



Communication response to Extreme Events
Initial RESPONSE & RECOVERY from hours to a few
days!

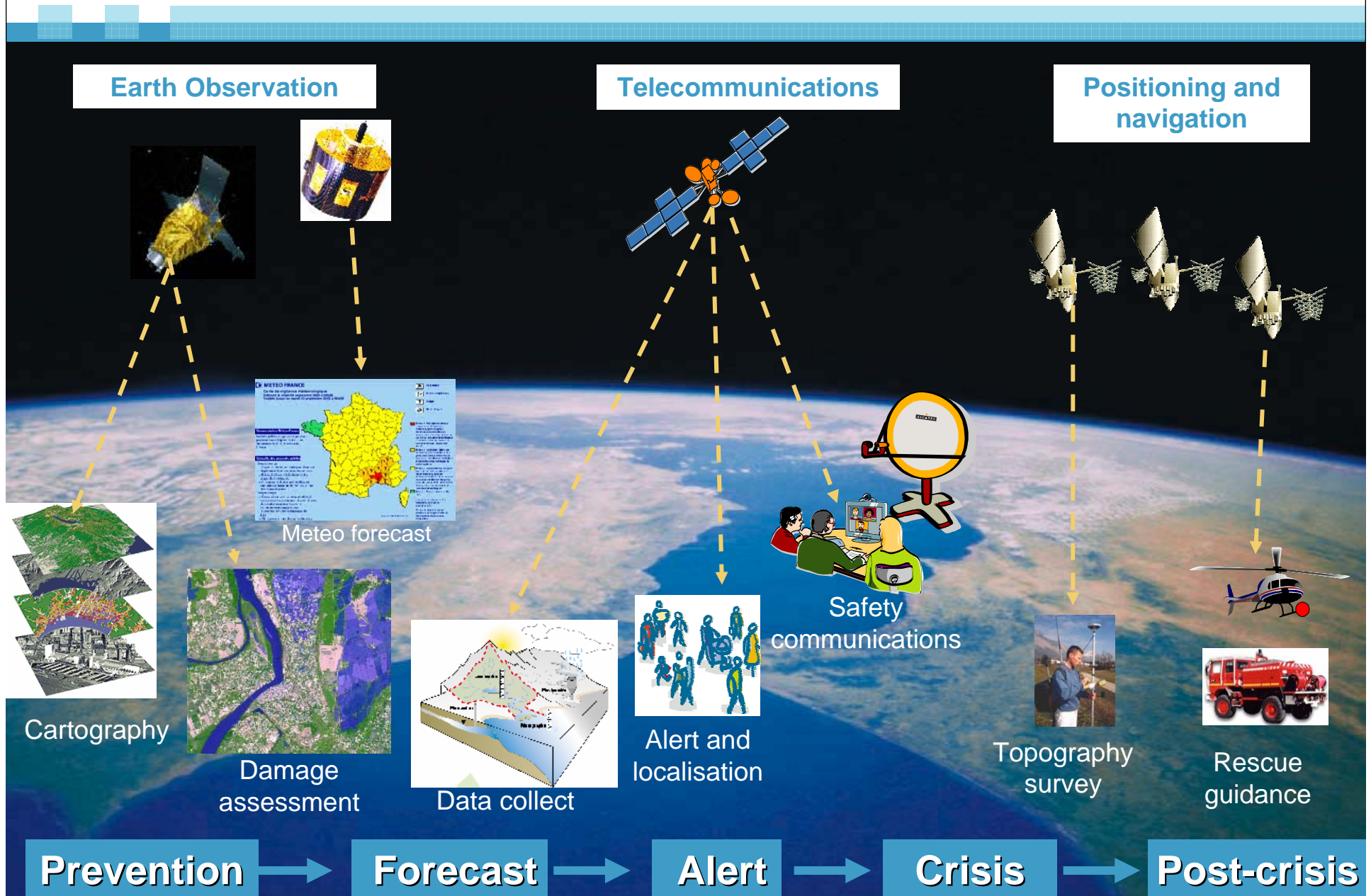
**How can Earth Observation and Surveillance, Satellite
Navigation and Telecommunications technologies can
collaborate for a crisis management and restoration
to normal?**

