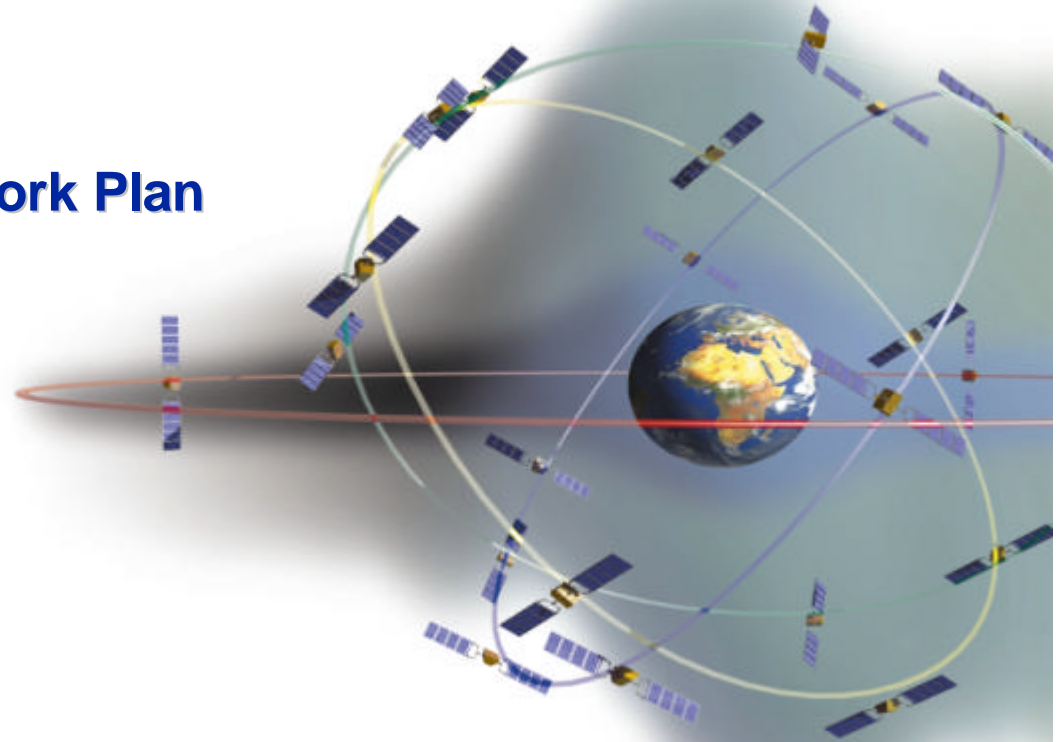
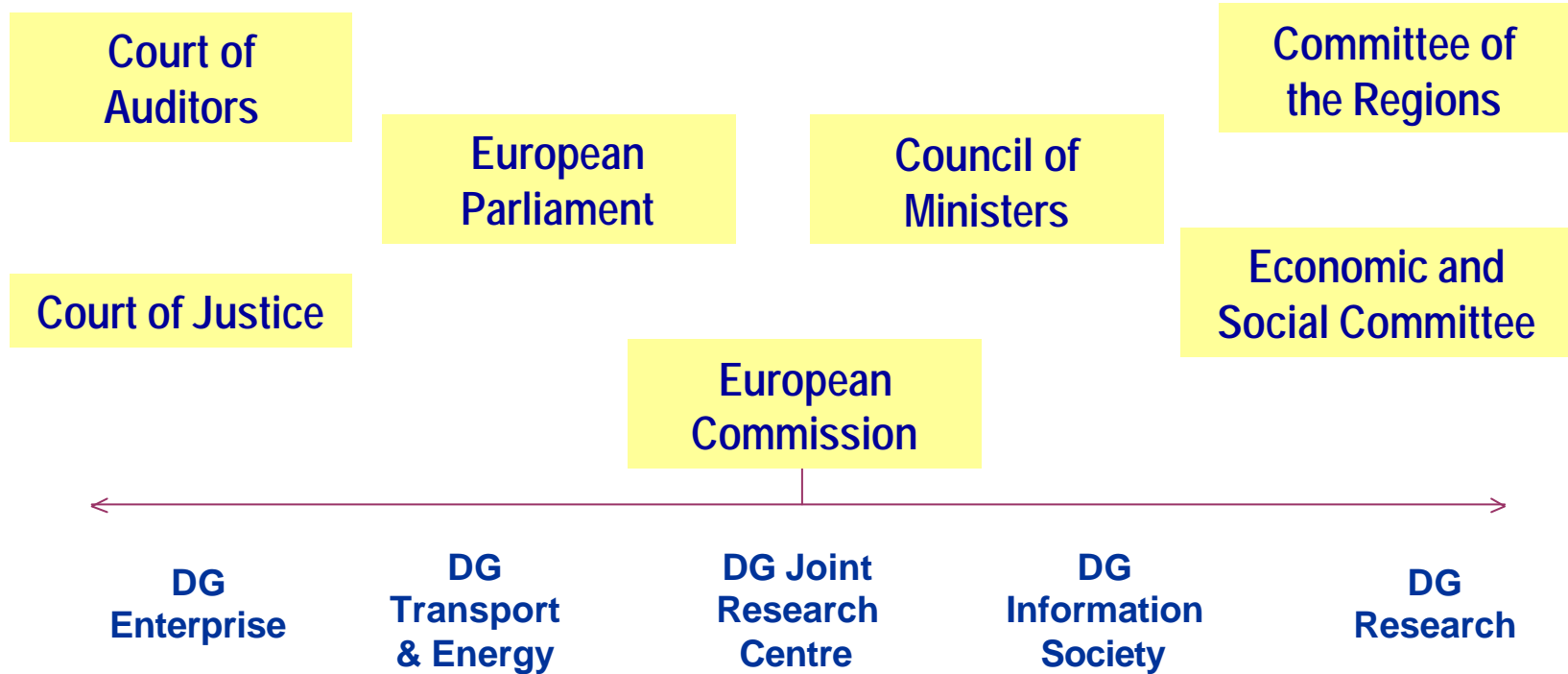


