

GSA Market Development Activities

Boris Kennes

NEREUS - PEGASE WORKSHOP
Brussels March 24th

GALILEO APPLICATION DAYS

www.application-days.eu

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GSA Market Development Activities



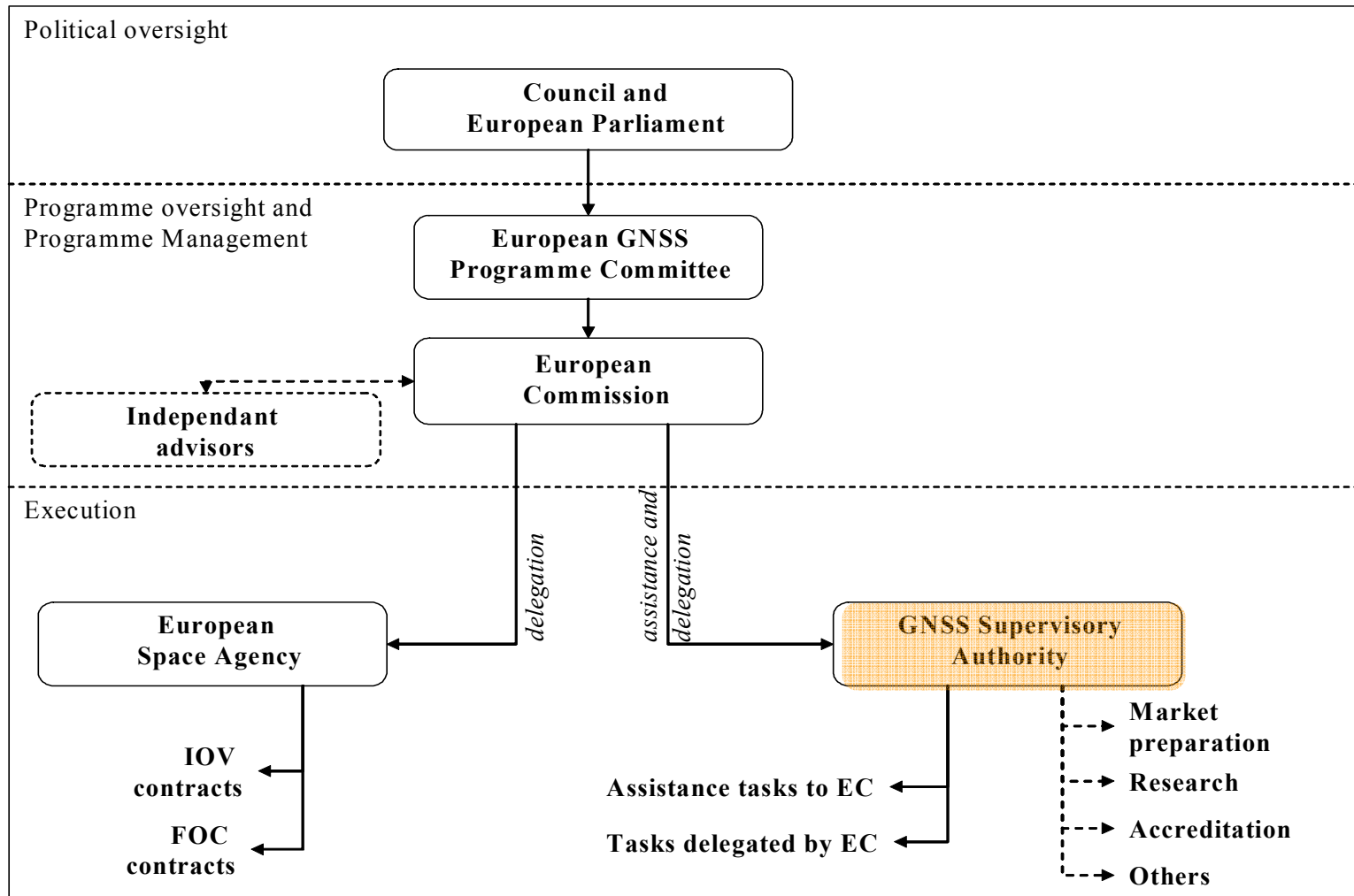
Boris Kennes

R&D and Market Monitoring Officer
European GNSS Supervisory Authority





GSA supports European Commission on market development and security accreditation



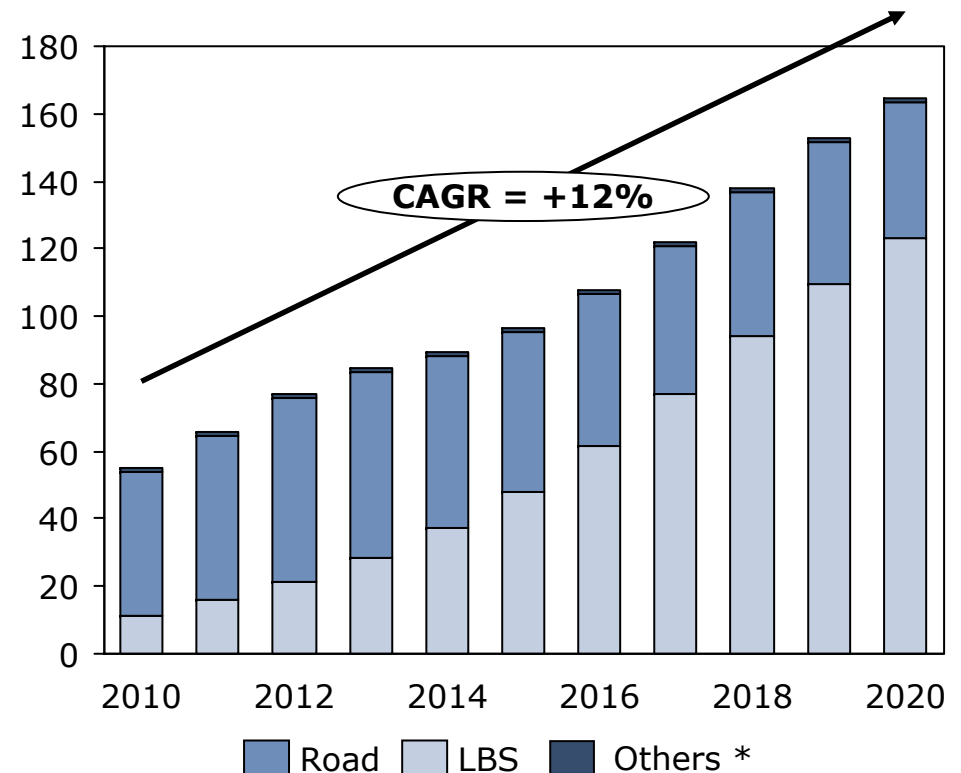
Role of GSA being revised



GSA Market Development *vision*

- We believe that ...
 - The GNSS market is developing **very fast**
 - GNSS is **benefiting** citizens, businesses and governments alike
 - **Galileo and EGNOS** are essential to capture full GNSS potential in Europe

Worldwide GNSS market size (€bn)



Public benefits of Galileo estimated at over €50 bn (cumulative)