London - Tuesday 8 June 2006

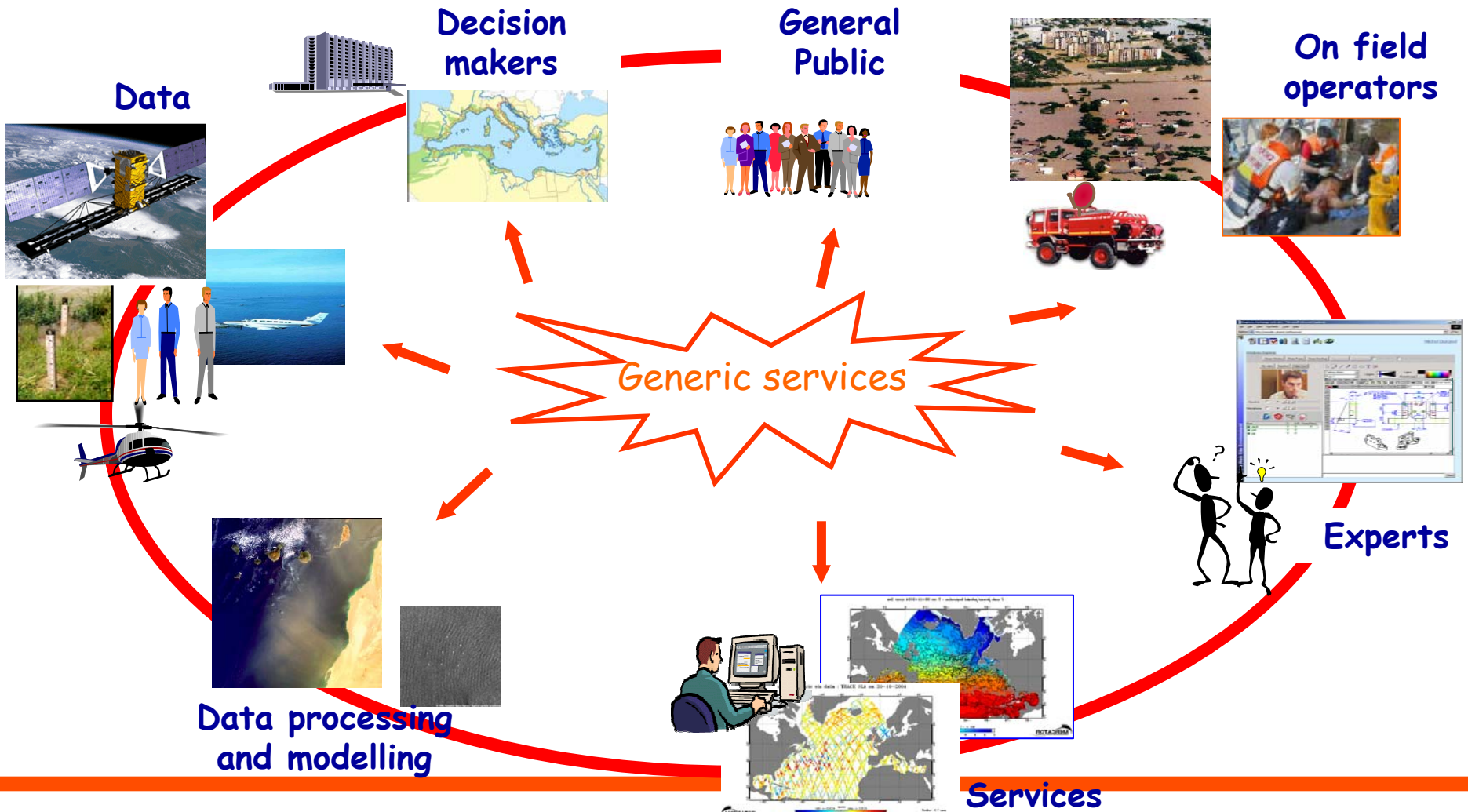