The GALILEO programme

- **Overall Applications Work Plan
(2001 – 2007)**
- **michalis.ketselidis@jrc.it
European Commission**



EC Institutional Framework



The Political Actions (Road)

Action	Actor(s)	Deadline
Provision of location information to emergency services, including via 112 (new Universal Service Directive).	European Parliament, Council	End 2001
Deployment plan for Intelligent Transport Systems for road transport.	European Parliament, Member States, Council	End 2001
Implementation of Recommendation on "participation of the private sector in deploying traveller services in Europe"	Member States, Private Sector	End 2000
Adoption of a decision to deploy Galileo infrastructure	European Parliament, Member States, Council	End 2000





eEurope: Intelligent Vehicle - part of the revolution

Telecom companies in Europe are in the process of making what may be the biggest gamble in the business history - **bringing together the Internet and the Mobile Phone** - investing 300 MUSD (The Economist, Oct 14, 2000)

These information technology and communications companies are **teaming up with traditional carmakers** to transform vehicles into mobile portals (Financial Times, Oct 2000).

eEurope actions should support the European industry (automotive, telecommunications, service providers), **at the same time gathering for the needs of the citizens**



Where are we now ?

The key challenge for Europe is to meet the growing demand for mobility within finite transport infrastructure networks.

- Congestion is a major problem in road transport. Intelligent Systems and services can alleviate bottlenecks and reduce pollution.
 - Road safety continues to be a major issue. For drivers and other road users the systems to enhance safety are the number one concern, followed closely by convenience systems.
- ⇒ The challenge is to introduce active safety / advanced driver assistance systems in all new vehicles.
- ⇒ Location determination of wireless callers through the 112 number and subsequent access to a full range of emergency services would be a major factor contributing towards public safety and comfort.



Where do we want to go ?

The European citizens should be able to fulfil their mobility needs safely and comfortably. This more intelligent vehicles and better infrastructure. Europe has to

Speed up the development and deployment of Intelligent Transport Systems, so that 50% of the major European cities are covered by Travel Information Services and 50% of major European motorways are equipped with congestion and incident detection and management systems by the end of 2002.

Start to introduce active safety / driver assistance systems in all new vehicles sold in Europe, by the end of 2002; and develop a roadmap for monitoring the progress

Introduce location determination of all wireless callers through the 112 number and subsequent access to full range of emergency services in the whole of Europe.



112 Service: Background

The regulation about a pan-European emergency number 112 entered into force 1991

The need for enhanced 112 came out strongly in **the 99 Telecommunications review**, although concerns were expressed

The Commission is well aware of the **huge commercial value** of the associated value-added services

Experience with the U.S. E-911 mandate has shown that **great care has to be taken in introducing location enhanced 112 - especially charging and accuracy**

A fundamental concern is the protection of personal data and privacy, as well as liability issues



The proposal

Member States shall ensure that undertakings which operate public telephone networks make caller location information available to authorities handling emergencies, where technically feasible, for all calls to the European emergency number '112'

Open Questions:

- ⇒ **Who:** network operators ?
- ⇒ **Where:** where technically feasible ?
- ⇒ **When:** by 1 January 2003 ?
- ⇒ **Charging:** without charge?
- ⇒ **Accuracy:** what accuracy is required by the emergency services?