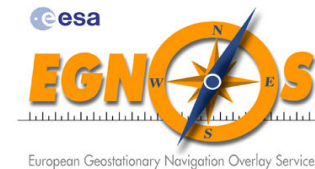


GSA Market Development *initiatives*

- ❑ Applications R&D funding
 - 47 projects in 2 calls total €40mln
 - 3rd call expected later this year (€38 mln)
 - Horizontal actions



- ❑ EGNOS market stimulating actions
 - R&D projects
 - Co-marketing with stakeholders
 - Awareness and EGNOS portal



- ❑ Market monitoring
 - Market forecasts
 - Indirect benefits and public utility of satellite navigation
 - Galileo and EGNOS added value





What is FP7

- ❑ €50bn R&D programme
- ❑ Covering period 2007-2013
- ❑ Theme transport: 4.3bn
- ❑ Sub-theme Galileo*:
 - 1st call: €25mln 2007
 - 2nd call €40mln 2008
 - 3rd call: €38mln 2011
- ❑ Topics
 - Applications and SME
 - Receiver development
 - Mission support
 - Horizontal activities
 - Interntational

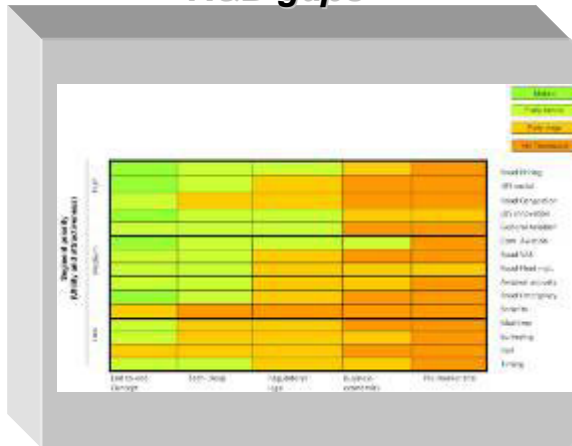


*€110 mln in FP6 (3 calls)



Galileo FP7 key activities and results

Identification and filling R&D gaps



Product development



Maximization of the portfolio value



● 1st call:

- 18 projects, 22 countries
- €16 Million.
- 59 SMEs

● 2nd call

- 29 projects, 26 countries
- €26 Million.
- 86 SMEs

● 1st Call results;

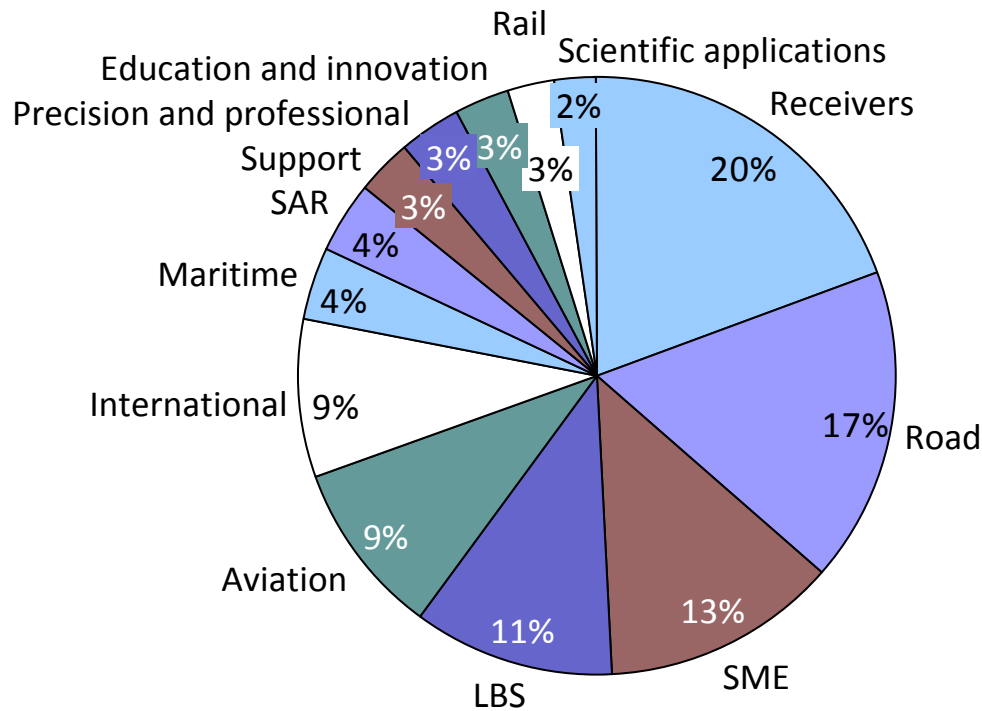
- **9 Pre-commercial prototypes** available at the end of the project
- **2 international collaboration centres**
- **2nd Call projects kicked off**

● **Venture Academy** in Galileo Applications Days

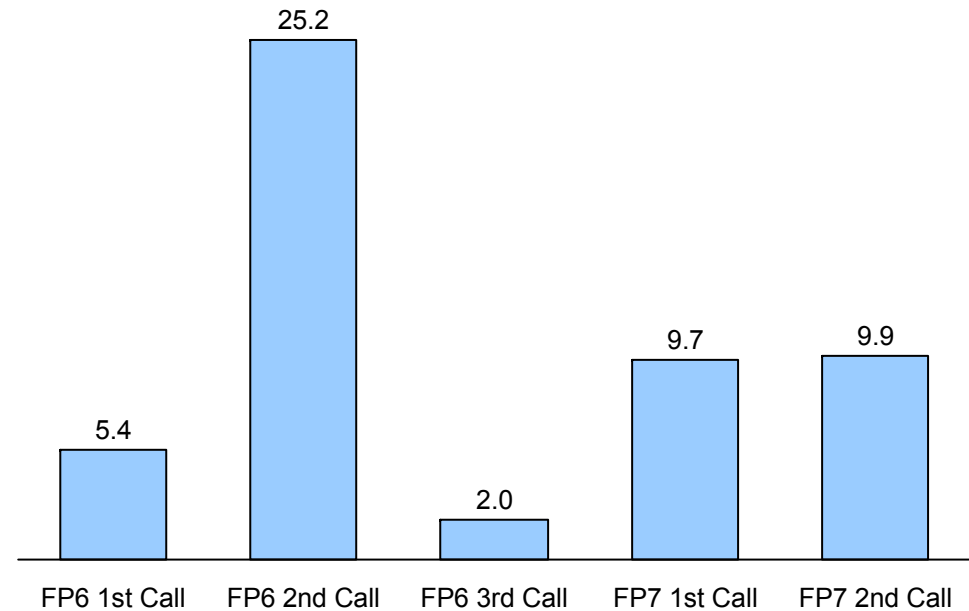
- **EGNOS demonstrators in aviation**
- 16 Scientific/technical publications
- **14 FP7 demos** in Galileo Applications Days
- **Media coverage**
- Participation in **industrial fairs**



