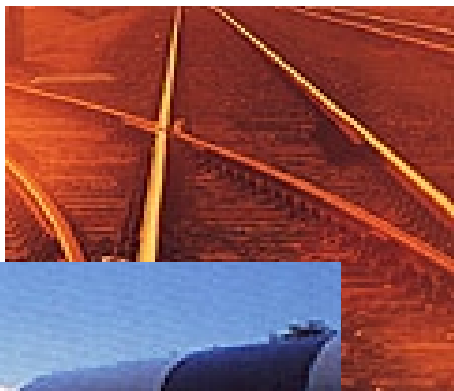




GALILEO





Galileo Service Definitions (1)

- **Open Service**
 - ◆ performances to compete with GPS
- **Commercial Services**
 - ◆ market driven commercial services.
 - ◆ Access commercially controlled.
 - ◆ Services to include integrity, differential corrections etc.
- **Public Services**
 - ◆ **Safety of Life Services**
 - ▶ high availability and high integrity needs
 - *Integrity warnings – 6 second Time to Alarm*
 - *Availability 99.9%*
 - ▶ Access controlled.
 - ▶ Encrypted signal included
 - ▶ Final decision in 2001



- **Public Services (continued)**

- ◆ **Regulated Services**

- Common EU Policies
- Same performance as safety of life.
- Guarantees of service.
- Access controlled.
- Encrypted signal.

- ◆ **Search and Rescue**

- Location of distress beacons with acknowledgement to user through Galileo Navigation signal

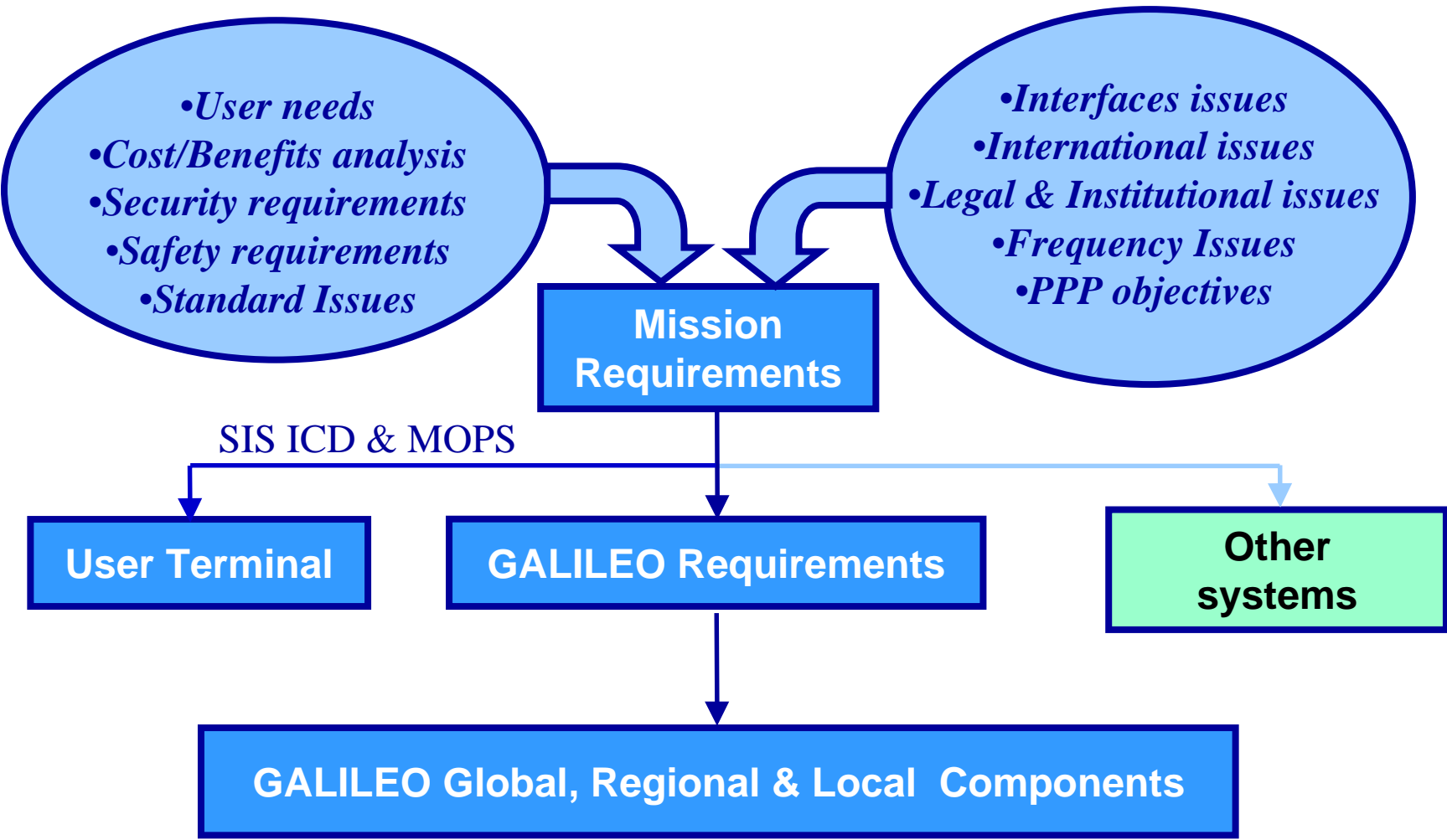
- **Navigation Related Communication Services.**

