

ORganisation of European GNSS Industry

- Market Development -

Eurospace, 7 November 2001

Introduction to OREGIN

User participation in Galileo

Market Development

Conclusions

WHAT IS OREGIN ?



The ORganization of European GNSS INdustry of equipment and services:

- **information exchange**
- **cross-fertilisation of expertise, fostering synergies**
- **point of contact/industry voice for the European Institutions**
- **publicity and lobbying**
- **fostering co-operation with non-European industries creating opportunities in overseas and global market**

- **82 members including international industry organisations and national groups (more than 100 industrialists represented)**
- **Industries from 14 countries**
- **From SMEs to multi-nationals**
- **Service providers, equipment manufacturers, chip producers, software developers, integrators, telecom and car manufacturers...**

- To support the development of GALILEO users segment equipment and services,
- To provide public authorities with technical and marketing expertise and support in analysing the impact of GALILEO architecture on user equipment and services,
- To support the necessary efforts on standardisation and certification for the development of user segment equipment and services,
- To foster the identification of business opportunities and define the necessary actions to ensure their success,
- To foster partnership between industrialists and in particular between large corporations and SMEs,
- To rapidly and efficiently circulate relevant information,
- To promote EUROPEAN industry, technology, products and services,
- To encourage participation of universities and research centres in R&D activities related to GALILEO developments.

User participation in Galileo

Gala - Market research

- **Team of Market Specialists**
- **Identification of Applications**
- **Market research**
 - **Questionnaires**
 - **Interviews**
- **Requirement Analysis (P, V, T)**
- **Market sizing**
- **User Requirement Documents**

Three iterations

Gala - Market research

- Team of Market Specialists
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- User Requirement Documents

Three iterations

Geminus - Requirement Reviews

- Independent verification of the Gala documentation by two review mechanisms:
 - User Forums
 - Industrial review
- Basis of
 - Business Models
 - Service definition
 - Service Provision

- **Six User Forums considered two iterations of the Gala Requirement Documentation:**
 - **Road Corporate**
 - **Road consumer**
 - **Rail**
 - **Maritime (EMRF)**
 - **Aviation**
 - **Science, Survey and Timimg**
- **Over 300 potential Galileo users participated in this process**
- **Workshops to discuss topics such as Bundled Services, Route to Market, Service provider models, legal issues**
- **Users views fed back into the development process**

- **Galileo together with GPS gives tremendous benefits and opens up vast new horizons**
- **Galileo Services wanted before 2008**
- **Worries over using encryption - especially safety related applications**
- **New operation methods will improve safety and reduce costs**
- **Timing was a key issue for both User and Industrial viewpoints:**
 - **Additional analysis conducted in Geminus**
 - **ESA Timing Working group established - workplan presented at GalileoSat final review**

- **Users need clear service definition (and charging structure) before market access and sizing can be confirmed**
- **There must be flexibility in the services for the future, new markets are developing such as:**
 - **Road tolling**
 - **ADAS is emerging which may require regulated bespoke services.**
- **Demand for services based on comms across many applications. The role of NRS in the market appears attractive but further details are needed for users to confirm its real value.**

NRS - Navigation Related Services

Market Development

- The market potential for GNSS-2 (GPS/Galileo) and the Socio-economic benefits to Europe are enormous, HOWEVER

GPS Programme:

- Significant US DoD Budget was dedicated to the User Segment Industry

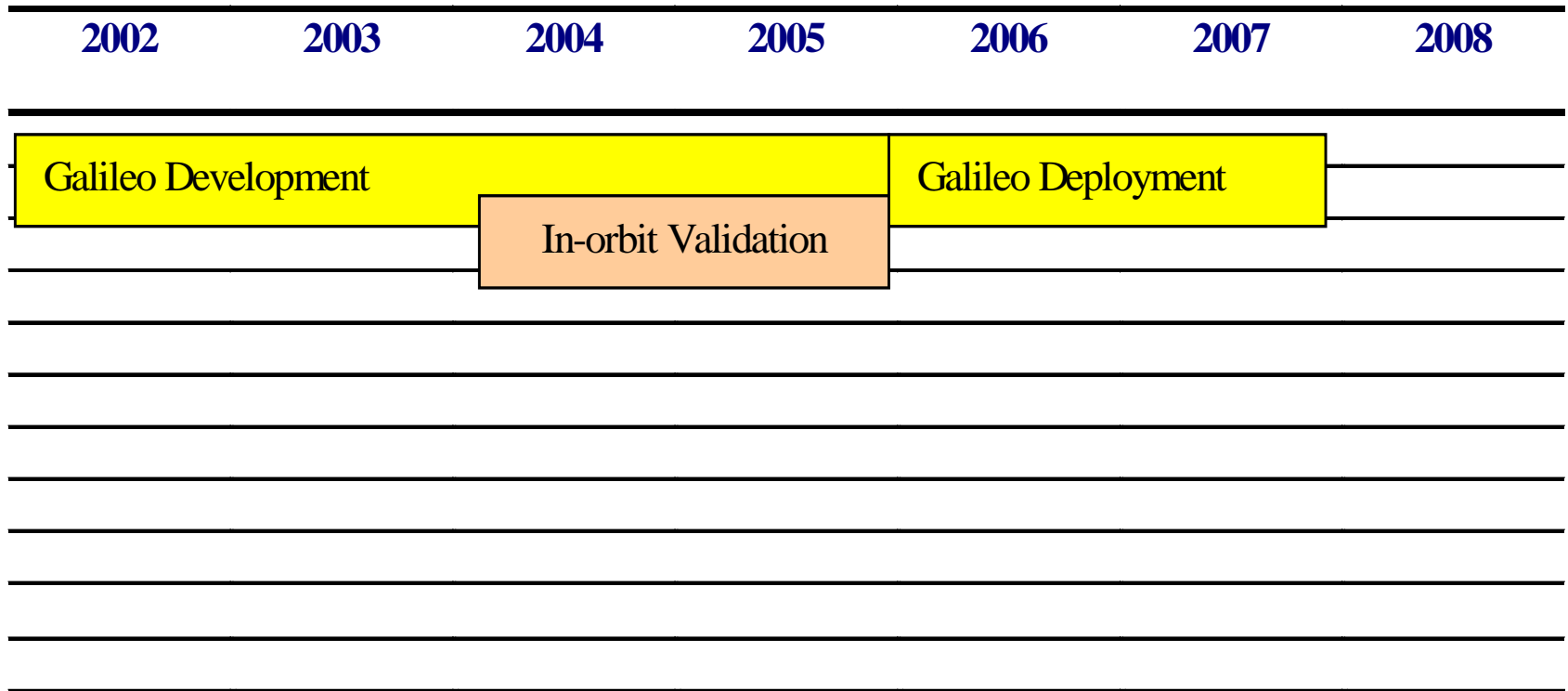
Galileo:

- The User Segment Industry is asked to contribute to the Budget

