



# SPACE, DEFENCE and SECURITY

VIII<sup>th</sup> European Interparliamentary Space Conference

Kourou, 21<sup>st</sup> September 2006

## Technological & Industrial Capacities

*Pascale SOURISSE*

*President & CEO*

*Alcatel Alenia Space*

- Space – a sovereignty issue
- Space technologies at the heart of Defence systems
- Space technologies at the heart of Information control
- Space technologies at the heart of European Security
- Alcatel Alenia Space at the heart of European Defence and Security Programs
- Space sector and Industry Fragilities
- Strengthening European Space
- Alcatel Alenia Space's ambition

## ■ Mr. Jacques Chirac, Alcatel Alenia Space Cannes – Mars 2006

- “In the current very competitive context, mastering Space is a political and strategic issue. Vis-a-vis the United States, Russia, Japan, and now China and India, we have to keep Europe’s competencies and capacities at the best level.”

## ■ Michèle Alliot-Marie, September 2006

- “Space should be one of the priorities of the French defence policy. Its mastering is one of the major strategic challenges of the 21<sup>st</sup> century. Space should be one of the priorities of the next French law, establishing French military budgets, in the same line as information and communication systems. The effort in this field should be pursued, and its European dimension should be taken into account.”

Integral part of modern military operations

■ **4 strategic functions of Defence :**

- **Dissuasion**
- **Prevention**
- **Projection**
- **Increased protection**

■ **Actions Management which enter the decisional loop**

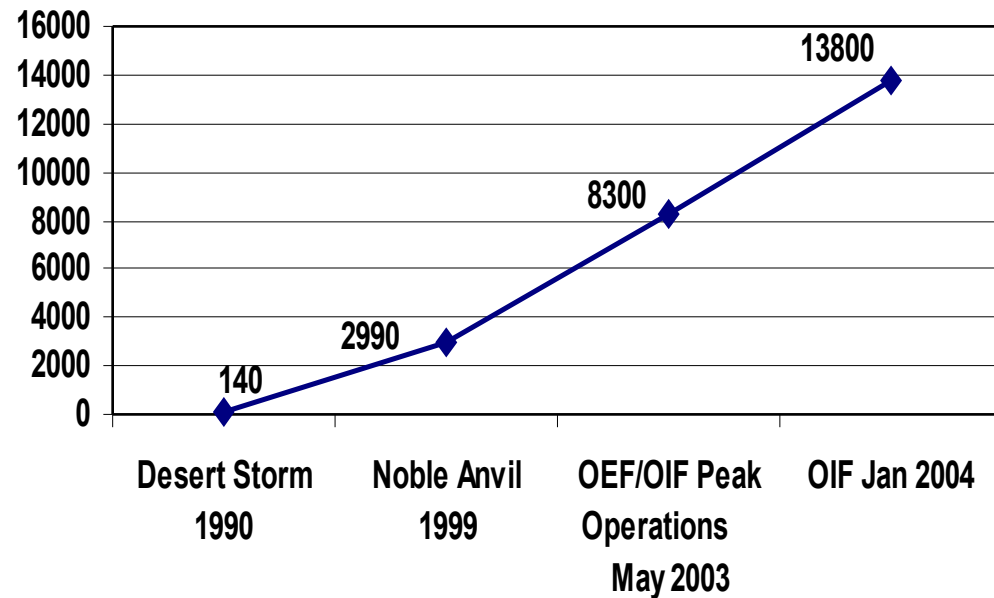
- **Acquisition**
- **Collection**
- **Exploitation**
- **Transmission**
- **Decision**

⇒ **Operational and informational vantage for Network Centric Warfare NCW (Time sensitive target)**

## ▼ Network Centric Warfare: capacity needs booming

- Real time Communications
- Intelligence data broadcast
- Data links with drones
- SATCOMs use by infantryman