Funding per topic



Funding towards SMEs

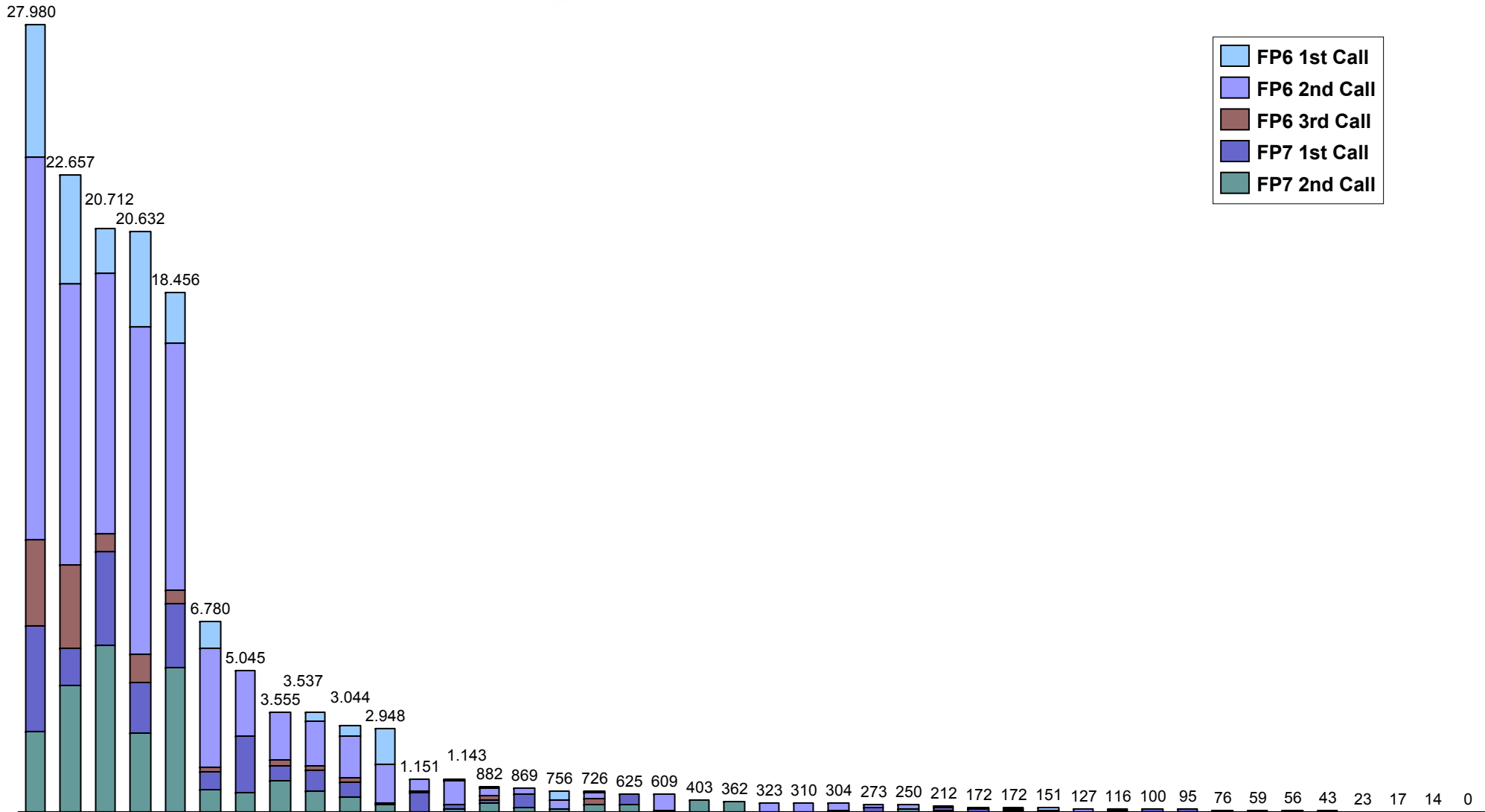


| | FP6 1st Call | FP6 2nd Call | FP6 3rd Call | FP7 1st Call | FP7 2nd Call |
|--------------------------------|--------------|--------------|--------------|--------------|--------------|
| % funding to SMEs | 28% | 36% | 21% | 50% | 37% |
| % projects coordinated by SMEs | 25% | 56% | 20% | 74% | 58% |

* Collaborative Projects and Coordination and Supporting Actions (excludes tenders)

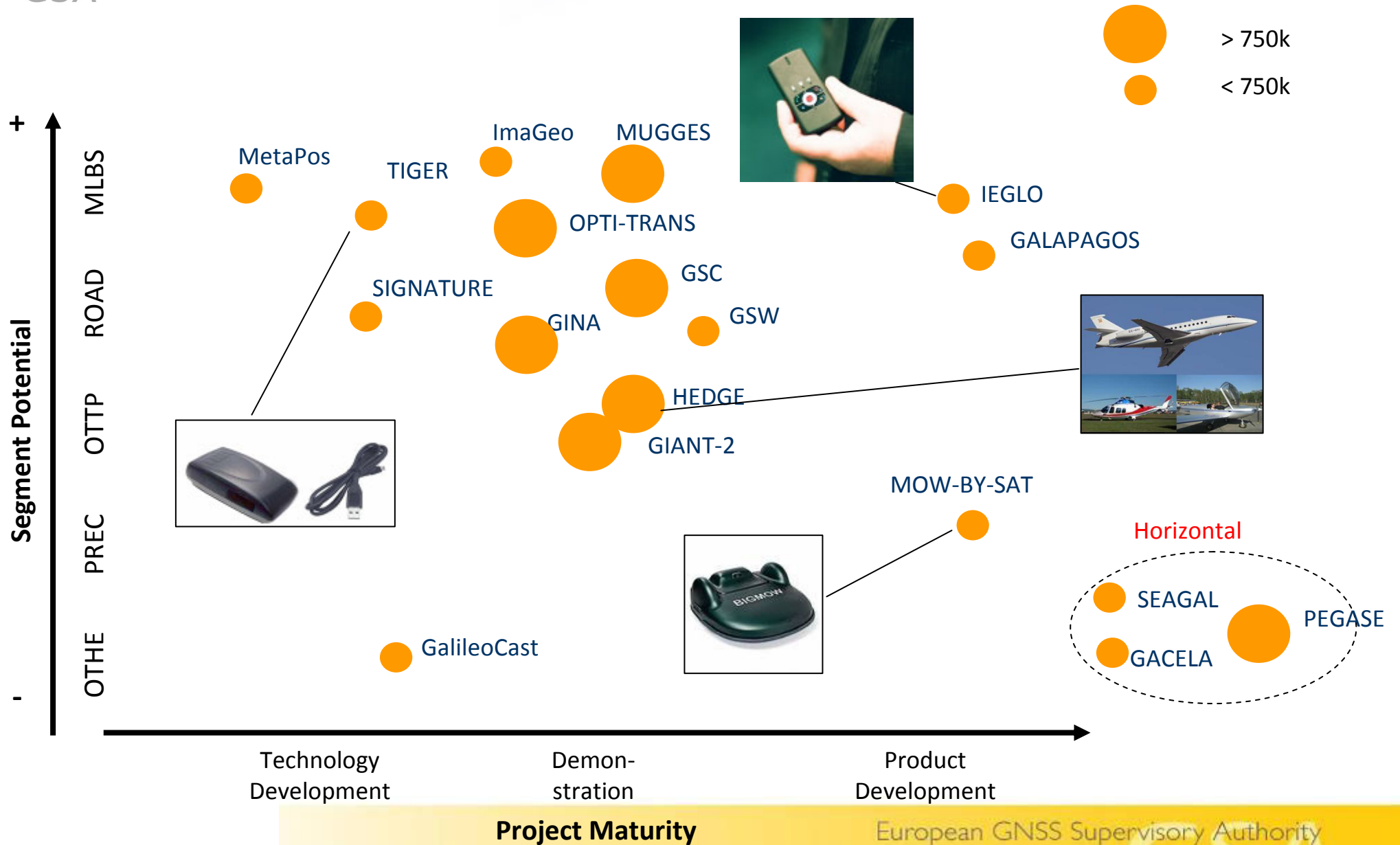


FP6 and FP7 funding per country*



* Collaborative Projects and Coordination and Supporting Actions (excludes tenders)