The 112 Co-ordination Group

The objective of the Coordination Group is to build consensus on the implementation of enhanced 112 between all the actors involved

As the commercial location-based services are the driving force, the coordination group is industry-driven

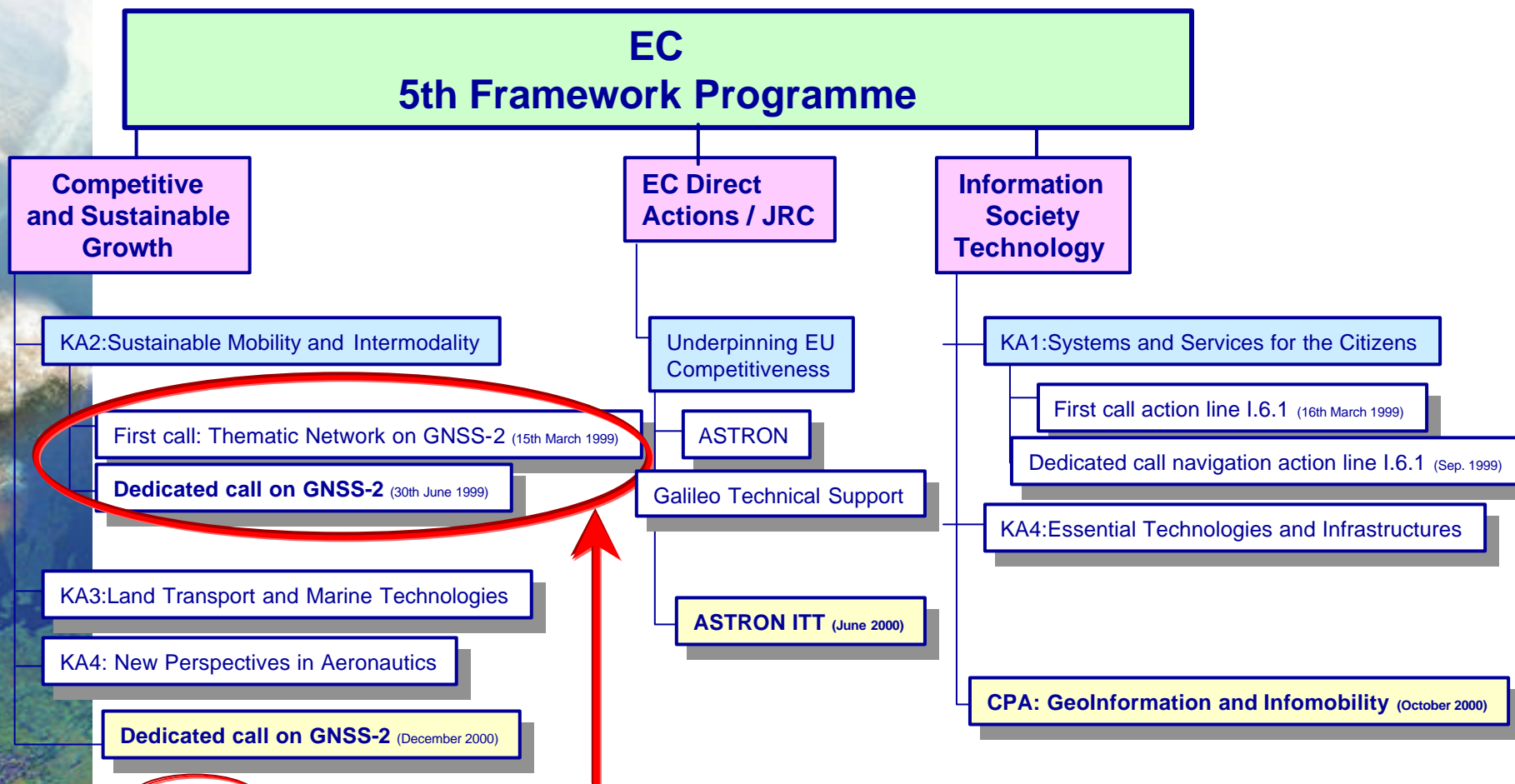
Participation by telecom operators, IT and telecom equipment suppliers, emergency service providers, automotive clubs, civil protection authorities, standard organisations, automobile manufacturers

The Coordination Group proposes to the Commission complementary regulatory actions