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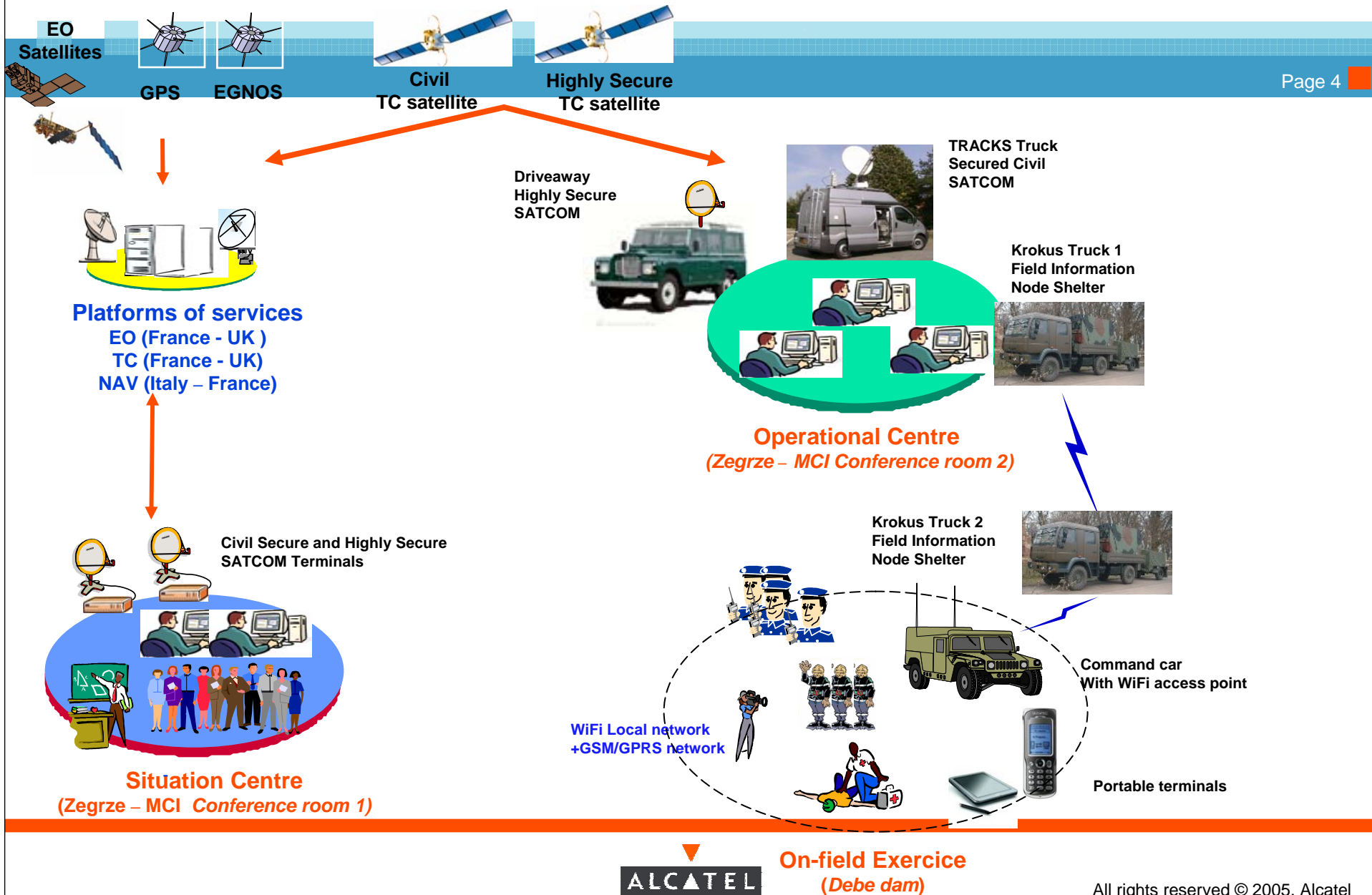


