



## The new European GNSS Governance approach:



- Dec '07 **Council decision**
  - confirmed EGNOS and Galileo as “**key project of the European Union**”
  - go-head with **Public procurement for the infrastructure** (+2.4 b)
  - Introduced the “streamlined and effective public sector governance”
  - **new regulatory and actions required**: access policy to governmental services, concept of operations, pricing policy, IPR policy, liability policy, a European Radio Navigation Plan, Galileo technology export control regime, international cooperation
- Jul '08 **new EU regulation (683/2008)** on EGNOS and Galileo
  - Procurement rules
  - Role of ESA and GSA



## The GNSS market according to the new EU GNSS governance model

- **Emphasis on the Universal Services**
  - EGNOS and Galileo open access services best performances and widest use
  - Maximum benefits for society, environment and citizens
  - Worldwide mass market
  - Interoperability with others GNSS/SBAS in a global context (system of systems)
- **Focus on EU interests**
  - Exploitation of Galileo/EGNOS for policy delivery (new regulations)
  - Security of GNSS infrastructure and assets
  - Security on GNSS applications (PRS, emergency and civil protection applications)
  - Safety of Life applications and evolution of safety standards for all modes of transport
  - Implement synergies with other EU space and non-space programmes (GMES, SESAR)
  - International cooperation
  - Sustainability (cost recovery and revenues during operations)
  - Support to EU GNSS industry (both upstream and downstream) and scientific community



# The GNSS market trends and directions

effort not  
100% on GNSS

- **Current revolution: from professional to mass market**
  - Low cost, user friendly (like internet at the beginning)
- **Revolution in progress: better technical performances**
  - Better accuracy (reduce hybridisation needs? but D-GPS already provides it)
  - Quick cold start-up (see also A-GNSS)
  - Real Time and quasi Real Time performances (SBAS)
  - Increase availability and continuity (reduce interruptions and degradation, proliferation of interoperable GNSS and SBAS systems)
- **Tomorrow revolution: Introduce safety**
  - integrity, compliance to safety standards, certification
- **Next revolution: GNSS services sustainable and guaranteed**
  - Increase robustness and control access to services (security)
  - Introduce service guarantee, clear liability coverage
  - Exploit quality of service, authentication of signal, complementary non-space services (from professional to regulated market)

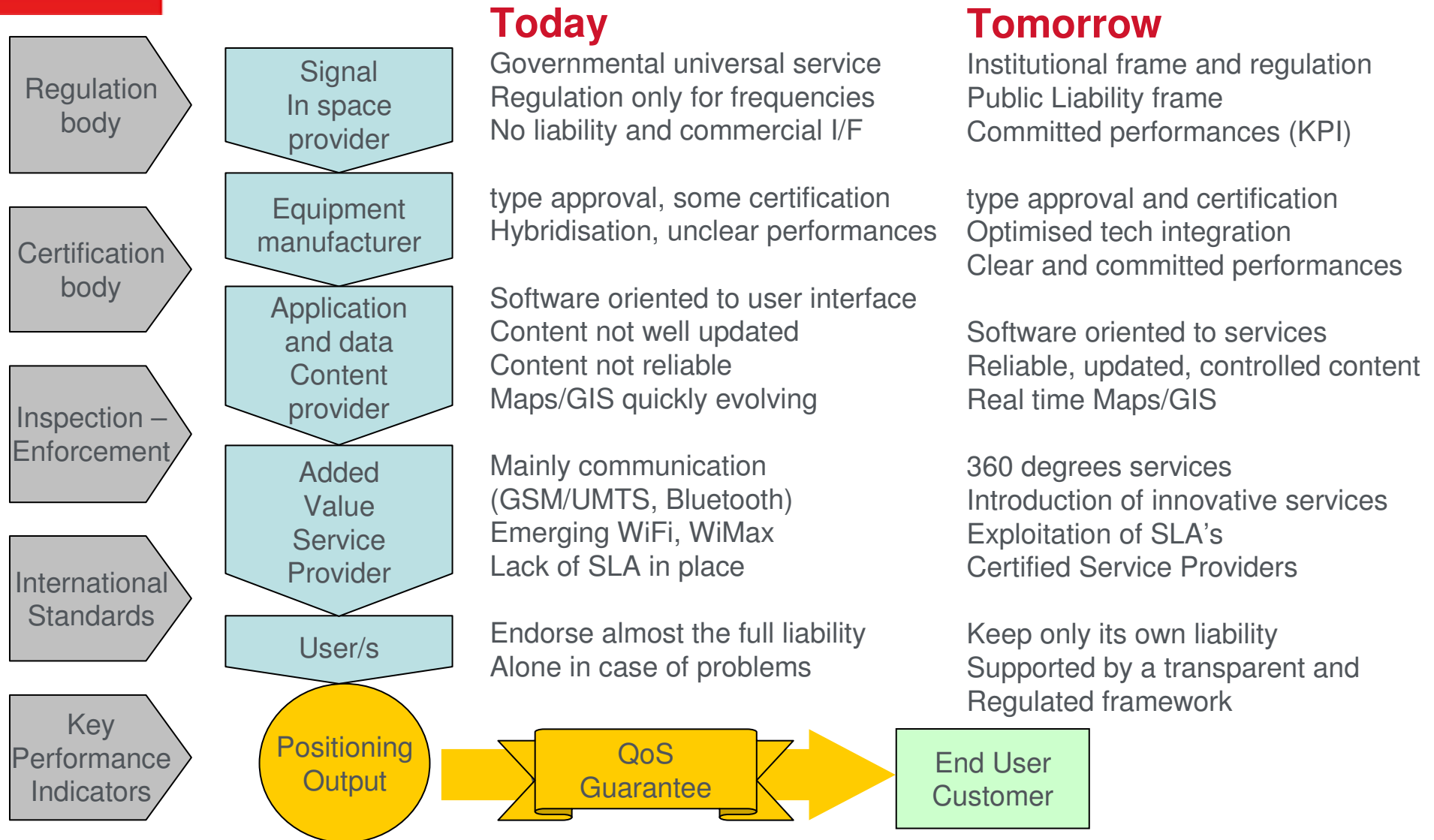
Main effort for  
GNSS tech  
performances

