communications
- Specialized applications are currently allowing customers to prospect for oil and gas, save lives, and communicate over both terrestrial and non terrestrial networks.
- All of this can be done from between a several hundred dollars per month to several thousand per month.

Thank you for the opportunity to present

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