



COMMUNICATION ON THE MOVE

UNIVERSAL HARDWARE PLATFORM



MOBILITY

- Efficient MODCODs with ACM and **high throughput**
- Software-defined equipment with **TDMA and SCPC return channels**
- **OpenAMIP** and other proprietary protocols to interface with antennas
- Automatic **beam switching** with network roaming
- Support for **GXT coverage maps** with prioritization of overlaps
- **Doppler effect** compensation up to 1300 km/h speeds
- **Load balancing** of channels and beams with predefined priorities
- Satellite router board for **integration into antennas**



Maritime



Airborne



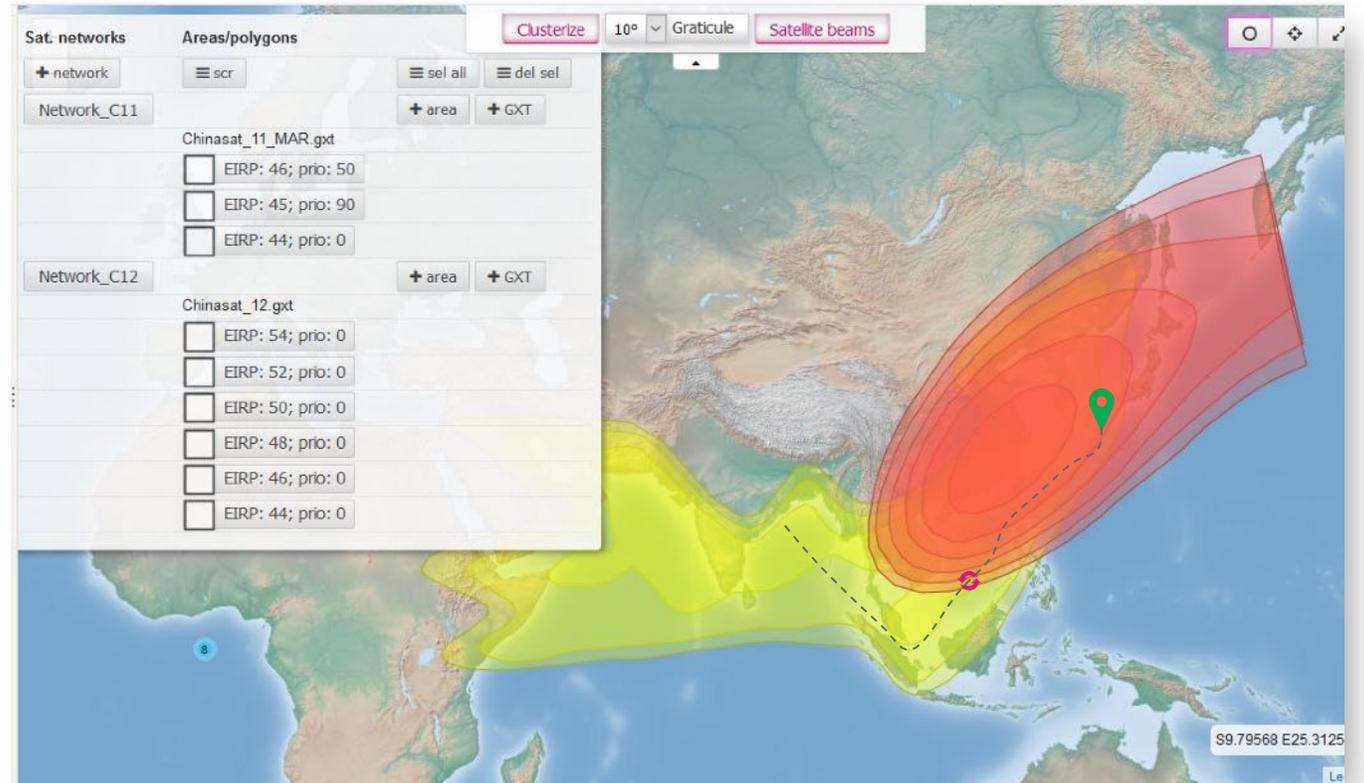
Emergency



MOBILITY

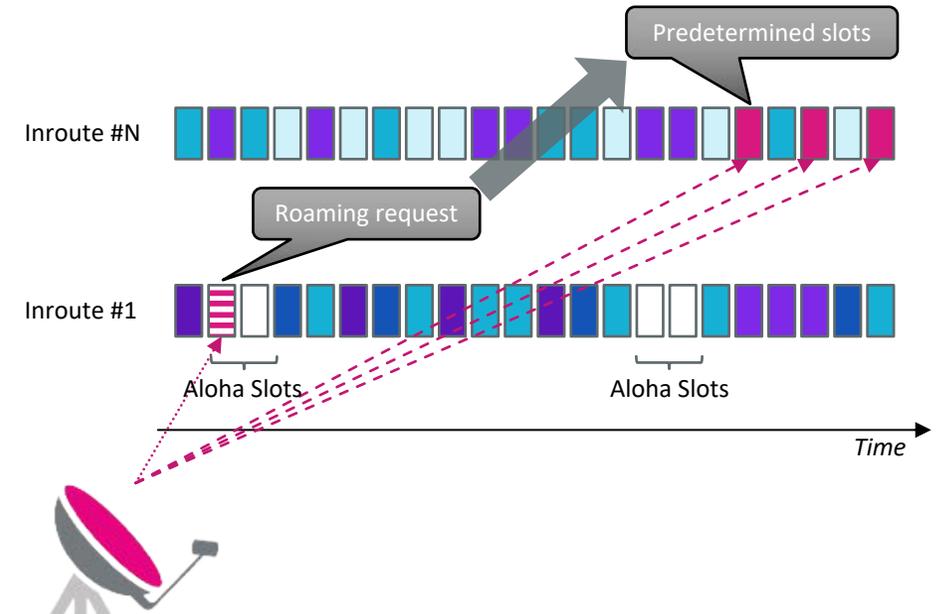
COMMUNICATIONS ON THE MOVE

- Support of GXT coverage maps
- Preloaded coverage maps in terminals
- Location-based make-before-break beam switching
- Priority of overlapped beams
- Network roaming without pre-dedicated bandwidth
- Tracking of mobile terminals



SLOTTED-ALOHA NETWORK ENTRY

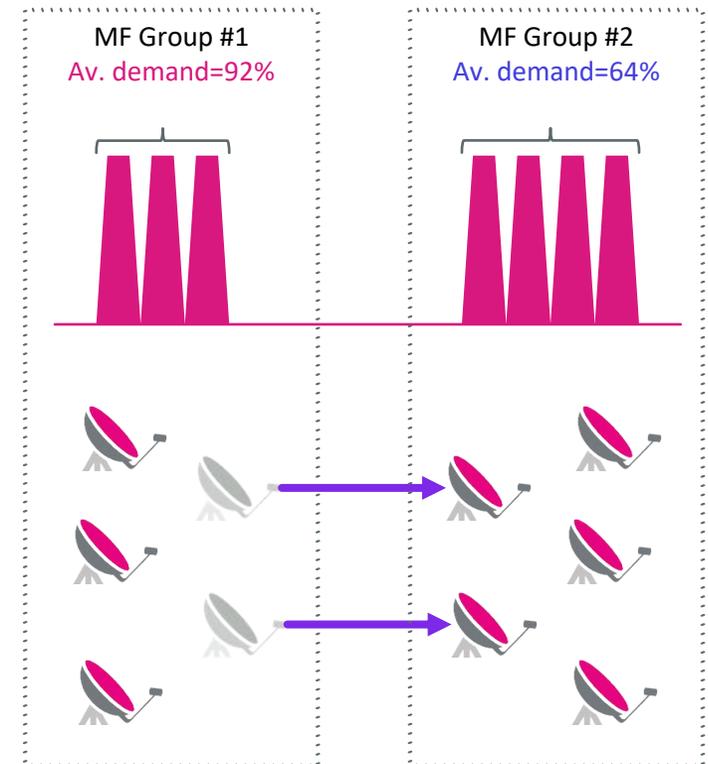
- Roaming Hub controller allows terminals to enter a new network without having the predetermined slots
- TDM/TDMA Hub allocates common Slotted Aloha bandwidth in the first TDMA carrier
- Newly arrived terminals can request roaming to this network through such common Aloha slots
- Random retransmissions in case of collisions
