



New funding opportunities in the European GNSS programmes

Presentation of the open Calls for Proposals in the area of GNSS

Bucharest, 11 October 2010

Reinhard Blasi

European GNSS Supervisory Authority

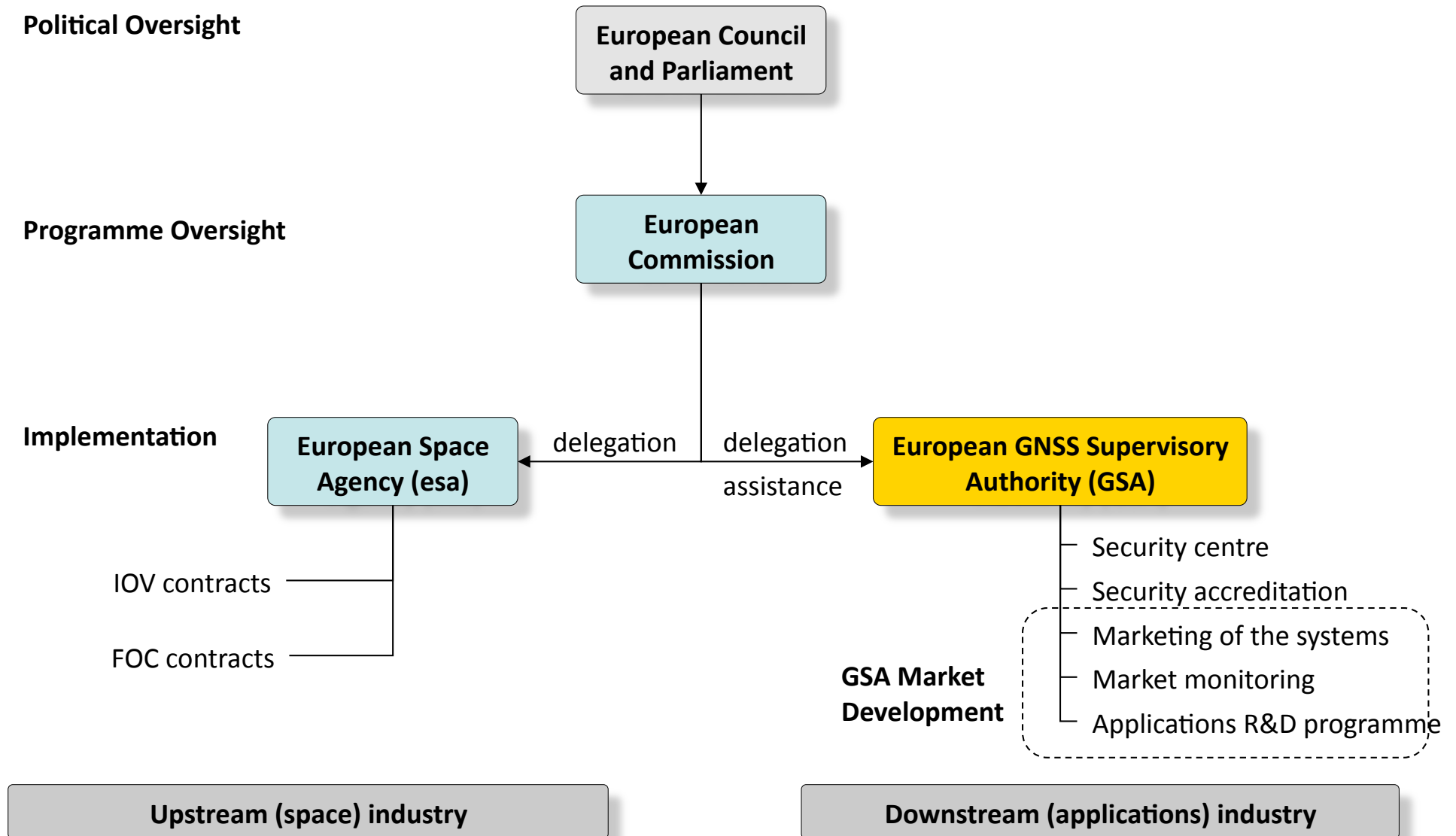


Content

- Introduction
- Overview of the FP7 process
- Overview of the 3rd GNSS Call in FP7
- Specific topics of the 3rd Call