- ◆ Existing/ planned space or terrestrial communications systems to be used.
- ◆ Option to include a packet data payload on Galileo will be decided in 2001.





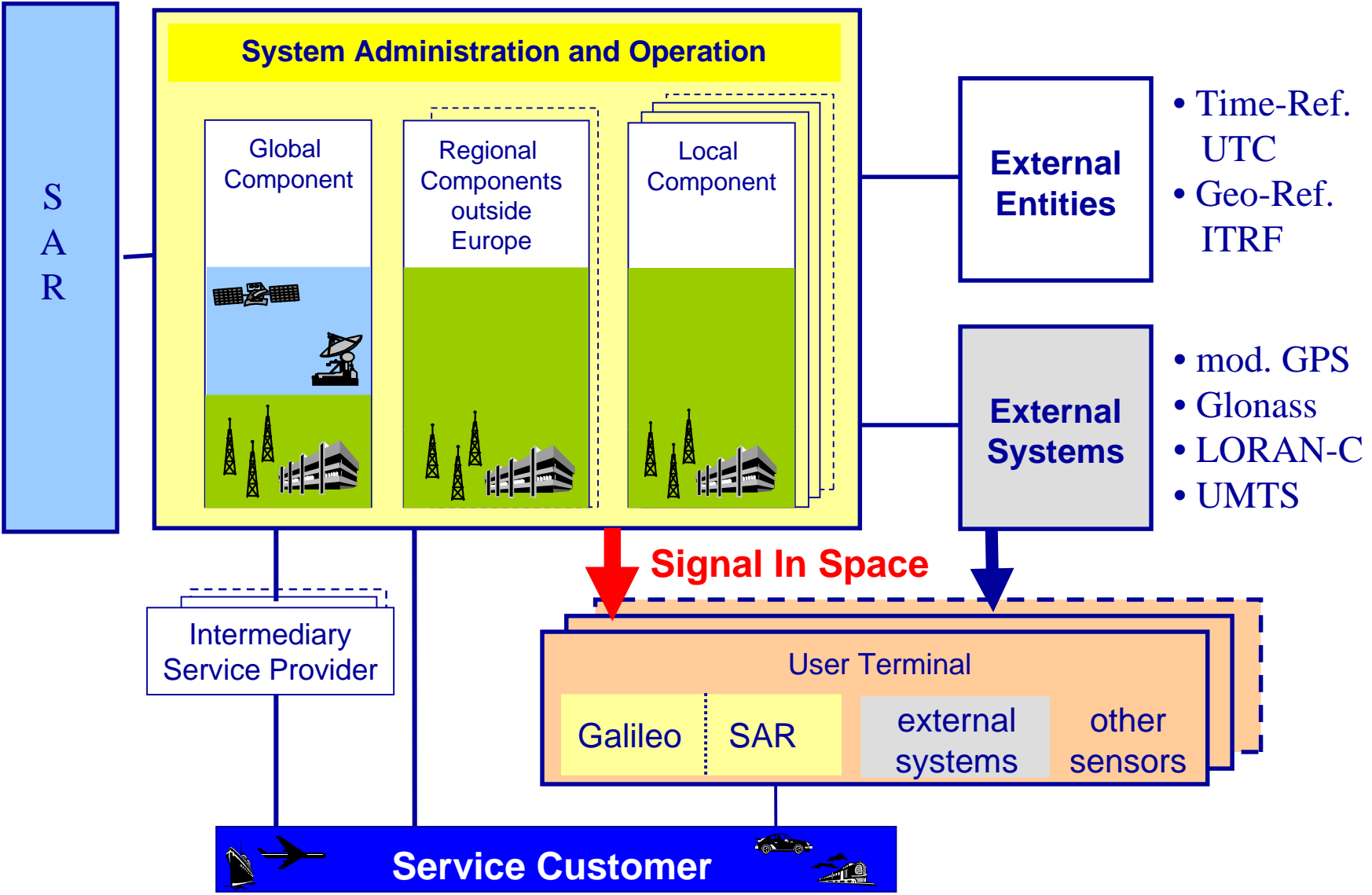
Overview of Mission Requirements





GALILEO OVERALL ARCHITECTURE

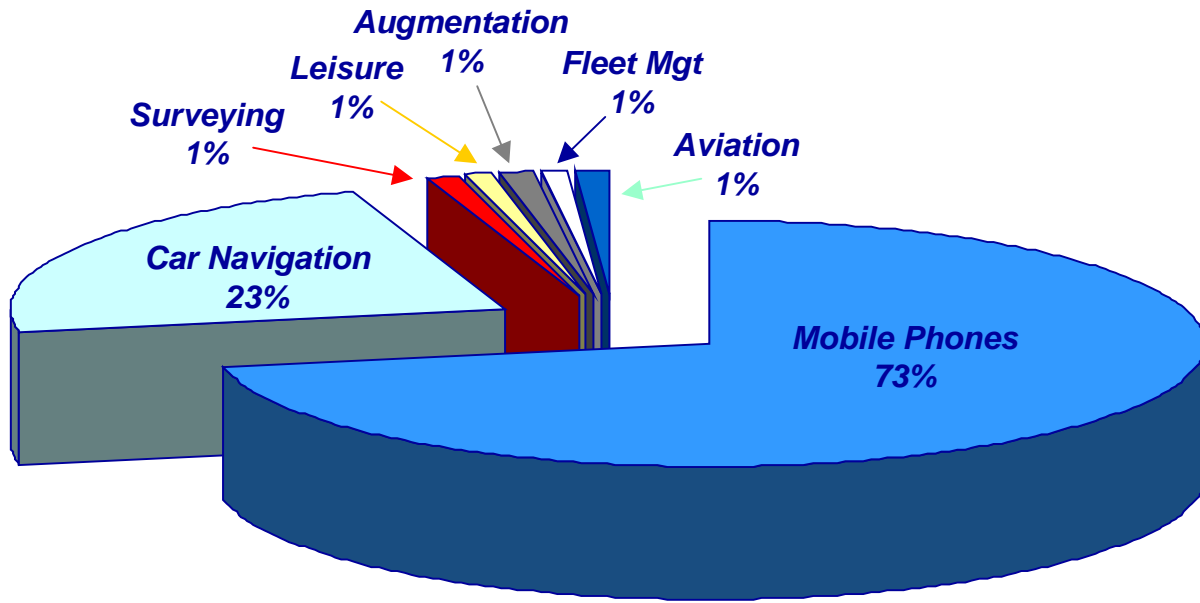
GALILEO





European GNSS Market 2005

GALILEO



Market Size €6Bn





GALILEO discriminators

- { GPS alone: 55% urban coverage
- { GPS+GALILEO: 95% urban coverage

GALILEO: liability and guarantee on quality of service

GALILEO: certification for Safety of Life

GALILEO: local elements

etc.