- If roaming is granted, terminal will start receiving standard predetermined slots as usual
- The hub will not allocate slots to terminals that have switched to another network or are inactive



SIGNIFICANT BANDWIDTH SAVINGS FOR NETWORKS WITH LONG-TIME INACTIVE TERMINALS OR WITH ROAMING

TDMA LOAD BALANCING

- NMS-based controller that is distributing network terminals across multiple Inroute TDMA controllers (standalone and MF)
- This ensures no single Inroute controller bears too much average traffic demand (average demand / capability ratio)
- Configurable max demand threshold and load difference to trigger the balancing process
- Balancing is done by changing the assigned Rx controller for terminals with longest uptime or low traffic (configurable)
- One network may have a few Load Balancing controllers with different strategies



**INCREASED BANDWIDTH EFFICIENCY AND
HIGH NETWORK PERFORMANCE**

UHP COTM

Capabilities

- Support for different antennas
- Seamless global coverage
- High-speed connectivity
- Flexible topology and waveforms
- Efficient use of satellite bandwidth
- Easy to deploy and operate
- Reliable equipment with redundancy

Advantages

- ✓ Scalable solutions applicable for fishing boats and cruise ships
- ✓ Meets demands of the most complex mobility applications
- ✓ Reliable broadband access for the crew and passengers everywhere
- ✓ Efficient multiservice VSAT platform for fixed and COTM terminals