Within the GNSS programmes, GSA supports the EC on market development & security



EU is running two satellite navigation programmes



- Global Navigation Satellite Systems (GNSS)
- Compatible with most other GNSS
- Inter-operable with GPS
- 2 prototypes launched (GIOVE)
- 4 IOV satellites planned
- Operational system planned for 2014
- Will support 5 services

- Satellite Based Augmentation System (SBAS)
- Measures GPS performance
- Sends corrections to users via satellite or terrestrial links (EDAS)
- Covers most of EU
- Expansion to Africa, Middle East and Eastern Europe planned
- Officially operational since 2009
- Certified for Safety Of Life by 2010

GSA Market Development *current activities*

1 EGNOS market stimulating actions



2 Market monitoring



3 Applications development via R&D funding



1 Example EGNOS market stimulation actions

EGNOS portal



Logo for EGNOS products



Events and exhibits



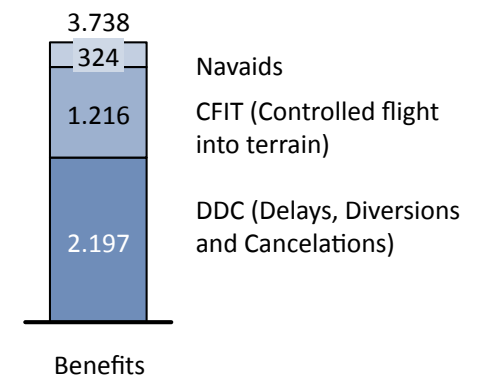
EGNOS data Access Service (beta)



Marketing Material



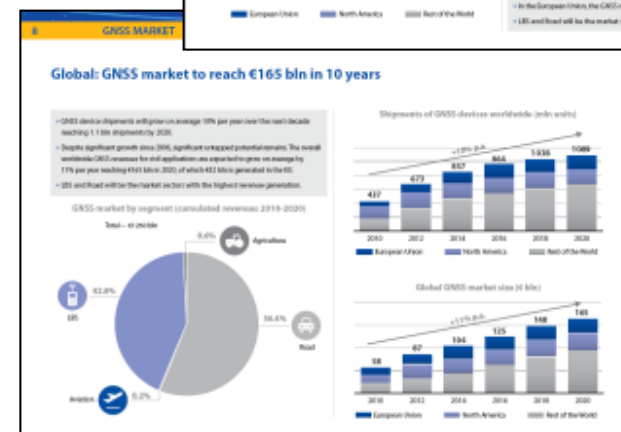
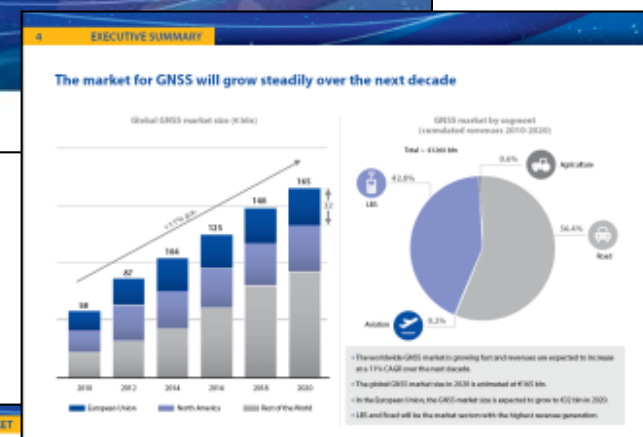
Cost Benefit Analyses



1st GNSS Market Report ready to be published



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3 Key numbers from previous 2 Calls

Requested funding is about **4** times available funding

Final funding: **42%** to SMEs

169 proposals received from over **500** organisations

Average consortium consists of **6** partners

Average grant requested is **€0.9m**

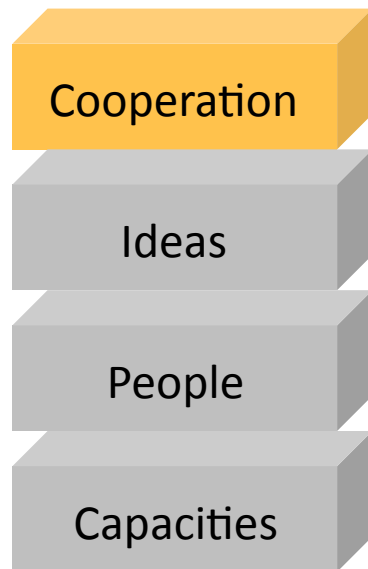
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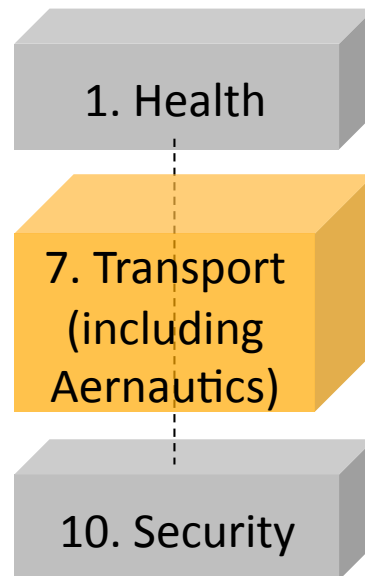
Galileo R&D in FP7