1st call: covers major user segments





2nd call: diversified portfolio of projects



ACCEPTA



INCLUSION



SMART-WAY



SafePort

GRAIL-2

PERNASVIP

LS4P

PUMA

CLOSE SEARCH



CoSuDEC

GOLDEN-ICE

ERSEC

GNSSmeter

ATLAS

LIVELINE



I2GPS

ASPHALT



SX5

SIRAJ



ENCORE

CIGALA

ESESA

EEGS



GSARSED

SCUTUM



COVEL

GENEVA



G-TRAIN

GAINS



Grant = 300k

The **IEGLO** project, developing sat-nav-based aids for the elderly, Alzheimer's sufferers and other at-risk groups, drew public and media attention at this year's Intersana trade fair in Augsburg, Germany.



Grant = 300k

MowBySat; BigMow, an autonomous mower, moved across a football pitch located at Toulouse, France, stopping neatly at its edge, then turned around to complete a manoeuvre. It then neatly wove through a line of obstacles, demonstrating its ability to navigate close to centimetre precision.



Grant = 300k

Patent Pending

The **TIGER** project is creating a security token with an in-built satellite navigation receiver that allows access to information based on location. The trusted receiver and software will authenticate and protect the integrity of the data and signalling type so that an attacker cannot access confidential information.

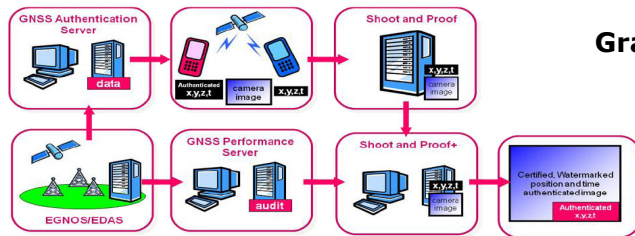


Grant = 1070k

The Concept of **GIANT-2** is to introduce the EGNOS enabled operations to the End Users of the identified niche markets, with a final goal of using integrated avionics on board the aircraft and rotorcraft and perform pre-operational flight demonstrations.

What more can we expect in the 2nd call? Some examples ...

ATLAS - Authenticating Time and Location within Liability-critical Applications and Services
Develop a GNSS Evidential Support Service and Authenticated GNSS Service to provide authenticated position and time information for multimedia captures.



Grant = 271k

SCUTUM - SeCuring the EU GNSS adopTion in the dangeroUs Material transport
Implementation of an EGNOS/EDAS based system for the monitoring of dangerous goods transport



Grant = 1,407k

CLOSE-SEARCH - Accurate and safe EGNOS-SoL Navigation for UAV-based low-cost SAR operations. Prototype a small unmanned helicopter with integrated thermal sensor and a multisensor GPS-EGNOS-based navigation system with an Autonomous Integrity Monitoring capability, to support search in SAR operations in remote, difficult-to-access areas and/or in time critical situations.



Grant = 308k

LS4P - LiveSailing for Professionals, a High precision and reliable positioning system for sailing professionals.

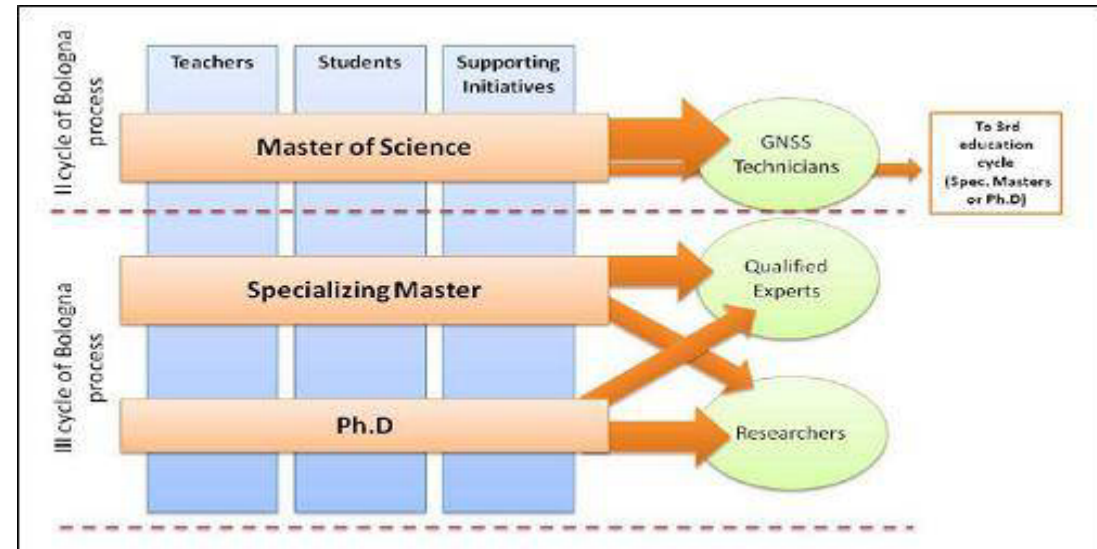


Grant = 484k

In the 2nd call, we are also supporting horizontal activities

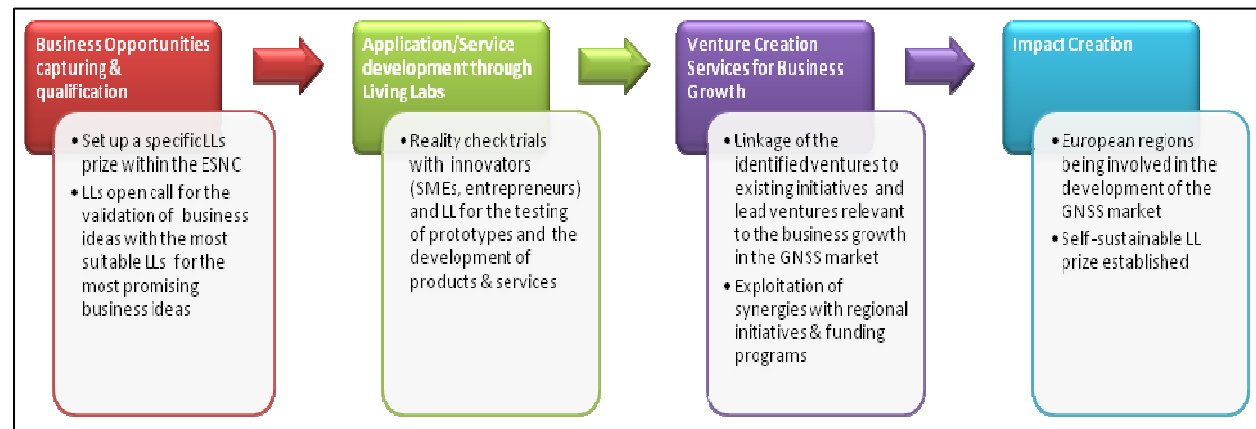
G-TRAIN – Supporting Education and Training in GNSS

Framework for higher education in GNSS at European level, addressing: MSc, a Specializing Master, support to PhD training and networking, creation of a Satellite University Network (SUN).