Main effort for  
Regulations  
and framework

Main effort for  
new business  
and integration  
With non-GNSS  
services



# EGNOS and Galileo: not only technical performances



# Telespazio mission

World-wide player in

- ▶ **Satellite Operations**
- ▶ **Services for Earth Observation**
- ▶ **Navigation and Infomobility**
- ▶ **Integrated and Value Added Connectivity**



*Fucino space centre*



*Toulouse space centre*



*Matera space centre*

leveraging on technological competences, facilities, participation in the main European Programmes (COSMO SkyMed, Galileo and GMES), and on the “Space Alliance”



*Kourou space centre*

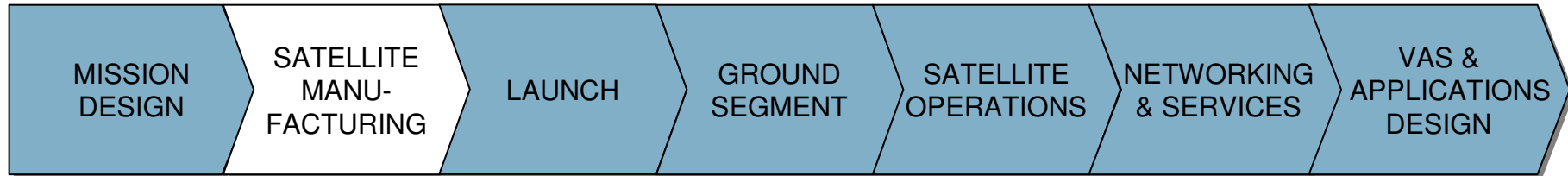


*Scanzano space centre*



*Lario space centre*

# Telespazio: from space to services



- Studies and analysis for new mission
- “End to end” configurations

- Operations launch bases
- Maintenance levels 1 & 2

- System architecture definition
- Design and implementation of ground system
- System integration and validation

- Control centres implementation
- Launch support (LEOP)
- Telemetry, Tracking & Control