FP7 has 4 main blocks of activities



€50.5bn

10 themes in cooperation



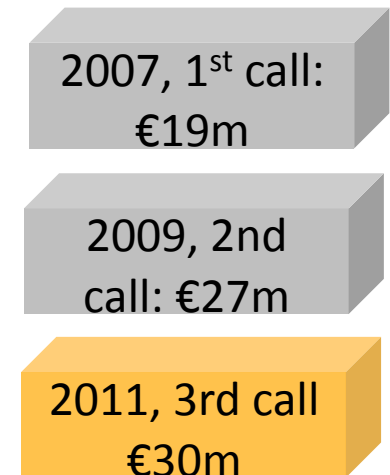
€32.4bn

4 sub themes in transport



€4.2bn

Different calls for Galileo*



>€75m

FP7 covers period 2007-2013

*Excluding tenders and administrative costs

FP7 grants vs. tenders

FP7 Grants

- Results in grant agreement
- Mainly RTD activities
- Need at least 3 partners from 3 different EU or Associated countries
- Consortium proposes activities fitting certain scope and objectives
- Mostly co-funded
- New IPR belongs to consortium
- Evaluated by external experts
- Flexible budget
- No, one or more winners per topic
- Implementation supervised by Commission / GSA staff using expert reviewers
- One schedule per Call (covering several topics)
- ***Three Calls published on July 20th, total of €30.5 mln (indicative)***

FP7 Tenders

- Results in service or supply contract
- Mainly professional services
- No minimum requirements
- Consortium responds to detailed statement of work
- 100% funded
- New IPR belongs to EU in most cases
- Evaluated mostly by EC / GSA staff
- Fixed budget ceiling
- Only 1 winner per tender
- Implementation managed by Commission / GSA staff
- Specific schedule per tender
- ***Publications expected over the next 6 months, total of €6.5 mln (tbc)***

Financial aspects grants

- Shortly after the project starts, **pre-financing** is paid; pre-financing amount depends on project length, usually 60-80%*
- **Interim payments** are done after each reporting period and final payment at the end based on cost statements**
- **Certificates on the Financial Statements (CFS)** required for beneficiaries receiving more than €375,000 cumulatively
- **Financial viability** check for coordinators and beneficiaries receiving over €500,000
- **Financial and technical audits** can be carried out up to 5 years after the project
- The **accuracy of the information** is the responsibility of the beneficiaries, overstatement results in liquidated damages and possible penalties

* 5% retained for the FP7 financial guarantee fund that insures EC and participants against e.g., bankruptcy of a partner

** Reporting period is usually between 12 and 18 months, minimum 10% is reserved for the final payment

IPR

- Background
 - Any IPR held by the participants prior to their accession to the grant agreement, as well as any IPR needed for the project or for using project foreground*
- Foreground
 - IPR generated by the project concerned
- Ownership
 - Background: no change of ownership
 - Foreground: the participant generating it (can be joint)
- Access rights (for consortium members)
 - For project purposes: Background is royalty-free, unless otherwise agreed before the GA; Foreground royalty-free
 - For use related to own foreground**:
royalty free or on fair and reasonable conditions
- Obligations
 - Protection: where Foreground is capable of industrial or commercial exploitation***
 - Use: use the Foreground or ensure that it is used
 - Dissemination: ensure that the Foreground is disseminated as swiftly as possible****

* Participants can define the project background and may exclude specific backgrounde.g., exclusion or positive list approach