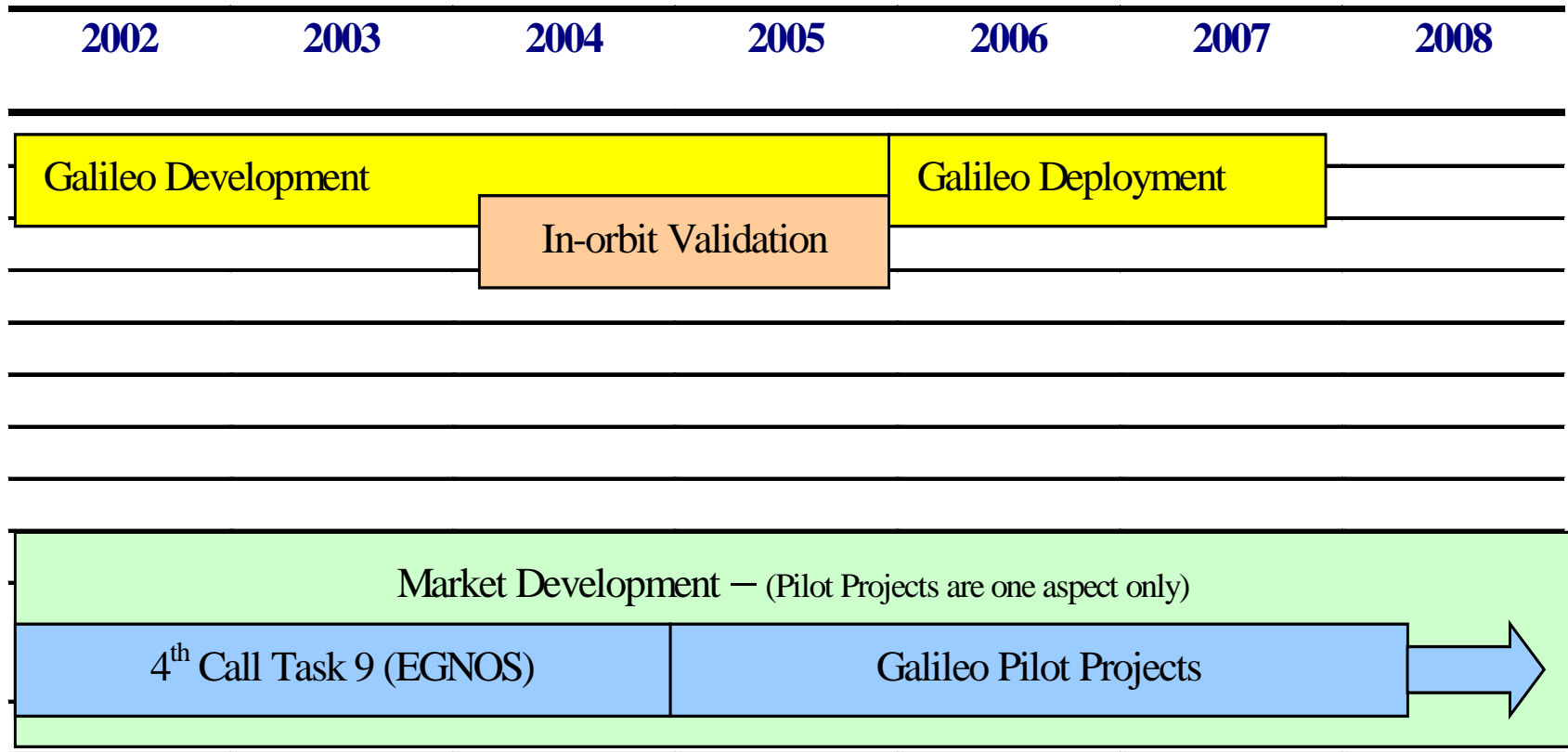
Public funding must embrace the sectors which have the potential to generate the most significant benefits, revenues and employment within Europe