Organisational and contractual aspects

- **An operating agreement will constitute the link between the public side of GALILEO and the operator.**
- **The operator needs freedom to establish a business and the public obligations need to be adequately reflected.**
- **No legal requirement that the public side needs to be the owner of the infrastructure.**
- **A special vehicle company, separating the operator and the owner could facilitate the establishment of a PPP.**

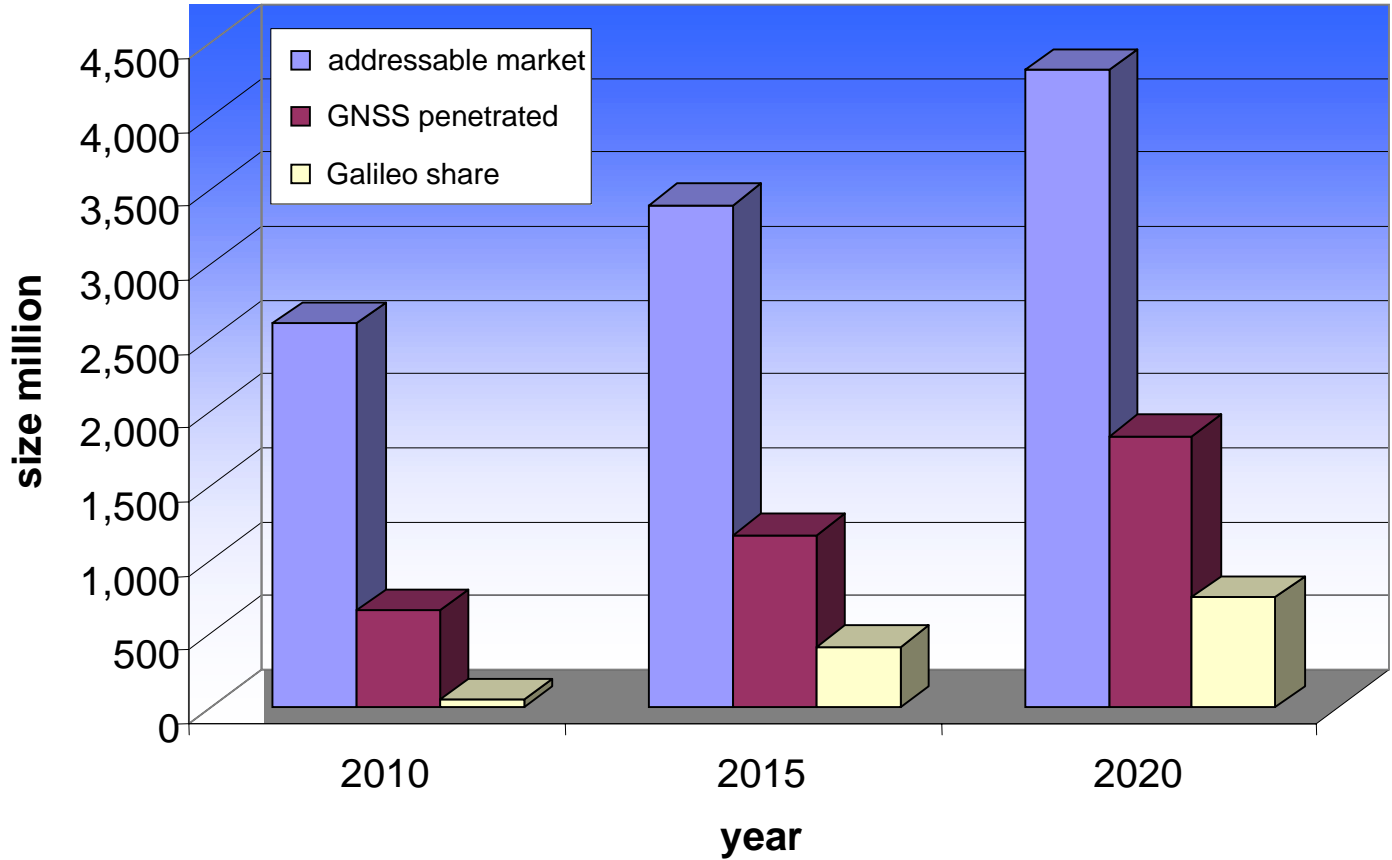




Total market size

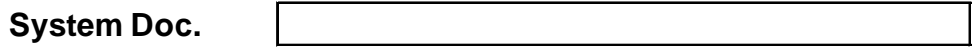
GALILEO