GAINS - Galileo Advanced INnovation Services

Implementation of 'innovation valleys' in the GNSS downstream market by validating and supporting GNSS ideas from Galileo Masters in Living Labs





Application days provided an opportunity to demonstrate and present these projects



- Over 30 demonstrations
- 1000 registered participants
- Industry and government leaders
- 40+ presentations
- Business Matching
- Networking events

- ❑ **104** proposals were received
- ❑ From **486** different companies and institutions
- ❑ Originating from **40** countries
- ❑ In total, **€108m** in grants were requested
- ❑ About **4** times the **€28.5m** budget that was announced
- ❑ Almost **70%** of proposals were above threshold with an average score of **10.9**
- ❑ **29** projects selected for funding
- ❑ SMEs were present in **90%** of the winning proposals and received **36%** of the funds
- ❑ Average consortium consisted of **6** partners and requested **1** mln EUR



- ❑ To be announced later this year
 - Publication scheduled for July 31st
 - At least 4 months for submitting final proposal

- ❑ Total amount of funding €38mIn covering all areas in the Galileo Work Programme
 - Applications
 - Receivers
 - Tools
 - Programme support
 - International and horizontal activities

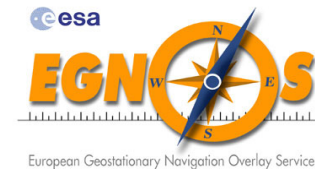


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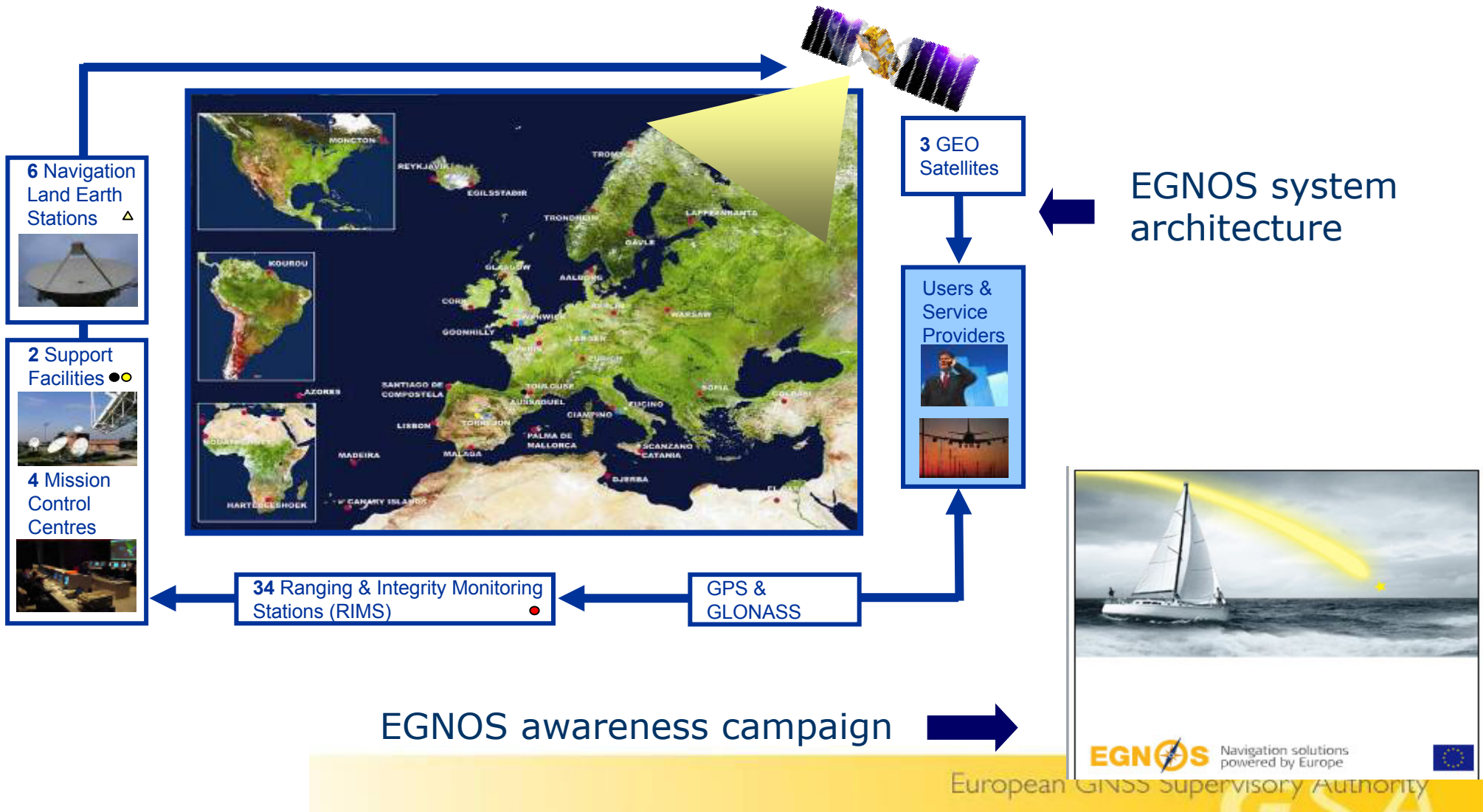


- ❑ EGNOS market stimulating actions
 - R&D projects
 - Co-marketing with stakeholders
 - Awareness and EGNOS portal



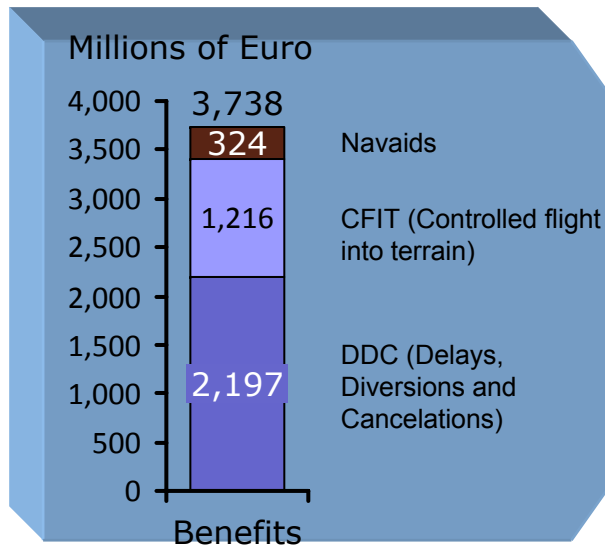
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Aviation: Preparing for certifications