Three Working Groups established, next meeting January, 30, 2001



EC FPV Organisation for GNSS / Galileo



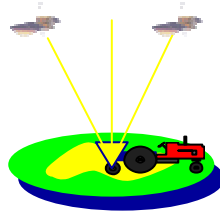
○ = GENESIS, GALA, GEMINUS, SAGA, INTEG
Other calls are relevant to GNSS applications and services



GALA PILOT PROJECTS

8.1.1/2 Fleet Management, Agriculture Personal mobility

Specified with EC,
developed by *Racal*



CURRENT PROJECTS

8.2.1 Road Safety and Mobility

Specified with EC,
developed by *Centro Ricerche Fiat*



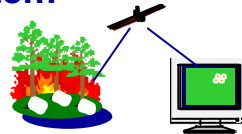
8.2.4 Road Traffic Monitoring

Specified with EC,
developed by *OHB*



8.2.5 Fires Management System

Specified with EC,
developed by *Thompson-CSF*



8.2.6 Maritime Navigation

Specified with EC,
developed by *KTI*



FUTURE PROJECTS

8.2.2 Intermodal Freight Transport

Specified with EC,
developed by *Telespazio*



8.2.3 Train Protection and warning system

Specified with EC,
developed by *Indra*



FUTURE PROJECTS

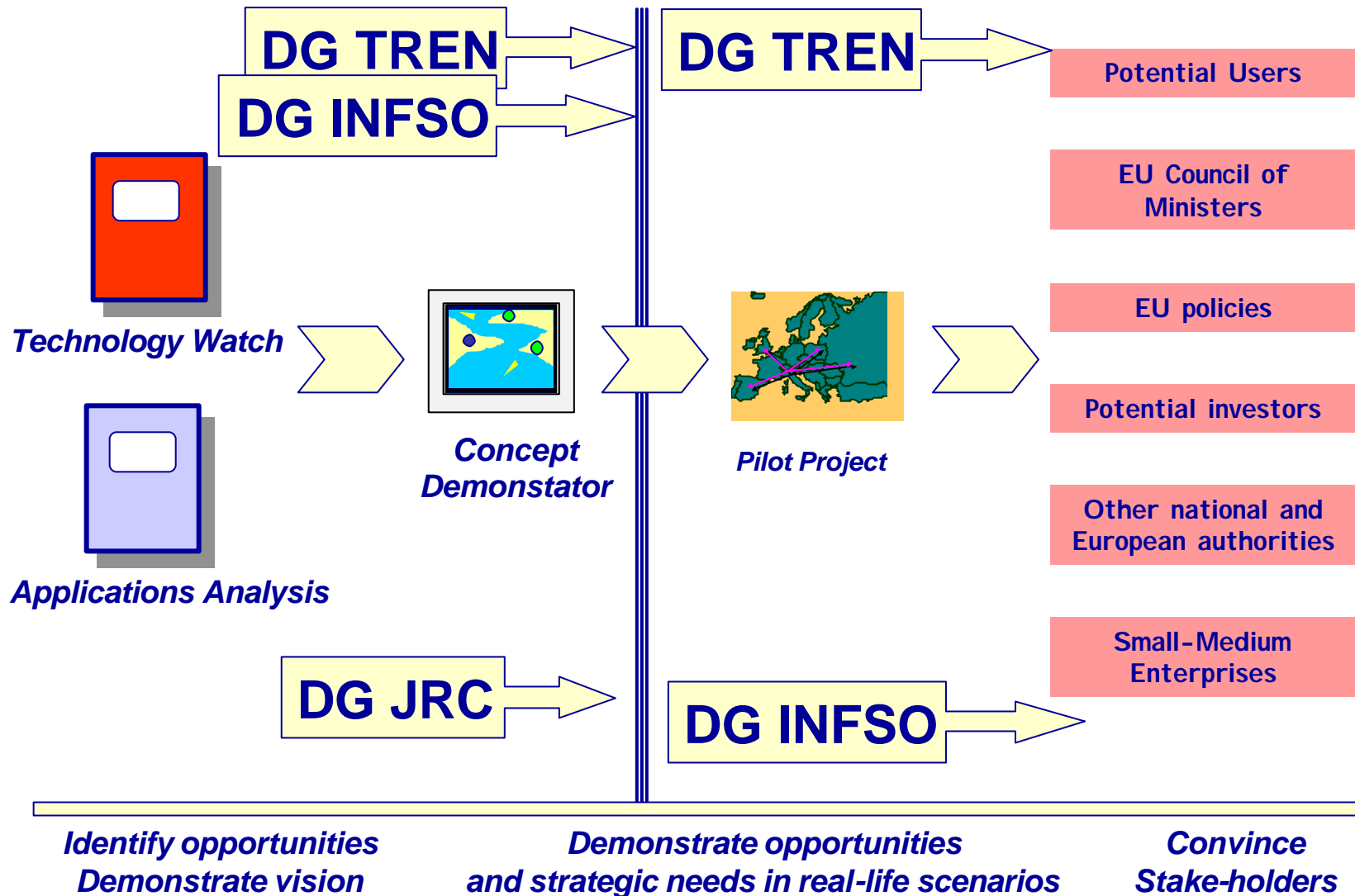
- Current Projects (<200K€)
- Future Projects (<100K€)
- Future Projects (<200K€)