Contribution of satellites in risk management



Security operations: the different contributors





The image displays two screenshots of the ASTRO+ GIS application interface, showing flood simulation and evacuation planning.

Top Screenshot: Shows a map with flood extension scenarios. Labels include "Evacuation road 1", "Flood extension Scenario « light »", "Flood extension Scenario « severe »", "Flood extension Scenario « extreme »", and "Evacuation road 2". The interface includes a toolbar, a coordinate display (X=20.9381027837306, Y=62.50002379872206), and a legend titled "Geographical layers" with categories like Local layers, Features, Other, Area, Villages, Natural elements, Ways, Contour, Geofencing, Flood extension, and Light.

Bottom Screenshot: Shows a detailed map with various incident markers. Labels include "Krokus 2", "Firemen Intervention", "Earthquake Epicentre", "Recon 1", "Destroyed building", and "Car accident". The interface includes a toolbar, a coordinate display (X=20.9381027837306, Y=62.48165212719533), and a legend titled "Geographical layers" with categories like Local layers, Features, Other, Area, Villages, Natural elements, Ways, Contour, Geofencing, Flood extension, Corridor, Ground_TC_coverage, Earthquake, Tonic_gas_simulation_15min, Alcas, GPS, Map information, Incidents, Interventions, and WMS servers.

Both screenshots show a "Message" window with the following content:

```

Message +
Incident Intervention
Map info
SHIP GMLK
LBS LBS SERVER
NEW DATA!
Author: wtrn_jm
Date: 2006-02-24 11:09:35
Message: http://www.intervention.com/has_been_added
Author: wtrn_jm
Date: 2006-02-24 11:08:25
    
```

Applications: Collaborative work

RIMS Conference

Netscape: RIMS - Alcatel Space Web Server

RAT v4.2.15: RIMS Conference

xterm

Terminal output:

```

Swap: 200M Total, 200M Free
PID USERNAME PRI NICE SIZE RES STATE TIME WCPU CPU COM
9073 root 2 10 3076K 7796K select 4:06 7.23% 7.23% vic
277 root 2 0 14116K 12972K select 13:22 4.05% 4.05% NFS
9076 root 10 0 1660K 1364K RUN 1:49 1.17% 1.17% rat
9075 root 2 0 5348K 4964K select 1:15 1.12% 1.12% rat
9074 root 2 0 968K 716K RUN 0:19 0.05% 0.05% rat
280 root 2 0 3308K 2544K select 0:20 0.00% 0.00% uua
204 root 2 0 804K 460K select 0:13 0.00% 0.00% nou
9061 root 2 0 1534K 1228K select 0:14 0.00% 0.00% ppp
9063 root 2 0 864K 520K select 0:06 0.00% 0.00% dvt
9146 root 2 0 21562K 18572K select 0:04 0.00% 0.00% con
9066 root 2 0 968K 620K select 0:01 0.00% 0.00% mro
126 root 2 0 832K 544K select 0:01 0.00% 0.00% sys
4909 root 2 0 2549K 2244K select 0:01 0.00% 0.00% xte
9058 root 2 -27 1035K 788K select 0:01 0.00% 0.00% isd
170 root 10 0 995K 576K nanslp 0:00 0.00% 0.00% cro
4910 root 10 0 852K 604K wait 0:00 0.00% 0.00% bas
bash-2.04#
bash-2.04#
bash-2.04# xv &
[1] 9206
bash-2.04#
  
```

09:31:13 Login: Cpt Texier Sector: Hospital 2 Operation: Earthquake S Starting time: 06:30 pm (local) Exit
Status: Coordinator F-M Current time: 08:12 pm (local)

EmergOSA Basic modules Private applic. VIDEO Conference

Map: Berre-l'Étang

Salle 7 / Room 7 (Demo MFA) - Marratech

Terminal output:

```

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9073 root 2 10 3076K 7796K select 4:06 7.23% 7.23% vic
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bash-2.04# xv &
[1] 9206
bash-2.04#
  
```

Main components:

- Auto pointing and Satcom antenna
- Control unit + ODU + IDU DVB-RCS
- Reduce service backup (Inmarsat BGAN)



Supported terminals:

- WiFi 802.11g ⁽²⁾ + long distance antenna
- Micro BTS GSM ⁽³⁾ + omni directional antenna
- applications servers
- Tablet PC WiFi + webcam
- micro-helmet +perif + ToIP + GSM
- autonomous energy

Main supported information applications:

- Video conferencing, including sharing of data and whiteboard
- Live video streaming from field locations
- WIFI capability surrounding mobile satellite communication terminal
- Integrated ruggedized PC Tablets for extensive use by in-field teams
- Internet access to World Wide Web
- Fully managed voice / media services (VoIP, GSM)
- Open Tactical Geographic Information System (Picture & Map Analysis)
- Location based services
- Generic data collect and sharing