Knowledge



Entry Plan



Adoption

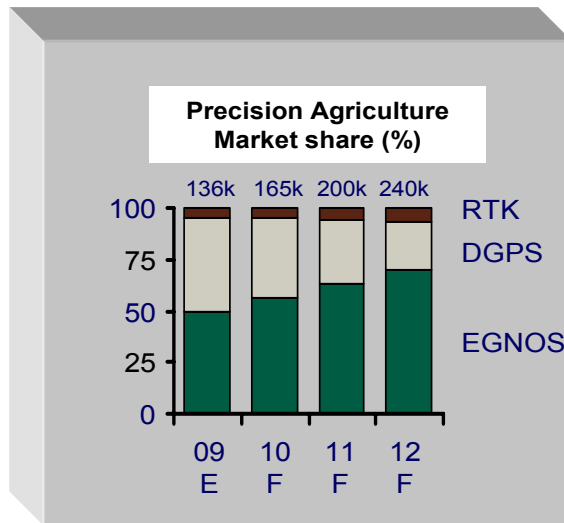


- European- and country level **Cost Benefit Analysis** to prove operational, monetary return on investment presented at 5 different conferences and fora
- Target Regional, Business and General aviation through print ads, trade fair participation, speaking at conferences
- Ensure visibility of demonstrated helicopter benefits
- Schedule FP7 demos in order to **accelerate certification** process
- **Coordinate** with ESSP and Commission to give visibility to certification
- Launch **EGNOS enabled** logo to be used by industry OEM

Precision Agriculture: Harvesting EGNOS benefits



Knowledge



Entry Plan



Adoption

CLAAS

Challenger

Trimble

- First ever analysis on **market size**, showing **EGNOS** potential to become **the leading solution in Agriculture**

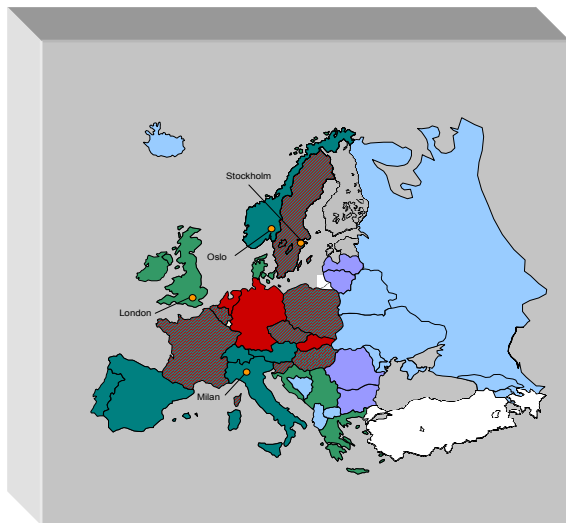
- Major device and tractor manufacturers **start to acknowledge EGNOS value proposition**

- Leading brands decided to **introduce new EGNOS products** to their portfolio



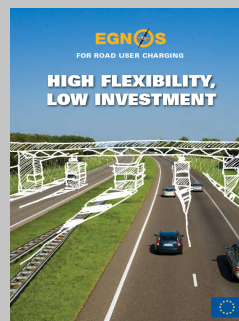
Road: Positioning EGNOS as “the solution”

Knowledge



- Identification of **potential adopters of EGNOS** (e.g. service providers, public authorities deciding to introduce new road network management schemes)

Entry Plan



- Major **Electronic Tolling service providers** now acknowledge the EGNOS potential

Adoption

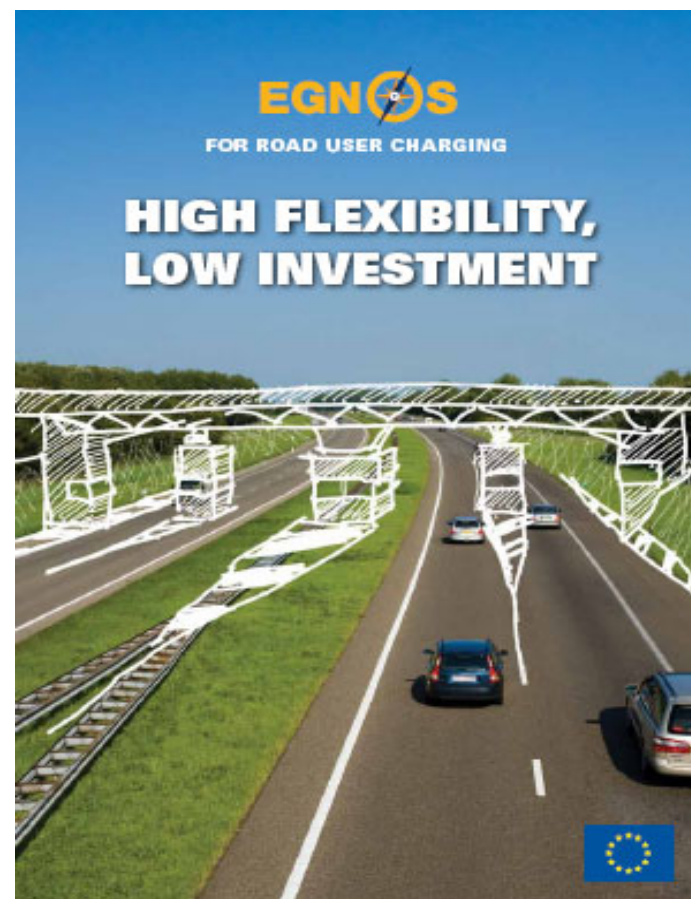
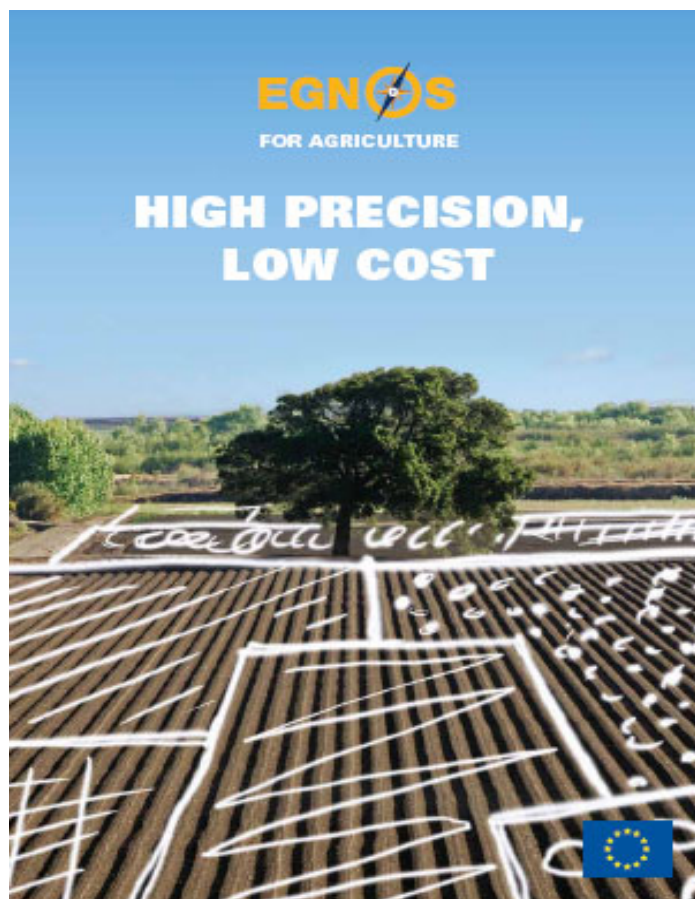


- **ENI**: early EGNOS adopter (FP6 Mentore)
- **EGNOS trials in progress**:
- **Road Operators** (e.g., ASECAP members) and relevant **National Authorities** (e.g. the Netherlands) being reached





EGNOS value proposition





It's there. Use it.