HOW?

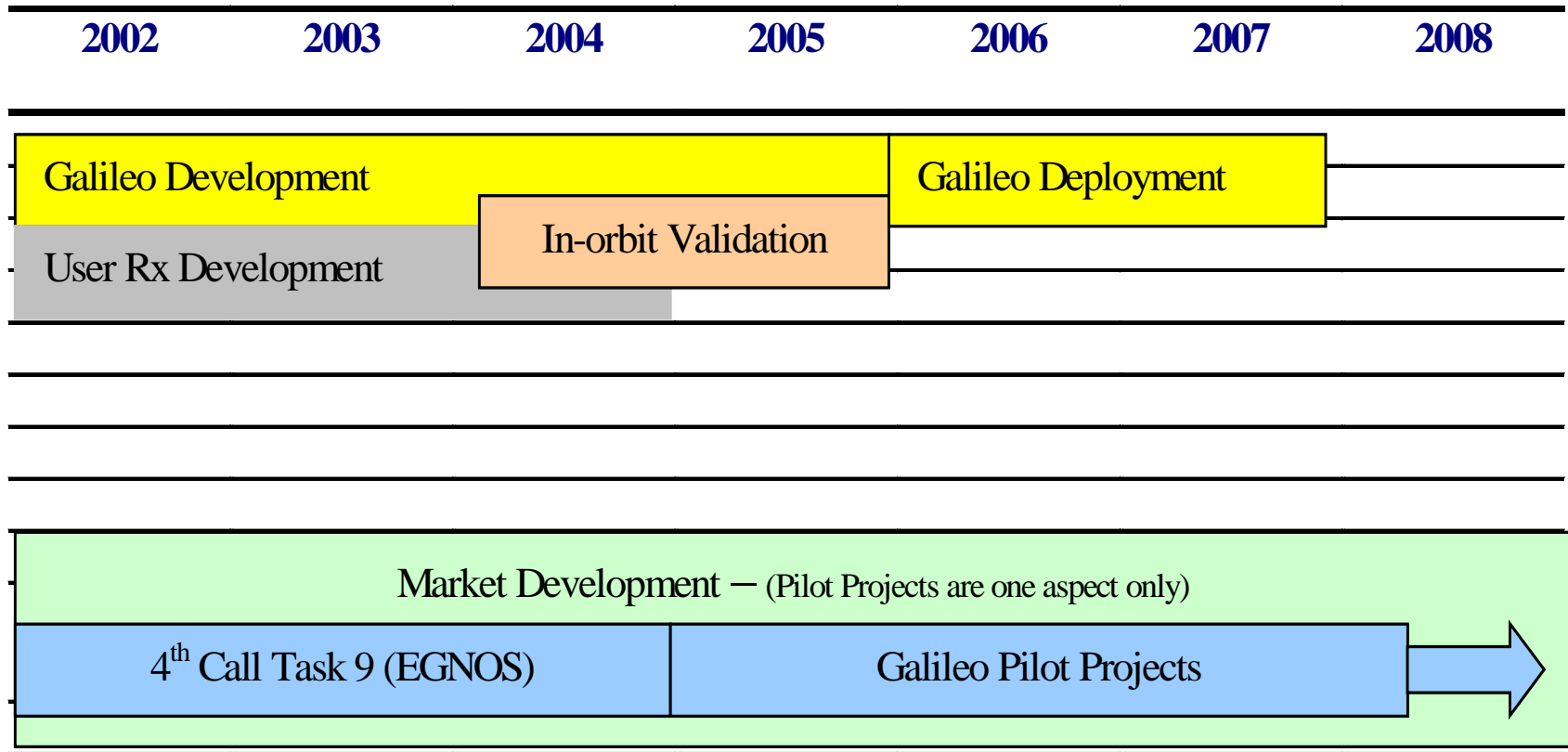
A Galileo Roadmap



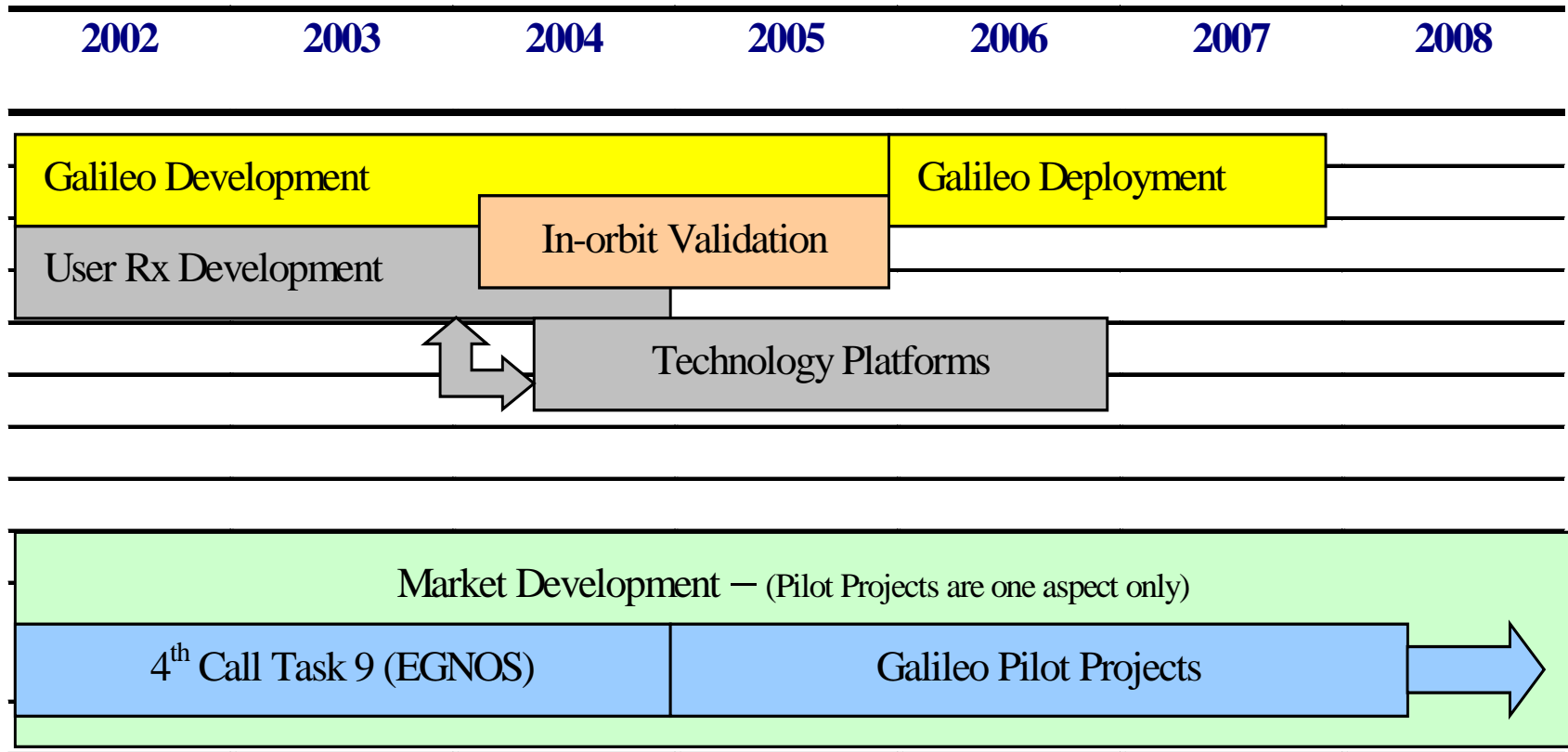
A Galileo Roadmap



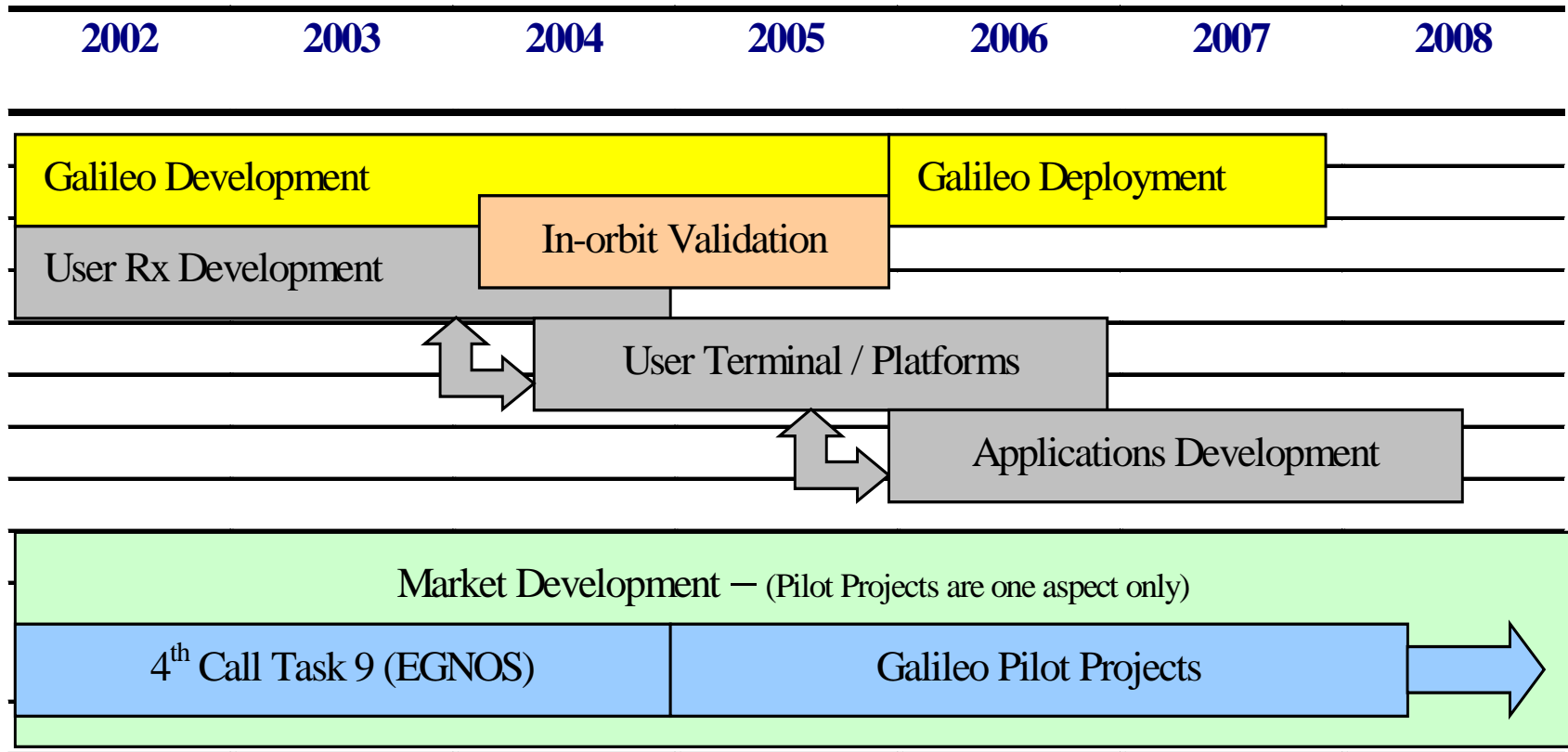
A Galileo Roadmap



A Galileo Roadmap



A Galileo Roadmap



- **Galileo represents an excellent prospect for Europe - both users and industry alike**
- **The Users needs and their views are being acted upon, their continued involvement will be highly beneficial**
- **Galileo needs a Service Developer to ensure commercial success**
 - **User Driven approach with open standards**
- **The Galileo Market has to be prepared**
 - **enabling technology - Rx, Technology Platforms, applications**
 - **Pilot Projects and tool developments**
- **Public funding should not forget market development**

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