

Resilient Band 31 Connectivity



Client Requirement Summary

- High availability over B31 and other LTE bands
- Ability to automatically switch between mobile networks
- Ability to lock to certain bands
- Connectivity in remote locations (longer reach from base stations for Band 31)
- Advanced security
- Secure WiFi
- Central management platform optimised to manage large scale networks often with poor connectivity

Key Benefits

- Dual or triple radio: dual LTE radio or dual SIM & WiFi
- Ruggedised metal case
- Advanced security
- Activator provisioning management platform
- DataChunk and job queue applications to manage poor connectivity deployments
- Ignition sense PSU and active power management

Requirement

The client is a nationwide chain with over 1000 retail outlets. Operational efficiency is dependent on retail and management applications that require high availability throughout Sweden. Stores are located in all towns throughout Sweden so resilient connectivity is required to enable complete coverage at all sites regardless whether the location is a remote town or larger city. Locations can often have poor or unreliable connectivity from the primary broadband networks, so when failover is required it must work.

Virtual Access Solution

Band 31 is ideal for low population density and remote areas due to its wider coverage than most other LTE bands. Therefore, a solution was proposed that consisted of a Virtual Access router supporting Band B31 and other LTE bands to meet the high availability requirement. The Virtual Access solution can failover from one mobile operator to another if and when the primary connection drops. Flexible triggering mechanisms are provided for the switch between network operators, allowing the system operation to be tailored to the customer's environment; for example, switchover can be triggered if the signal strength is below a certain level or if test connections to a specified destination fail. The new service based on the Virtual Access solution has proven to be a success due to its higher resilience compared to generic broadband or LTE services.