** In other cases: freely negotiated

*** does not exclude open source approach

**** except in security-sensitive areas

Dissemination and exploitation of results

Dissemination

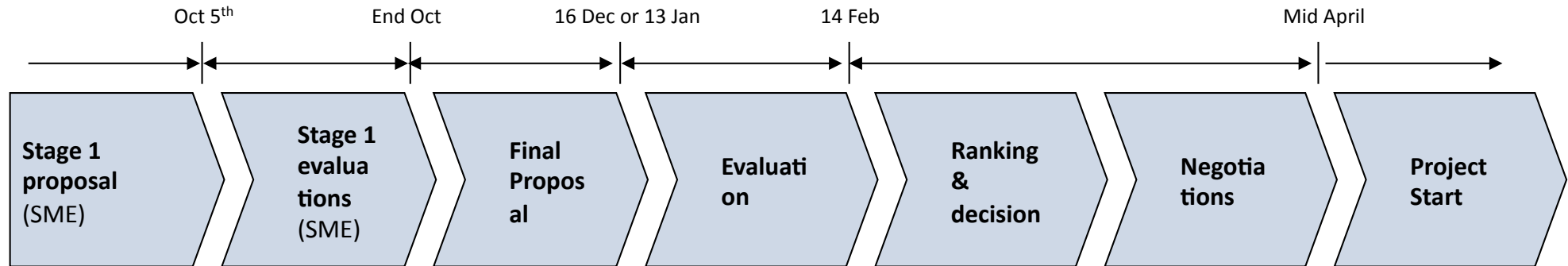
- Widespread dissemination is encouraged
- Projects to run a website with public information
- Some rules
 - Always display European emblem prominently in dissemination material 
 - Always mention that the project has received Community research funding
 - Share the article, document, brochure or web page with the project officer and obtain approval
 - Make public publications available via the project website and the GKMF/Virtual Library

Exploitation

- Commercial exploitation is encouraged
- Revenues generated from exploitation are **not** subtracted from the EU/GSA contribution
- Exploitation can be done through a newly created legal entity



From proposal to project



- Form consortium (has not to be finished)
- Write proposal
- Submit proposal via EPSS (Electronic Proposal Submission Service) before deadline

- Eligibility check
- Evaluation by independent experts
- Send feedback to participants: *proposals passing the threshold are invited for 2nd stage*

- Form consortium
- Write proposal
- Submit final proposal via EPSS* before deadline

- Eligibility check by GSA/EC staff
- Individual evaluation**
- Consensus meeting**
- Panel review**
- Feedback via initial information letter

- Ranking by GSA/EC staff: *ranked list, reserve list and rejection list*
- Determination of negotiation mandate and maximum contribution
- Inter-service consultation
- Feedback on decision and invitation to negotiations

- Gathering of administrative information
- Review of costs and cost methodology
- Negotiation of final description of work
- Final approvals and award decision

- Prepare and sign grant agreement
- Appointment of reviewers
- Kick-off meeting

* except for classified information

** driven by independent experts

Evaluation criteria

Included in 1st stage

S/T QUALITY

“Scientific and/or technological excellence (relevant to the topics addressed by the Call)”

- Soundness of concept, and quality of objectives
- Progress beyond the state-of-the-art
- Quality and effectiveness of the S/T methodology and associated work plan

IMPLEMENTATION

“Quality and efficiency of the implementation and the management”

- Appropriateness of the management structure and procedures
- Quality and relevant experience of the individual participants
- Quality of the consortium as a whole (including complementarity, balance)
- Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)

IMPACT

“Potential impact through the development, dissemination and use of project results”

- Contribution, at the European [and/or international] level, to the expected impacts listed in the work programme under the relevant topic/activity
- Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

Note: Slightly different sub-criteria for Coordination and Support Actions

Key documents are on Cordis



<http://cordis.europa.eu/>



- **Call fiche** – summary data of this specific Call, including overall budget
- **Transport Work programme 2011** – general information spanning all transport themes and all Calls, showing which topics are open in 2011

- **Detailed Topic descriptions*** (12 documents) – contains vital information and detailed guidelines for each individual topic
- **Guides for Applicants for Collaborative Projects** – contains general information on the process such as eligibility criteria, evaluation procedure, proposal templates, etc.

Includes detailed scope, key recommendations, expected deliverables and other important guidelines!