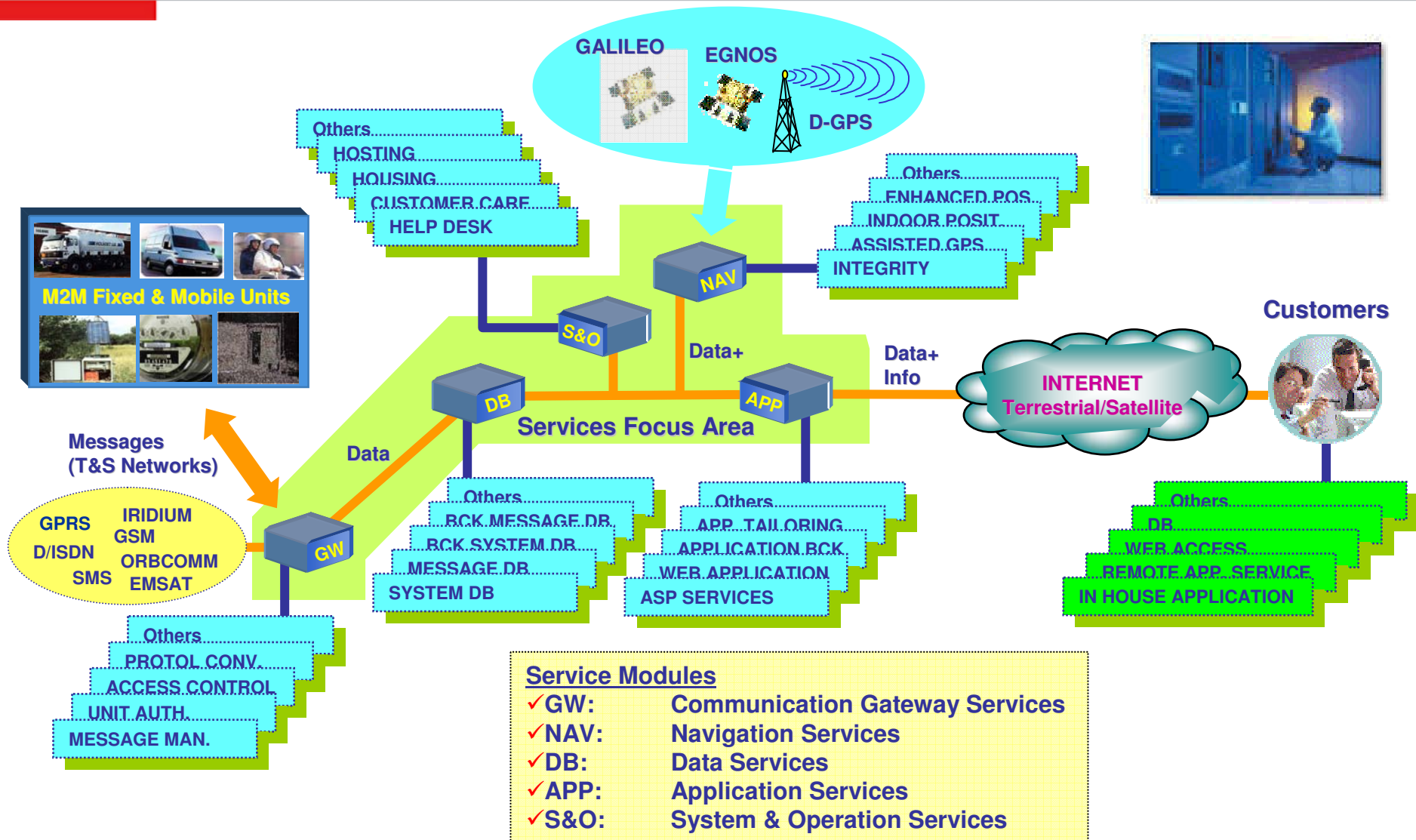
- Networks integration
- Infomobility
- Navigation
- Geo information

- Reselling satellite capacity for TLC & TV
- Trunking services
- Networks management
- Multimedia application



Telespazio has the right competences to be in every phase of a space system based on satellite technology

# Telespazio: Infomobility Service Platform (target)



# Telespazio key factors for the EGNOS/Galileo services exploitation



- Deep knowledge and involvement on definition, development and operations of EGNOS and Galileo systems and their test beds
- Provision of GPS and D-GPS services as optimal opportunity for the exploitation of EGNOS and Galileo added value
- Unique competence and facilities for Earth Observation and Satellite Communication allowing their optimal integration with Satellite Navigation
- Wide international footprint and strong group organisation (Finmeccanica, “Space Alliance”, controlled and shared companies) to address competitive international and institutional markets
- Consolidated and diversified network of technology and IT suppliers
- Diversified and flexible portfolio:
  - End-to-end services based on Service Level Agreements
  - Products, platforms
  - Facilities management for governmental organisations and large accounts
  - Data
- Continuous effort on R&D including next generation of GNSS

# Telespazio opportunities for EGNOS/Galileo services



- Applications and services
  - Emergency prevention and intervention
  - Environment monitoring and protection
  - Security, civil protection, humanitarian aid, dual use
  - Safety (aviation, train, maritime, road)
  - Regulated (e.g. transports, cadastre, custom, taxing)
  - High precision surveys and in-situ data monitoring
  - Telemedicine (Telbios)
- Support Facilities and Services
  - GNSS augmentation services (D-GNSS, A-GNSS, EGNOS)
  - Performance and quality monitoring
  - Local Services
  - Simulation, data analysis, test, validation and certification
- Products and IPR
  - Software and algorithms (data fusion, processing, analysis, verification)
  - Architectures, subsystems, platforms, modules, interfaces