Carrier id
A Satellite Operator's Perspective

June 2013   Roland Smith, SES, General Manager, Customer Service Operations
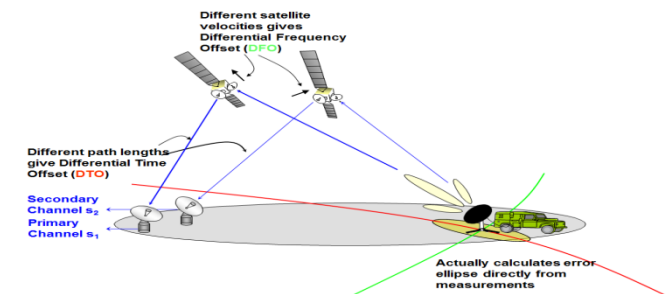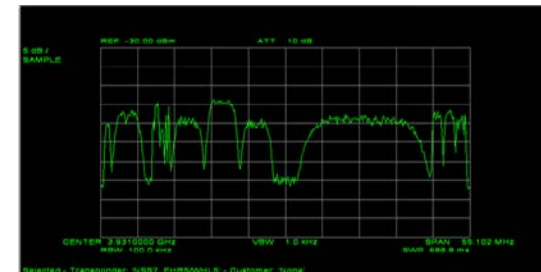
A Shared RF Environment
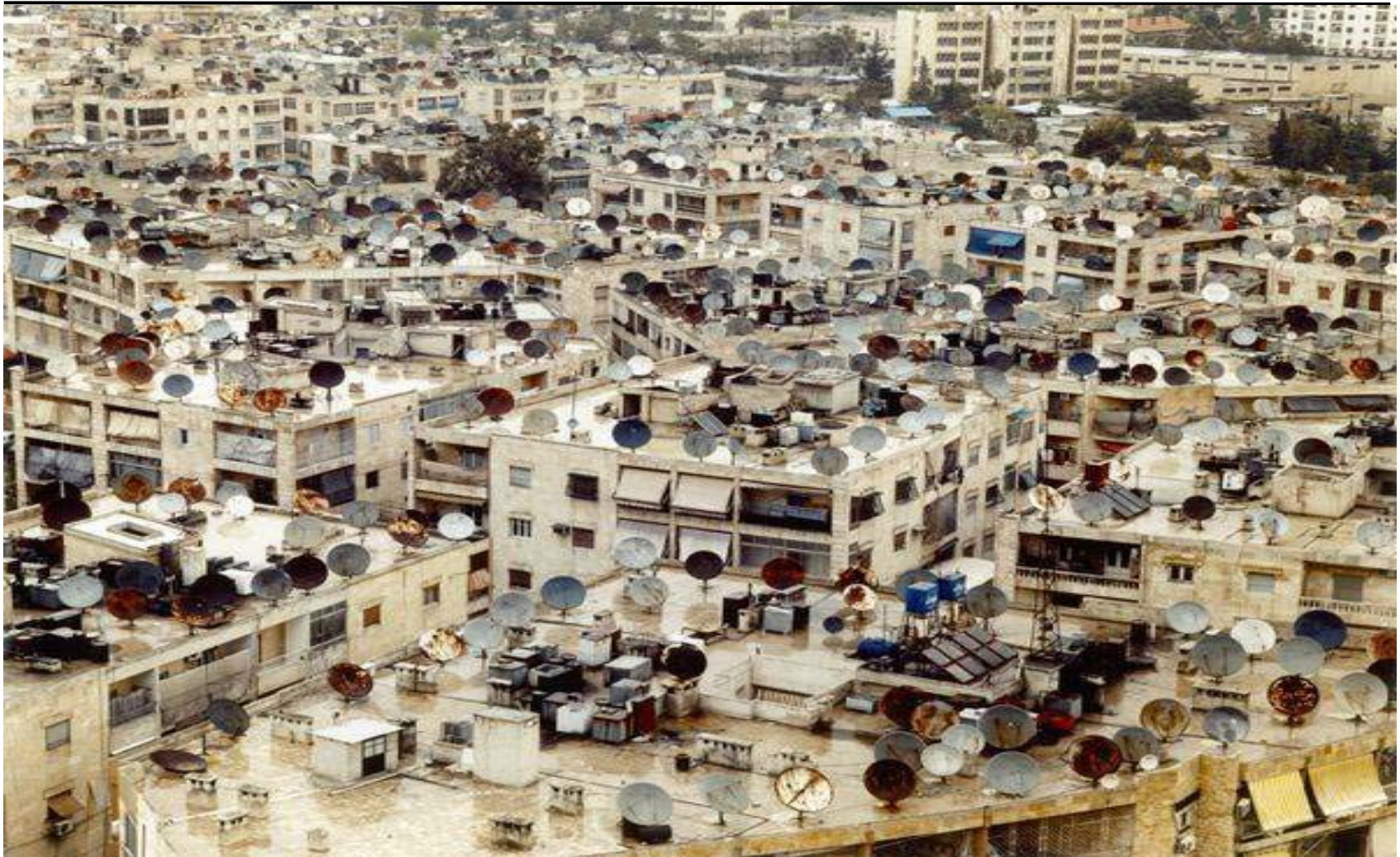
Managing Interference
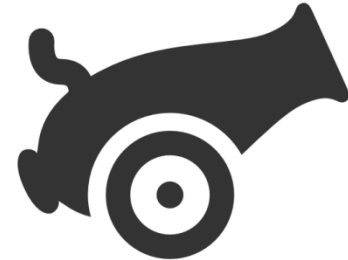
▲ **Many Tools at our disposal:**