* included in additional documents on Cordis

Further information

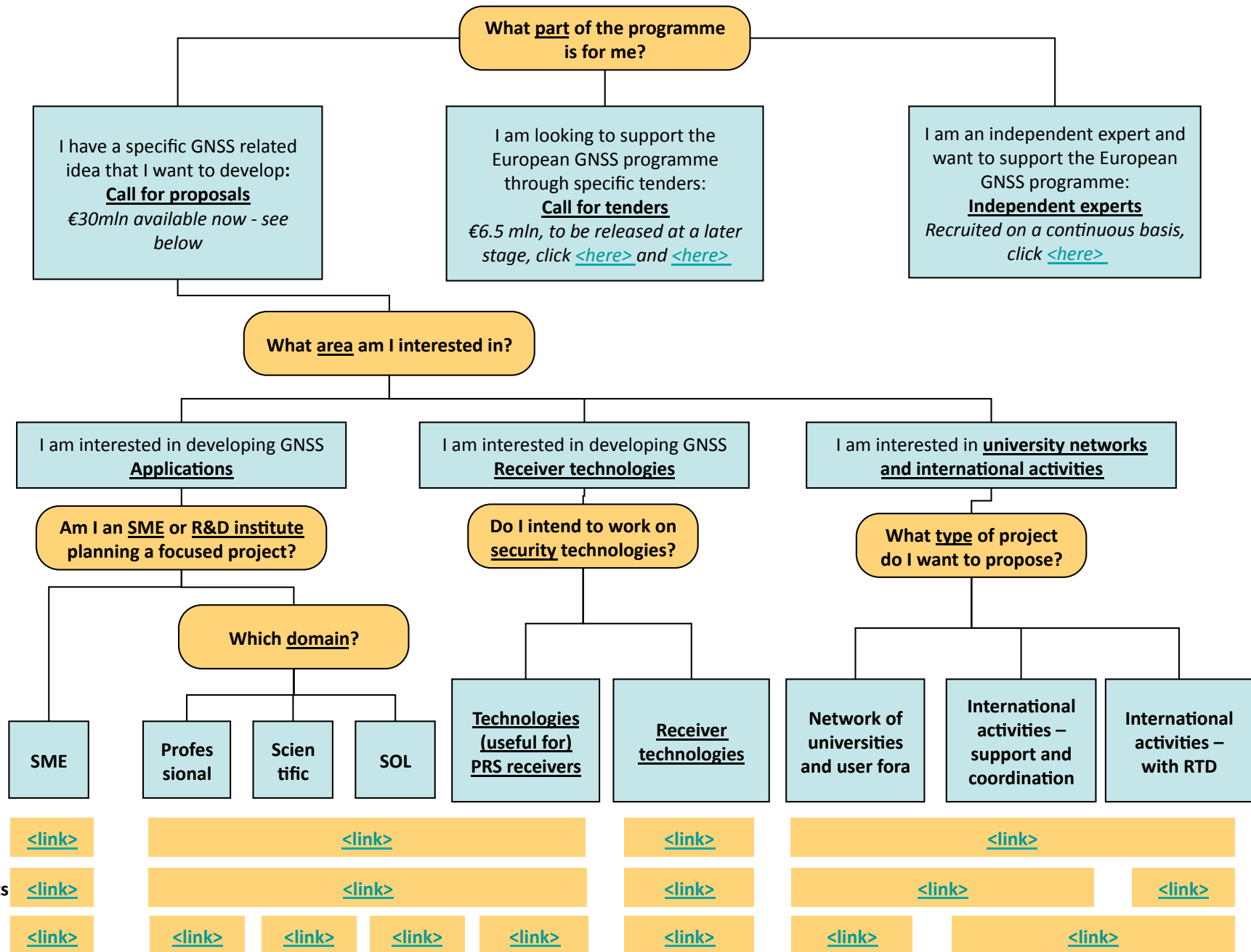
- Call information
 - CORDIS Call documentation:
 - http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7DetailsCallPage&call_id=325
 - http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7DetailsCallPage&call_id=326
 - http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7DetailsCallPage&call_id=356
 - GSA contact point: research@gsa.europa.eu
 - GSA website: www.gsa.europa.eu

- General sources of help on FP7
 - National Contact Points: http://cordis.europa.eu/fp7/ncp_en.html
 - The Commission's FP7 Enquiry service: <http://ec.europa.eu/research/enquiries>
 - Finding partners: http://cordis.europa.eu/fp7/partners_en.html
 - Documents, templates, checklists: http://cordis.europa.eu/fp7/find-doc_en.html

- Specialised and technical assistance
 - CORDIS Helpdesk: http://cordis.europa.eu/guidance/helpdesk/home_en.html
 - EPSS Helpdesk: support@epss-fp7.org
 - IPR Helpdesk: <http://www.ipr-helpdesk.org>

- Other sources of help
 - Numerous specialised consultancies and independent experts can help consortia to prepare

Where can I find the documents I need?