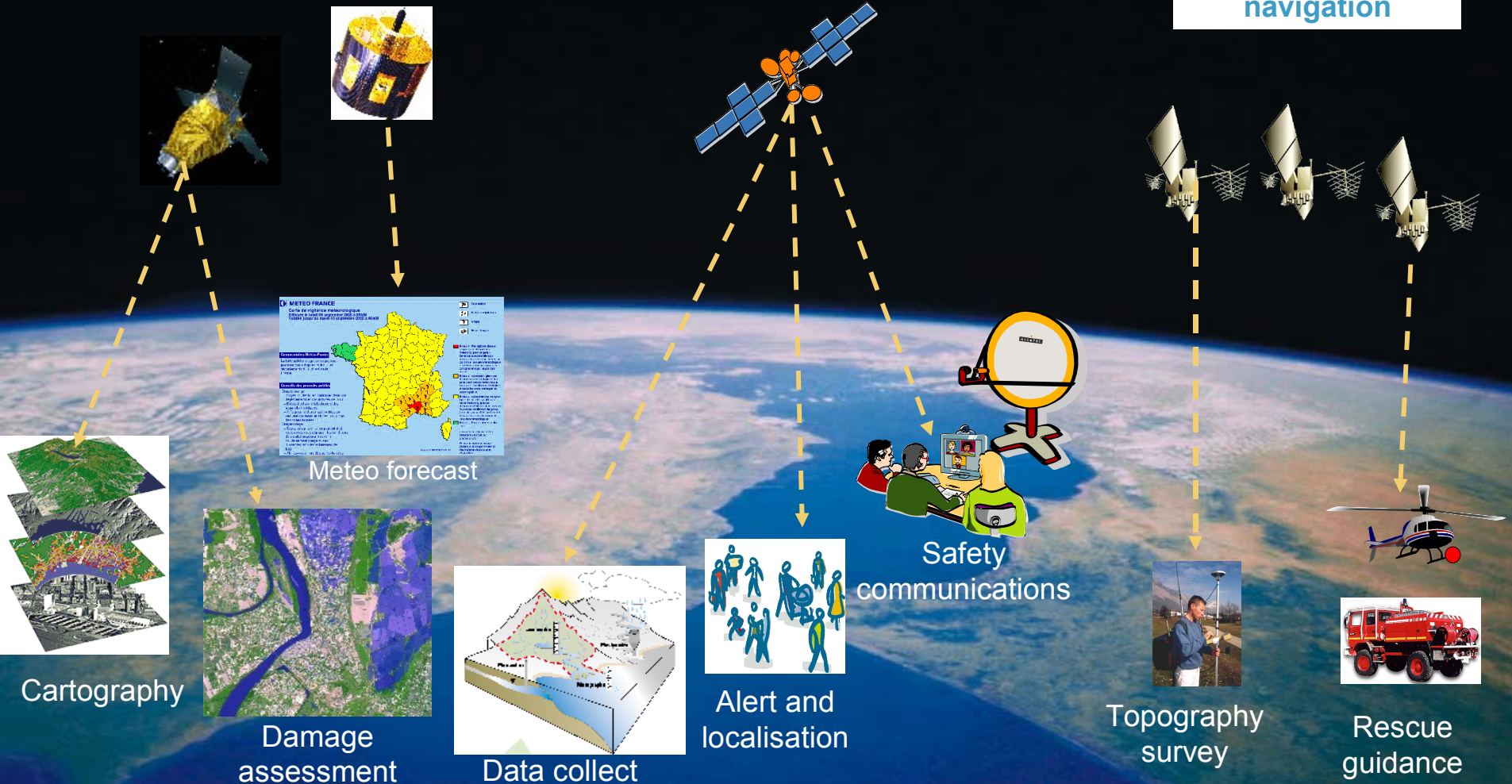
**US operations: Iraq and Afghanistan**  
Increase of per user band-width (bits/s)  
(from DOD)



**Earth Observation**

**Telecommunications**

**Positioning and navigation**



**Prevention** →

**Forecast** →

**Alert** →

**Crisis** →

**Post-crisis**



## Building NCW/NEC systems

### Communications

Inter-operability  
Mobility  
Flexibility  
Broadband  
Secure

Syracuse  
Sicral  
Satcom BW

### Intelligence & reconnaissance

Extra-territorial  
High resolution  
All weather  
Inter-operability  
Data sharing

Cosmo-SkyMed  
Pleiades  
Helios  
Sar Lupe  
Spirale

### Navigation

Global  
Accuracy  
Integrity

EGNOS  
Galileo



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## ■ **United States: space is an overwhelming priority**

- **Concept of « space predominance »**

## ■ **Rest of the world: emerging powers**

- **Heavy investments in space : China, India, Brazil**

## ■ **Europe: a political wish but not the money to match it**

- **Europe needs space for its defence, foreign operations and security**
- **Space technologies are mature**
- **Space assets are under-used and under-developed in European programs**

## ■ **Insufficient action leaves Europe vulnerable to two dangers :**

- **Weakening of capabilities compared with other space powers**
- **Increased challenges for European space companies**

- **Political actions are to be taken/implemented  
at national and European levels**
  - ⇒ **for the benefit of Europe, its citizens and its industry**
- Fulfil **obligation to protect European citizens**
- Guarantee the **European independent use of space**
- Prevent the danger of **industry regression**
- Encourage **multi-national use of space assets**
- **Involve the new entrants** in space applications

**Waiting cannot be an option**

- **Develop multi domestic offers**
- **Promote pan European space based applications and services**
- **Support the development of space activities in every European country**

# A New Vision of Space