- Experienced Operational staff

- Global Spectrum Monitoring Systems

- Geolocation Systems

Carrier id

▲ **One More Tool in the Arsenal**

- No complete solution

▲ **The target:**

- Every carrier uplinked to every satellite in every geographical location carries a unique identifier that can be used to help identify its source, should it be the cause of interference
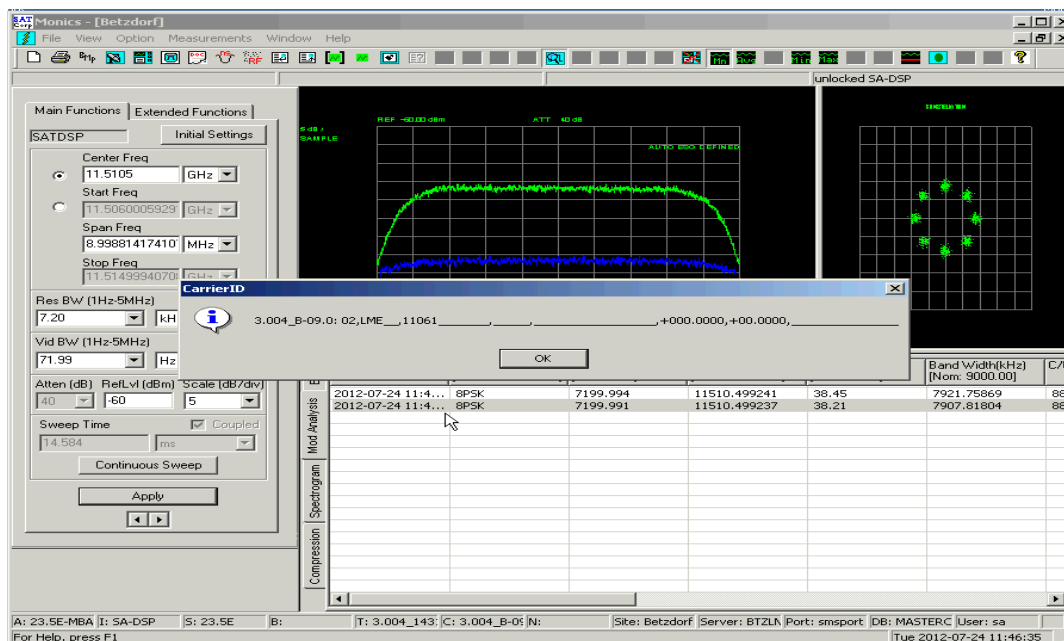
Major Milestone

▲ **Proof of concept - London Olympics 2012**

- SNGs doing OU uplinks for the Olympics equipped for Cxr_id (NIT solution)

- SNG Operators enabled Cxr_id

- Satellite Operators able to decode Cxr_id using standard monitoring systems

- Satellite Operators kept their own databases of users Cxr_ids

Will it help?

▲ **If carrier id helps in 10% of cases, it will be a success**

- Rogue SNGs

- ASI

- VSAT Networks
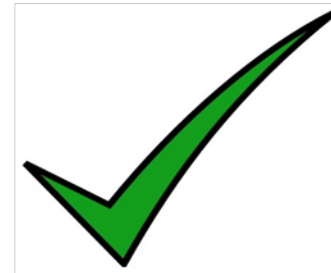
■ Cxr_id no help

■ Cxr_id helps

What needs to be done?

- ▲ Cxr_id standard feature on all satellite modems

- ▲ All operators of modems enable Cxr_id

- ▲ Decoding devices incorporated into all standard carrier monitoring systems

- ▲ Neutral organisation to host centralised database

- ▲ All satellite operators keep their own database of Cxr_ids of uplinks using their satellites

- ▲ Commercial model that ensures no barrier to the technology being used by equipment manufactures and operators

A Team Effort

Thank you!