If I am selected, how will GSA be involved during the project?

- Project follow-up
 - Appoint project reviewers – usually two, specialised reviewers may be consulted for specific deliverables on an ad-hoc basis
 - Review and accept deliverables
 - Participate in key review meetings
 - Quarterly status
- Finance and administration
 - Pay pre-financing
 - Interim payments and final payment based on periodic/final cost declaration reports
 - Implement any changes if needed in grant agreement
- Support
 - Reviewers and GSA actively help the consortium
 - Access to GNSS information via virtual library
 - Support in dissemination via GSA website
- People
 - Project Officer: all technical matters
 - Contracts Officer: administrative, financial and contractual matters

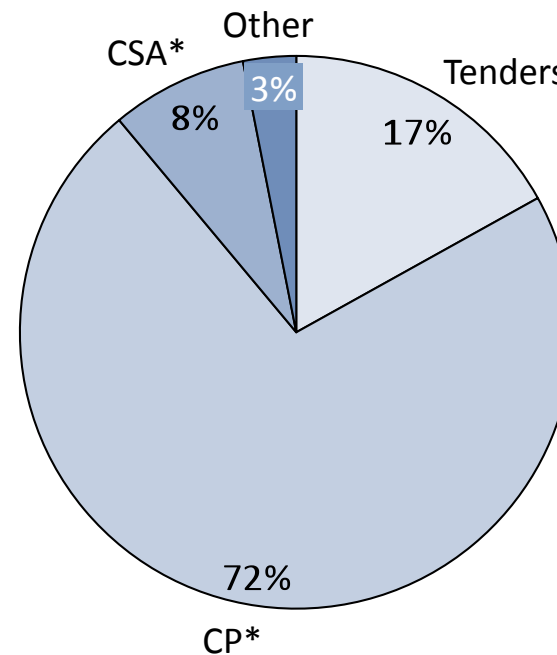
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Majority of budget for Collaborative Projects, managed by GSA

Indicative split by funding scheme



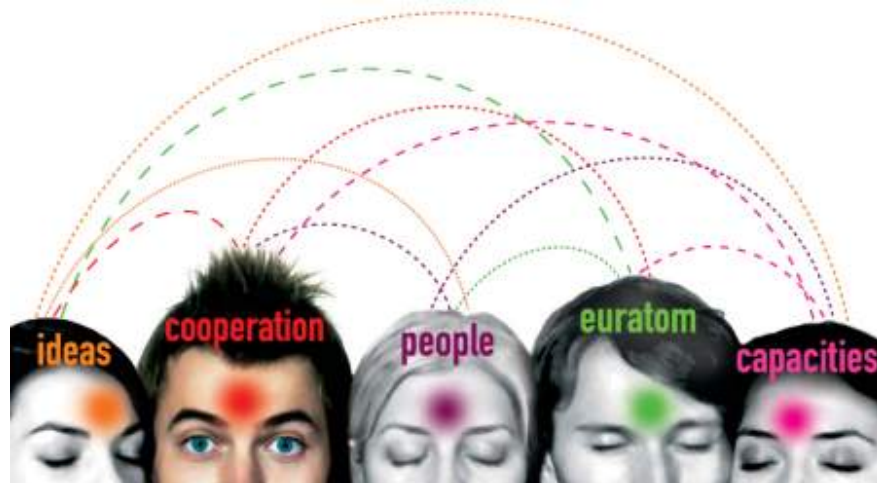
Collaborative projects are most important funding instrument in 3rd Call, tenders 2nd

* CP: Collaborative Project; CSA: Coordination and Support Actions

The programme builds on the solid legacy

Legacy of previous GNSS Calls

- Emphasis on research **close to the market and commercial exploitation**
- Emphasis on **tangible results**
- Supportive to **small companies and FP newcomers**
- **Accessible and responsive to any questions**
- Link to **Galileo and EGNOS programmes**
- Hands-on management and **support** including e.g., dissemination