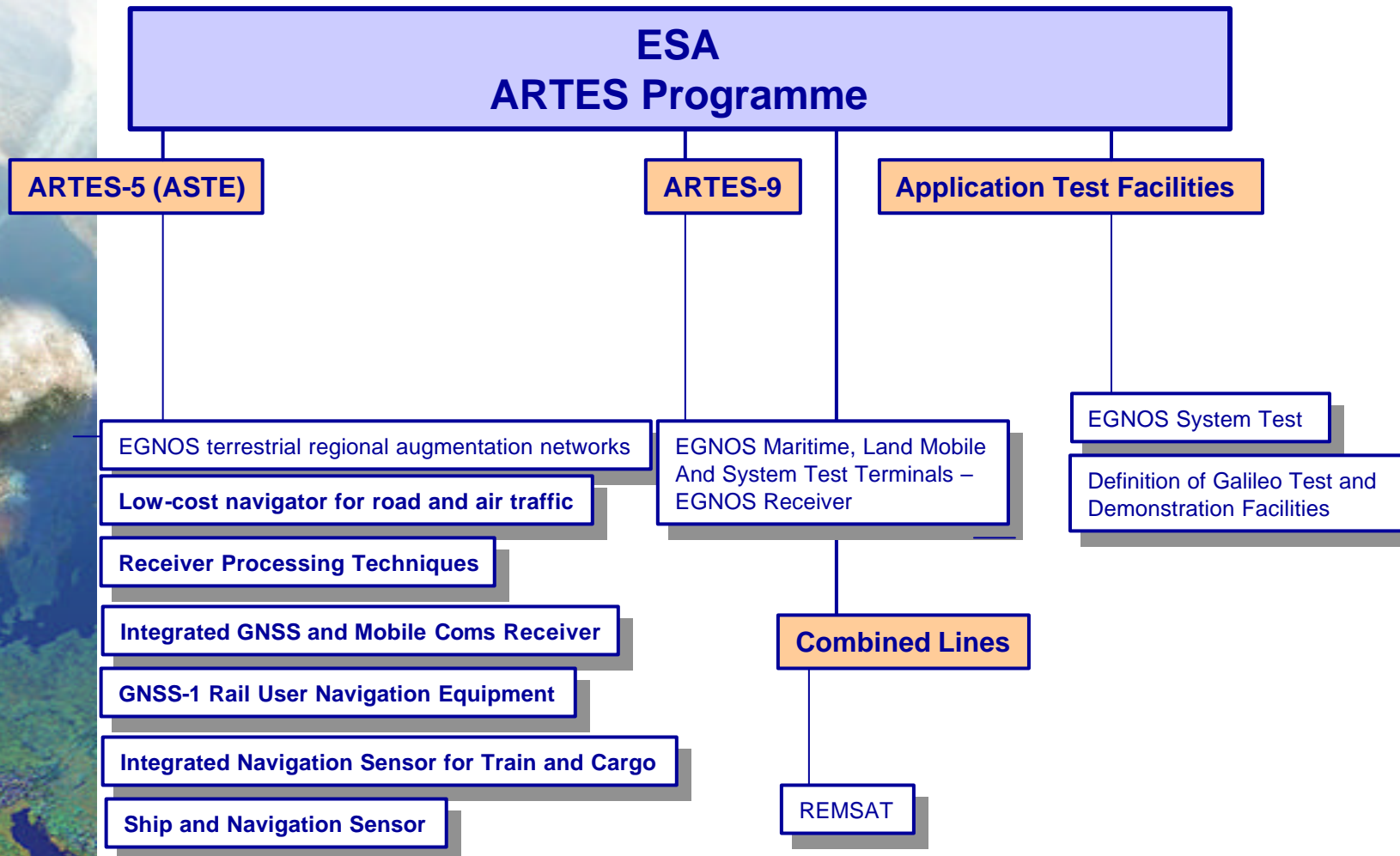
European Commission



Galileo / GNSS Pilot Projects – Process model



ESA ARTES Organisation for GNSS applications (1999 – 2001)



REMSAT - Real-time Emergency Management via SATellite

