## TSO

**Telecommunication Service Office** 

#### What are we?

- ❖ A Senior Telecom Engineering Team
  - partnering with clients
  - analysing and understanding the needs
  - conceiving the ideal solution
  - working in close relationship with major equipment suppliers
  - multi-vendor platforms
    - offering flexibility
    - adapting to the exact needs of its customers
- Sphere of Operations
  - Worldwide but especially Africa & Middle East

## *TSO*Independent System Integrator

- ❖ TSO brings you:
  - Tailor made solutions: offering its Clients the solution that answers exactly to their needs.
  - **Network specification and engineering:** assisting its Clients in defining their needs.
  - Purchasing: sourcing hardware and software solutions at the best value
  - Turn Key Networks: installing and commissioning the network
  - Long Term Partner: offering training for the operations and maintenance of the network and assisting in keeping a healthy network in operation

### Partners adding Strength

- ❖ Working with a network of associated installation and services companies in Middle-East and Africa
- ❖ In Lebanon and Syria: a core team of 14 with competencies in switching, fibre optic cables and wireless local loop. Installed the national fibre network for Shell in Syria (1500km: Deir-ez-Zor to Damascus with several spurs) and worked with CDMA WLL systems from L3 (Primewave)

Our strength resides in our ability to team with local companies, in our willingness to invest in training our engineers and partners, working with them in their home country and in managing procurement and delivery of essential products to some of the worlds remotest destinations.

### **Applications**

#### \* Radio Technologies:

- Wireless Local Loop:
  - For the connection of offshore platforms, exploration rigs, SCADA and narrow-band voice applications
  - Rural telephony
- IP Broadband Wireless Radio: Latest Technologies (WiFi; WiMax)
  - Video surveillance city wide (police etc.)
  - Broadband Internet to rural or suburban locations
  - Wi-Fi Hot Spots in Airports, Hotels, Shopping Malls ...
  - Building to building bridges for private networks.
  - Easily deployed, weatherproof enclosures, approved for police/military applications
  - Centrally administered for ease of network management

#### **Applications**

- Fibre Optic:
  - Long distance transmission systems along pipelines, railways, roads.
- ❖ Flexible Multiplexers, DACS, Protocol Converters...
- Terminal Equipments:
  - VOIP phones, VOIP ATAs, GSM encrypted phones, GSM Gateways (LCR), GSM Access Control, Security (automatic doors, gates, and fences)
- Surveillance Systems:
  - Infra-red detection, motion detection, night vision, border patrols, aviation systems.

# TSO With You Everywhere



Thank you for your attention