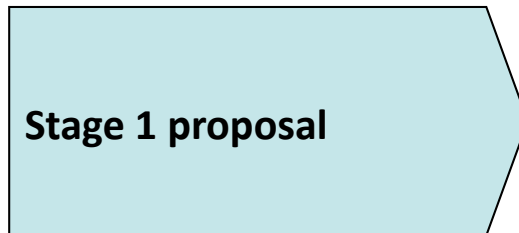


In the 3rd Call we go a step further and introduce some new elements

1. **Two-stage** evaluation for small projects, lowering the barrier to entry
2. Revamped **support** tools
3. More focus on supporting **community** of developers
4. Using real **Galileo** signals
5. Different **funding** levels
6. Support for **classified** proposals
7. Faster **process**

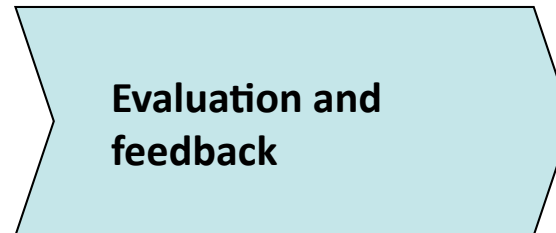
1. Two-stage evaluation for small projects

Deadline: Oct 5th



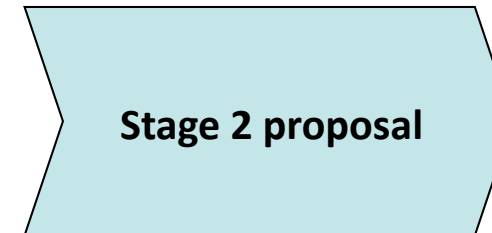
- Submit initial proposal
5-10 pages
- Coordinator can file
without explicit
support of partners
- Evaluation on the level
of innovation and the
potential impact

Feedback: end Oct



- Received feedback
- Confirm / enhance
consortium
- Enhance concept
- Prepare full proposal

Deadline: Jan 13th



- Submit final proposal
(60-100 pages)
- Consortium needs to be
fully on board and
support proposal
- Workplan and quality of
consortium also
evaluated

The 1st stage is focusing only on the concept. It is designed to be **quick, efficient and accessible** with minimal administrative hassle. Once you have passed the 1st stage you can improve the concept and write a full proposal with more confidence. The likelihood of getting funding should be 60-70% instead of 20-25% for single stage evaluations.
(SMEs: <250 employees; <50 mio € turnover p.a.)

2. Revamped support and tools (1/2)

EGNOS portal



www.egnos-portal.eu/

Synopsis of all FP6-7 projects



www.gsa.europa.eu

EGNOS data Access Service (beta)



<http://www.gsa.europa.eu/go/egnos/edas>

GNSS innovation Voucher Programme (2011)



2. Revamped support and tools (2/2)

EGNOS toolkit (ongoing)



Virtual Library

THE GSA VIRTUAL LIBRARY - A NEW RESOURCE GIVES EASY ACCESS TO KEY INFORMATION

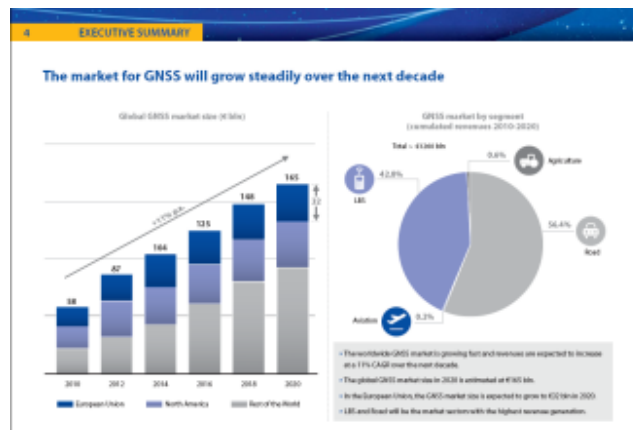
The new GSA Virtual Library provides a single on-line access point to thousands of important files and documents related to the European GNSS Programmes.

An easy-to-use computer interface allows simple or advanced searches via the internet on Galileo and EGNOS-related information and research projects. New documents, images and other reference materials will be added on a regular basis.

Text Search

Look For:

Market Report (ongoing)



Events and exhibits



3. More focus on supporting community of developers

- IPR developed in collaborative projects is owned by the consortium and we encourage consortia to fully exploit any commercial opportunities
- However, many of the R&D projects are addressing similar issues and could win by sharing information
- GSA aims to facilitate sharing and act as a broker in some cases
- In addition, we want to encourage the development of **free, open source toolkits**. This will be taken into account in the evaluation.