Enhanced & specialized applications for crisis management:

- Victims Management
- Population flow management
- Tactical decision support
- Request and offers
- Epidemiologic data collect
- Medical Assistance (tele medicine)

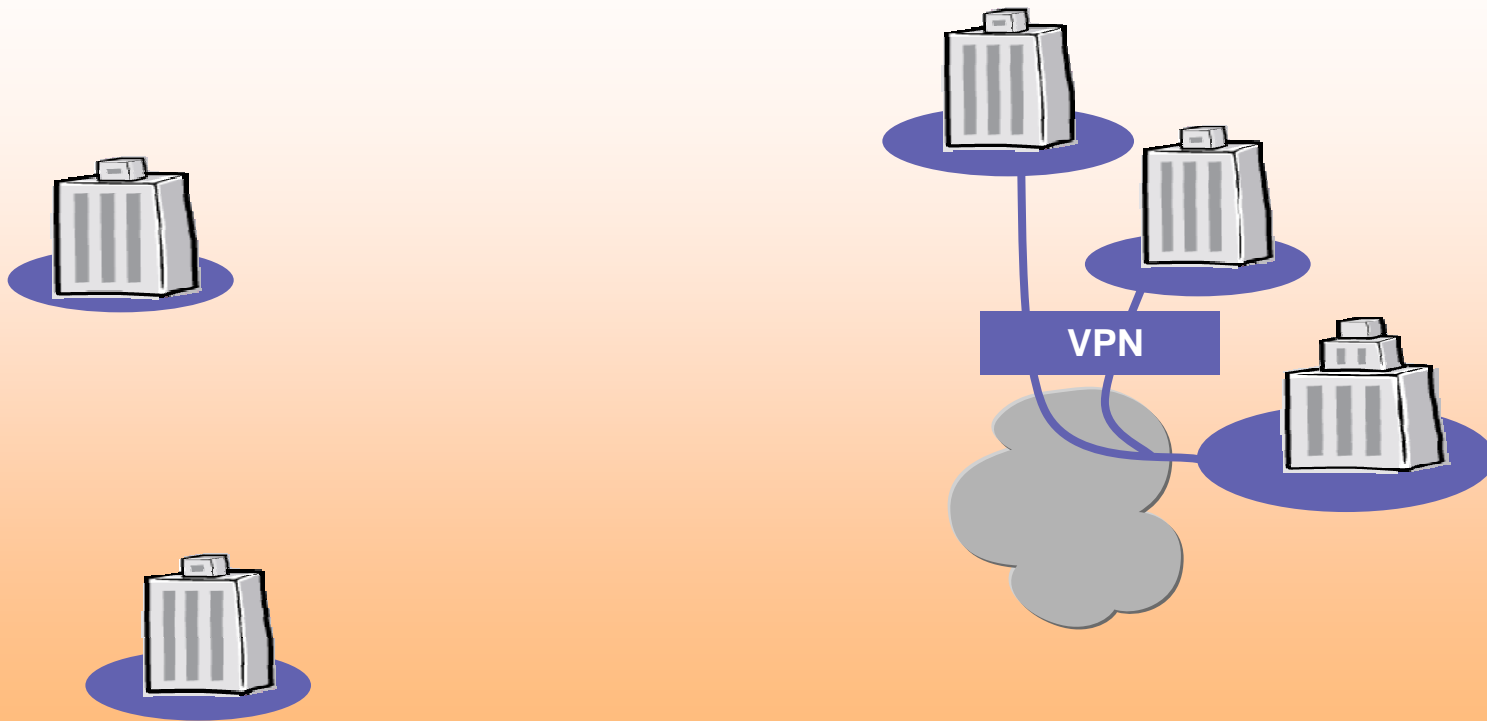


Logistics vs customers:

- Several models to adapt to different traffic needs
- Large range of power amplifiers and antenna size
- Several Terminal packaging according to mobility needs (transportable, fix, fast, deployable on vehicle, on ships)