Galileo total market size as share of addressable market
most likely values





General Roadmap Logic



GALILEO

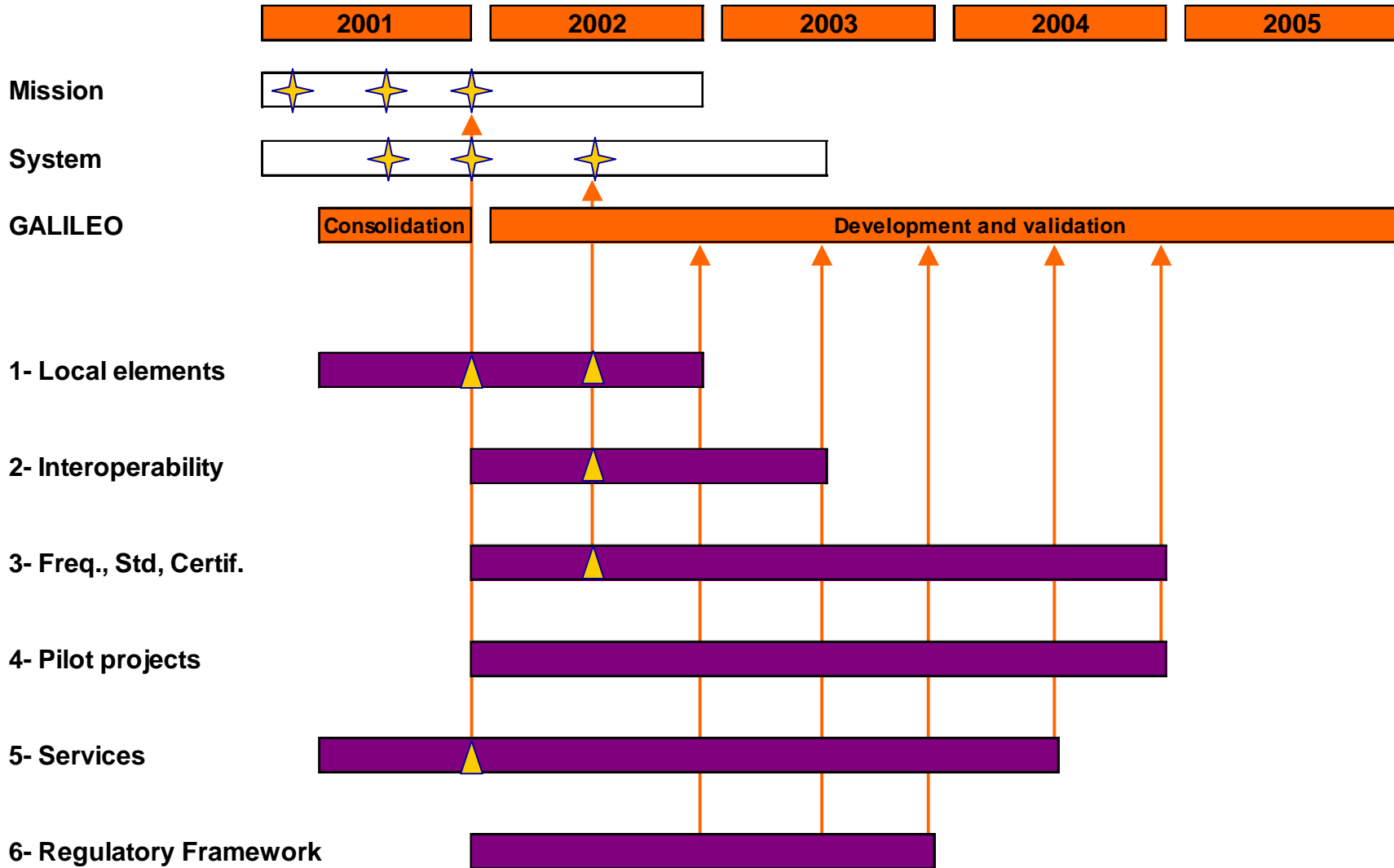


+ Important milestones :

- World RadioConference (WRC-2003)
- Flight model(s) availability
- EGNOS availability
- Management Structure
- International discussions, Enlargement



Fifth Framework Program: Roadmap Logic





MAJOR STEPS IN 2001

- **European Council in Stockholm (23rd March)**
- **Transport Council (5 April)**
- **Establishment of a single public authority**
- **Tendering process for the next phases**