DISCOVER EGNOS

DEVELOPER PLATFORM

NETWORKING FORUMS

LIBRARY

BUSINESS SUPPORT

search

Go



26/02/2010

Live music and networking at Galileo Application Days

The Galileo Concert at Galileo Application Days on 4 March will cap off the events networking reception in the Application Village.

[» More](#)

24/02/2010

Register for Galileo Application Days special sessions

A GNSS Venture Academy and a session to stress the importance of GNSS education are being held for registered participants on 3 March.

[» More](#)

16/02/2010

ESA Investment Forum targets start-ups and SMEs

ESA's Technology Transfer Programme will hold an investment forum for start-ups and SMEs from 19-20 May in Stuttgart, Germany.

[» More](#)

[Sign up for our newsletter](#)

[» More news](#)

Highlights

EDAS

The EGNOS Data Access Service (EDAS) is a terrestrial commercial service disseminating EGNOS raw data in real-time to those who plan to develop precision location-based services.

[» Read more](#)

Road transport

Discover how your business can use EGNOS to develop more accurate and reliable applications for the road transport market, including for road user charging and fleet management.

[» Read more](#)

EGNOS network

Help desk

Our experts will provide answers to your questions about EGNOS.

[» Go to the help desk](#)




Forums

Join a forum of your peers to network and discuss EGNOS-related topics. Read the latest posts or become a member and contribute to the development of EGNOS as a service.

[» Go to the forums](#)

Information for

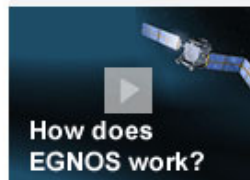
 Aviation

 Road

 Agriculture

 Location based services

 Maritime



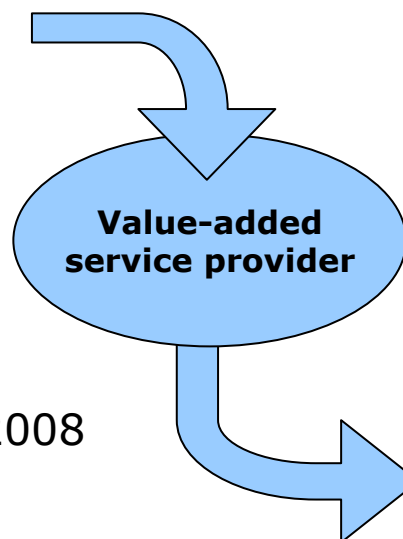
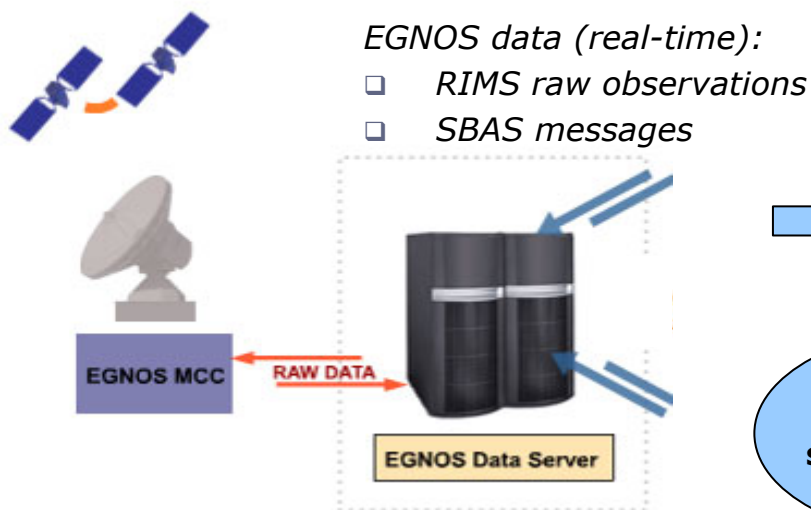
[How does EGNOS work?](#)

What's new?

Discover what you've missed since your last visit to the EGNOS Portal

[» Click here](#)

EGNOS Data Access Service (EDAS)



End users



Phased approach:

- **Phase 1:** prototyping since March 2008
 - Free-of-charge
 - Helpdesk
 - No guarantee of service
- **Phase 2:** commercial exploitation
 - Feature enhancement
 - Enhancement of service level
 - Pricing (cost recovery)

Online content: new website
<http://egnos-edas.gsa.europa.eu>

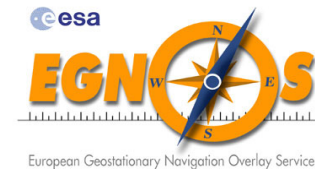


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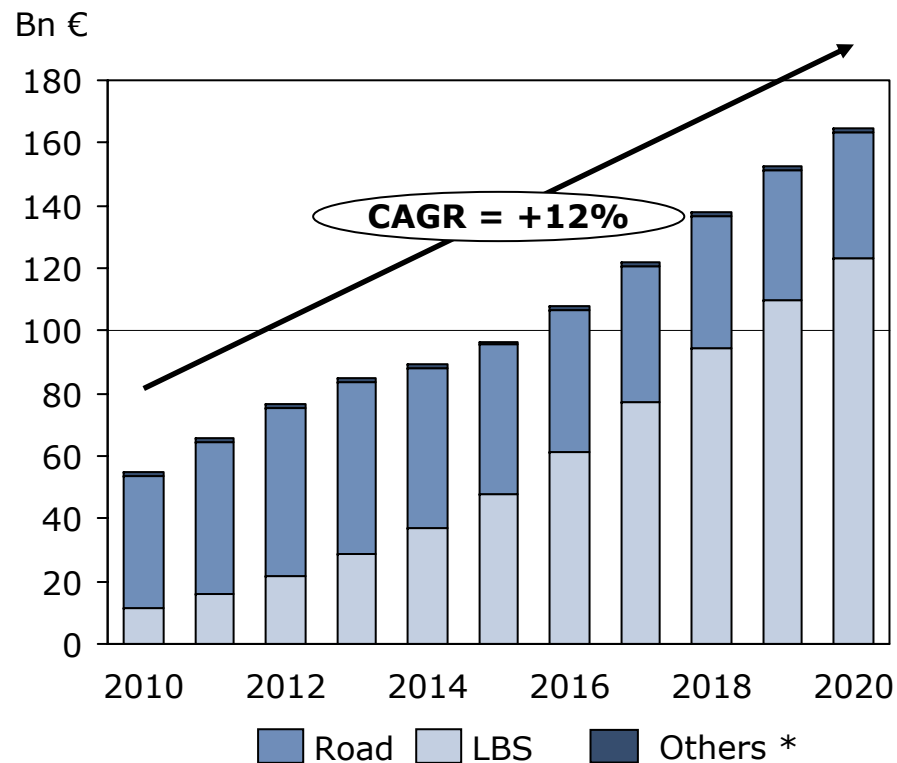
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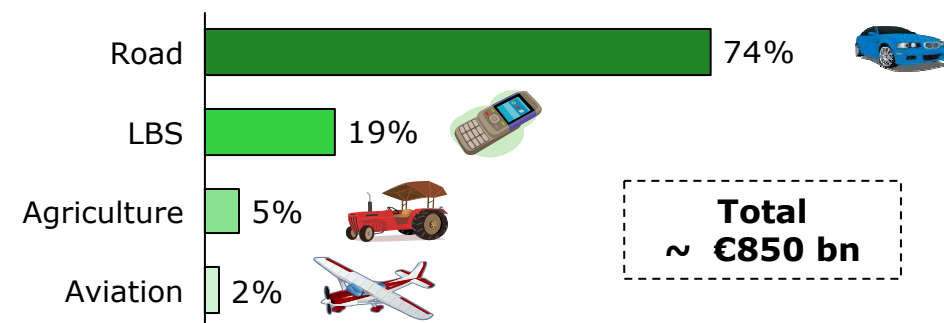
GNSS Market Monitoring Process