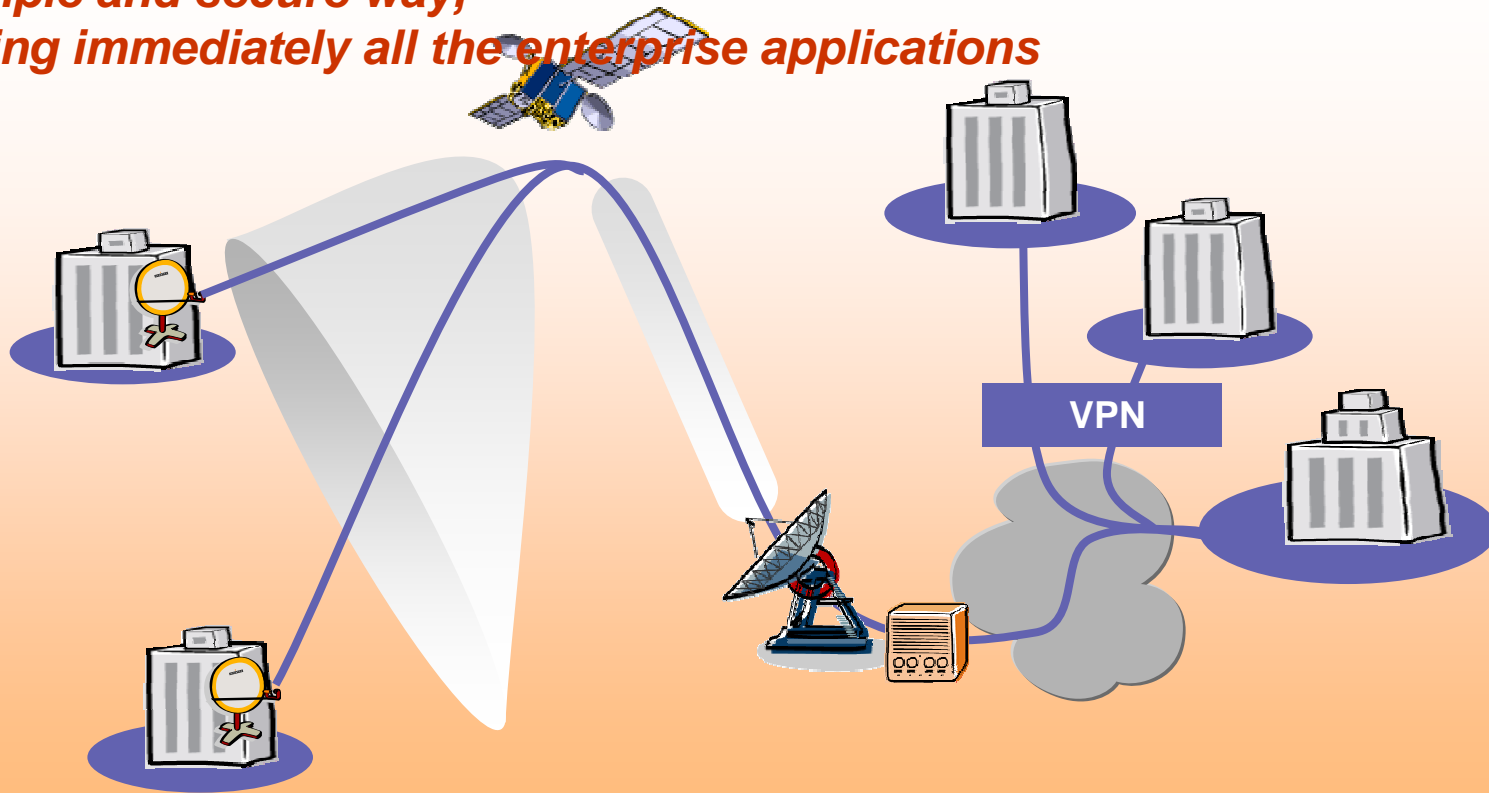


Integrating Remote Sites into Private Networks



Integrating Remote Sites into Private Networks:

- *In a simple and secure way,*
- *Restoring immediately all the enterprise applications*



Integrating remote isolated sites to the public GSM network (BSC) in an efficient, Simple & Secure way,

