



# Aspects of an overall European Space Policy

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# The Institutional system of the European Union

A unique **institutional system**

The Member States **delegate sovereignty for certain matters** to independent institutions.

The **Commission** traditionally upholds the interests of the Union as a whole.

Each **national government** is represented within the **Council**.

The **European Parliament** is directly elected by citizens.

# The European Union and the Treaties

The European Union (EU Treaty) is constructed on three pillars

- European Communities (sectoral economic and social policies including space activities – first pillar)
- Common Foreign and Security Policy (second pillar)
- Justice and Home Affairs (third pillar)

**Community Policies with Space aspects are:**

For Example: Transport, Agriculture and Fishery, Common Foreign Policy, Industry, Research, Environment, social policies and others.

# The EU and space

- Enlarged European Union represents the framework for a integrated Europe with over 400 million citizens and a land area  $> 4$  million  $\text{km}^2$ ;
- Union policies/initiatives increasingly require space as an implementing tool; EU research concentrates on these applications;
- Space-related technology development: mainly with ESA and national space agencies

**=> Need for a coherent European approach**



# Space activities support Union policies

- Economic growth and social development;
- industrial and technological competitiveness
- Social and economic development in European neighbourhood countries (European Neighbourhood Policy)
- Universal access to information
- Sustainable development of Earth
- Developing countries (digital divide, environment, security and management of natural resources)
- Enhance security of citizens in and outside of Europe



# Space as a shared competence in the new EU Constitution

In June 2004 Heads of EU Member States signed the Constitutional Treaty (ratification by the Member States is on hold)

(Article 254 “Space”)

- To draw up a European Space Policy
- Implementation through a European Space Programme
- Set clear responsibilities for EU and ESA

# WHITE PAPER on European Space Policy

- European Parliament in 2002 requested a White Paper on Space after endorsement of first joint EU-ESA European Space Strategy (2001);
- Commission, together with ESA, started in 2003 a broad consultation process initiated by a Green Paper on Space (discussion paper);
- As result of the consultation, the Commission adopted a White Paper on Space including an Action Plan in November 2003;



# Main messages of the White Paper

- ❑ Europe needs a space policy driven by demand in support of the Union's policies and objectives
- ❑ Space should be established as a shared competence in the Constitutional Treaty
- ❑ A European space policy requires a new governance of space activities in Europe
  - EC shall define political priorities (federating institutional demand)
  - ESA concentrates on the implementation





## Roles of ESA and EC in a European Space Policy

The **cooperation between EC and ESA** is based on two complementary institutional roles:

- EC responsible to federate the European demand (in particular on space applications)
- ESA responsible to federate the European Space offer

A Framework Agreement between EC and ESA was concluded in March 2004



# Governance in European Space Policy

## Implementation of the EU-ESA Framework Agreement

- management by the ESA of European Community space-related activities in accordance with the rules of the European Community;
- participation by the European Community in optional programmes of ESA;
- joint activities coordinated, implemented and funded by both Parties;
- Complementary initiatives to research and development activities, i.e. the management of infrastructures;



# Instruments

1. **Joint EC- ESA Secretariat (JS)** coordinates the implementation of the Agreement
2. **High Level Space Policy Group (HSPG)**
  - Representatives of 27 EU and ESA Member States – co-chaired by DG from EC and ESA
  - Gives advice to the JS and monitors implementation of joint actions
  - Discusses a coherent approach with Member States space activities
  - Contributes to the elaboration of a European Space Programme
3. **Space Council** (meets twice a year)
  - Relevant Ministers of EU Competitive Council and ESA Council Adopts main policy orientations
  - Monitors the implementation of the Framework Agreement and joint initiatives

# Elements of an overall European Space Policy

Three traditional space sectors:

**Science:** space science, micro-gravity, space station, earth observation science (science and technology-driven, ESA)

**Launchers,** driven by independence and market

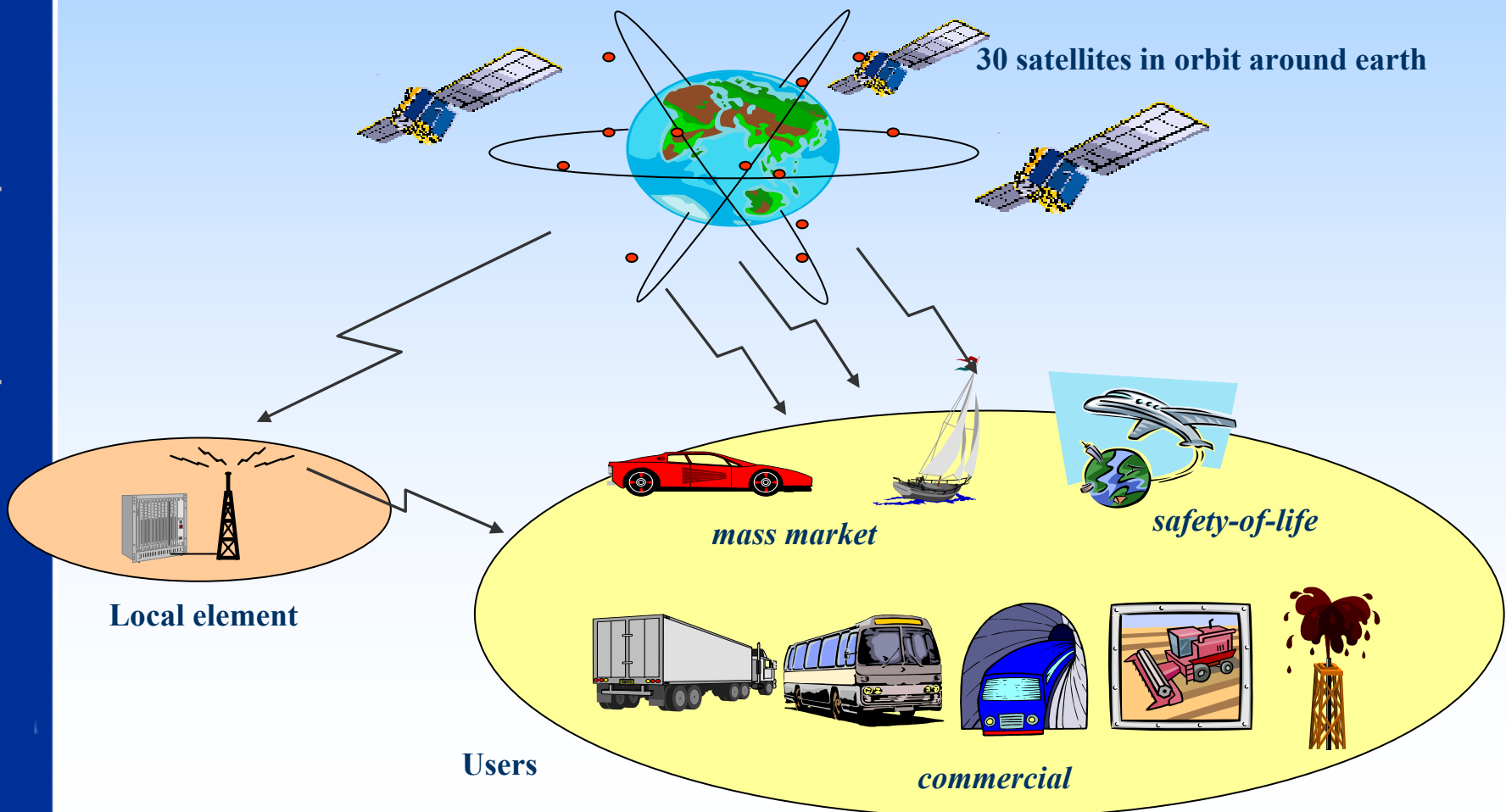
**Applications:**

- Earth observation (GMES)
- Satellite Navigation (Galileo)
- Meteorology (EUMETSAT)
- Telecom (largely commercial)

=> EU-ESA space policy emphasises user-driven space activities/ applications



# GALILEO - Satellite radio navigation system (joint ESA – EU project)





# *Space-based applications within the next EU Research Programme (FP-7)*

**GMES** (*Global Monitoring for Environment and Security*):

user driven approach to:

- ✓ satellite-based monitoring and early warning system
- ✓ Management of environment and security;
- ✓ Integration with satellite communication and navigation

Innovative **satellite communication** services in public application sectors (e.g. civil protection, tele-medicine)

Technologies for reducing the **vulnerability of space-infrastructure** and for the surveillance of space



## *RTD for strengthening space foundations*

- Contribution to international space exploration initiative (i.e. Mars Express or the European space exploration programme Aurora, ExoMars robotic mission - 2011)
- Contribution to:
  - Space transportation technology (Ariane, Vega, AT, Soyuz).
  - Space sciences including life in space (ISS).

# Roadmap for developing a European Space Programme

- Three Space Councils took place in 2004 and 2005 (ESA Council + Competitiveness Council)
- Preliminary Elements set out in the Communication from the Commission in May 2005 (COM(2005) 208 final)
- Draft proposal for a European Space Programme from Commission by end of 2006
- Adoption EU Space Programme by mid 2007

[http://europa.eu.int/comm/space/index\\_en.html](http://europa.eu.int/comm/space/index_en.html)