- GNSS market will pursue steady growth in the next decade
- Large public benefits from the use of GNSS

Worldwide GNSS market value per segment



GNSS monetized Public Benefits (cumulated 2010-2030)



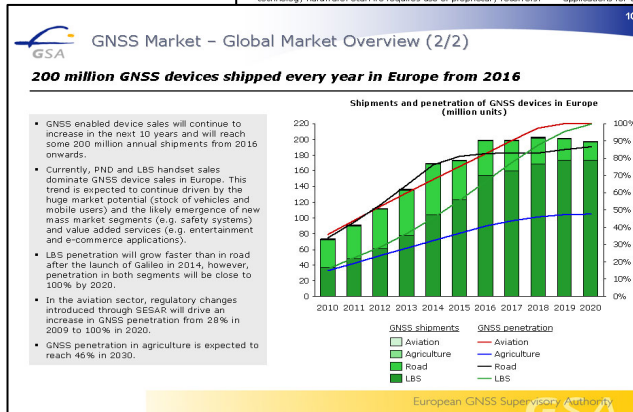
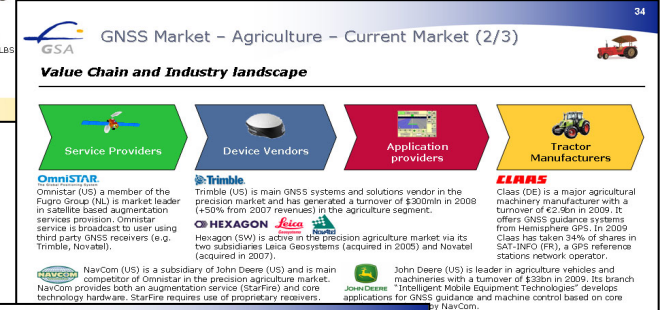
Public Benefits in Road

- Fuel consumption reduction
- Travel time reduction
- Air pollution reduction
- CO2 emissions reduction
- Severity decrease of accidents
- Congestion reduction due to avoided accidents



1st GNSS Market Report to be published in Q2 2010

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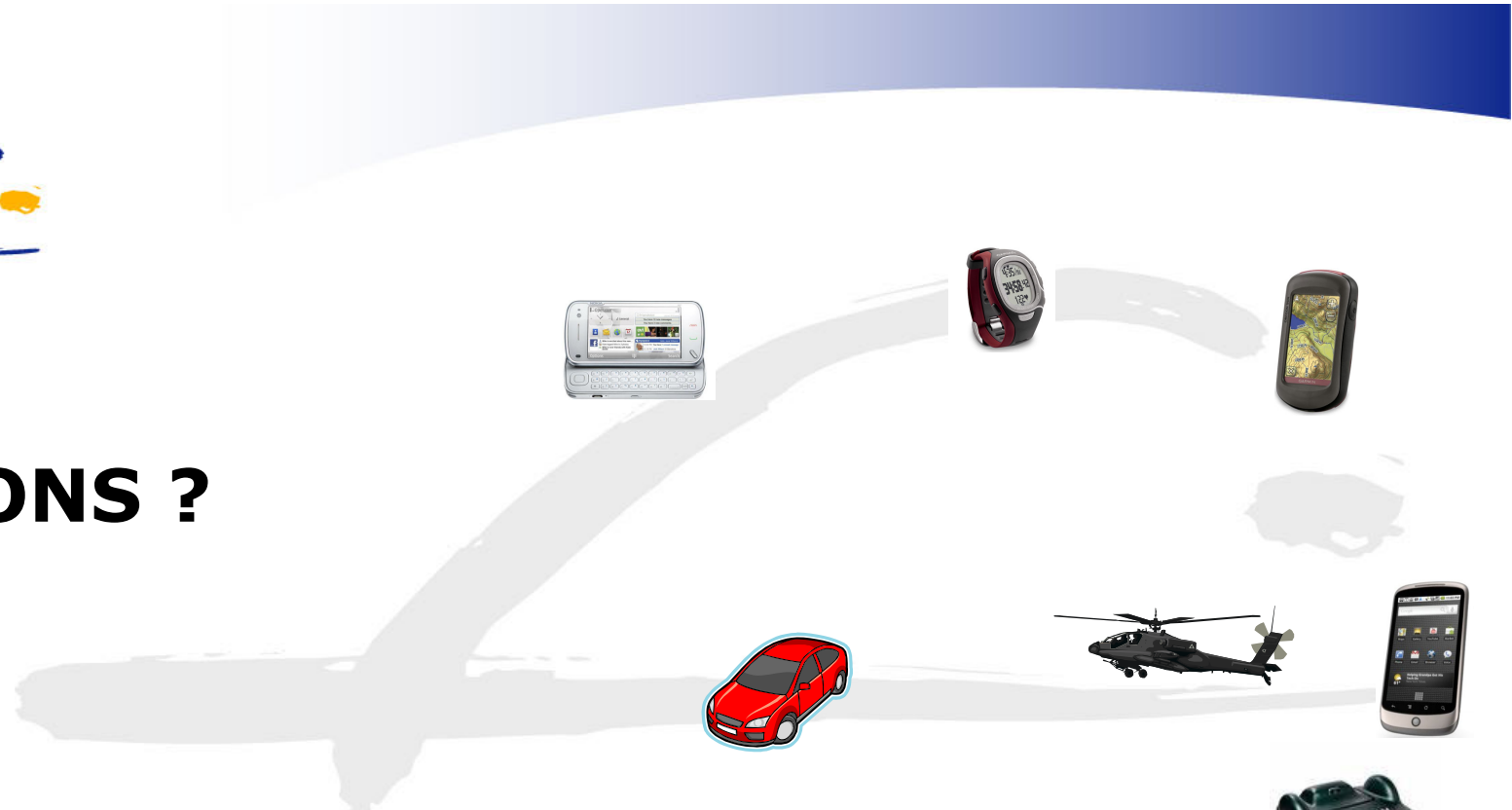
Vehicle market trend

Agricultural vehicle manufacturers are moving up the value chain by integrating service providers and device manufacturers as it is considered both as a key future technical asset and a growth area.

European GNSS Supervisory Authority



QUESTIONS ?



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