4. Testing with real Galileo signals

- The elements for intensive Galileo testing are being put in place
 - OS ICD released and available for commercial and research use, friendly IPR and pricing
 - Galileo is available in market leading simulators
 - Several testing facilities are operational with more in progress
 - Leading chipset and receiver manufacturers are releasing Galileo ready products
 - 2 GIOVE satellites already in space
 - 4 IOV satellites launched 2011-2012
 - 14 FOC satellites launched 2013-2014
- Within budgetary and business constraints, projects should carry out testing that is as realistic as possible
- GSA and Commission are aiming to facilitate access to testing and simulation facilities



5. Different funding levels

Funding scheme	Type of organisation	R&D activities	Demonstration	Management & other
CP (Cooperative Projects)	SME or R&D institute	60%	50%	100%
	Large companies	40%		80%
CSA (Coordination and Support Activities)	All	100%		
Tender	All	100%		

We encourage pre-commercial projects with a high degree of **maturity**.
We also aim to fund **many activities** with limited budget.

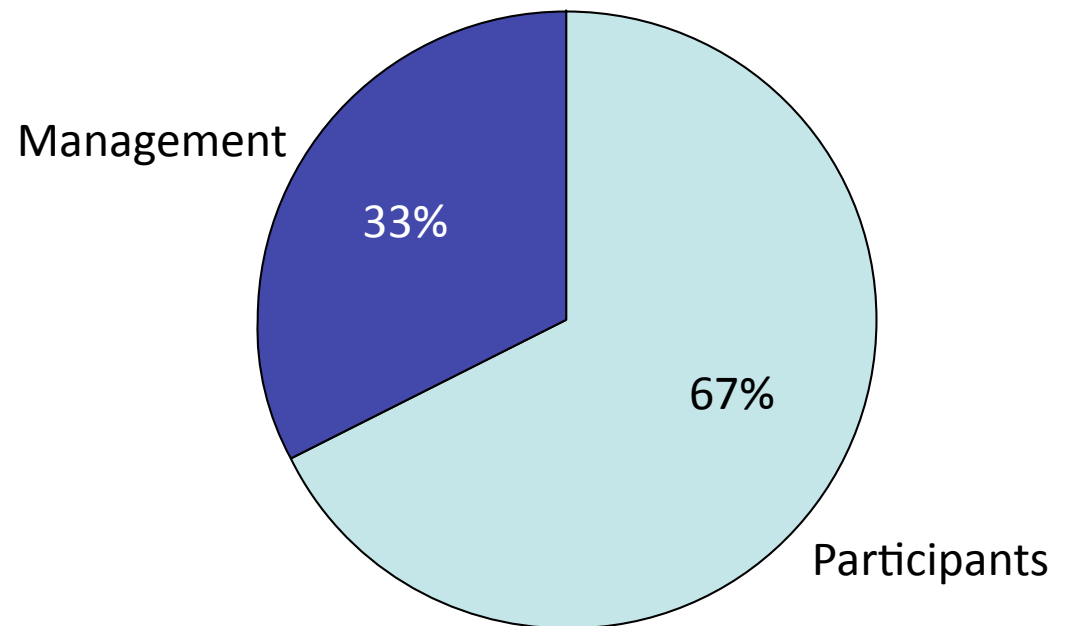
6. Security sensitive proposals

- Proposals containing **classified information** can be accepted for topics related to security sensitive areas such as PRS
- Any proposal considered as **sensitive** will be scrutinised to verify that all security aspects are properly addressed (can affect the funding decision)
- The classified information should be in a **separate annex** and should **not** be uploaded via the Electronic Proposal Submission Service (EPSS) on CORDIS with the non-classified part of the proposal. Note that 1st stage proposals in the 2-stage process **cannot** contain any classified parts
- Instead, the classified parts should be sent directly to the **GSA Local Security Officer** according to the relevant rules. This process is further described in the Guide for Applicants
- The following **documents** apply: Galileo Stand-alone Security Classification Guide, the European GNSS Programme Security Instruction, the GalileoSat Programme Security Instruction
- These can be obtained via **GSA-FP7-Call-1@gsa.europa.eu** after establishment of a NDA and consultation of the appropriate NSA/DSA

7. The schedule has been optimised as much as possible

- Total time from publication to award decision: 9 months – including summer break and Christmas holidays
- Most of the time is for participants to prepare and improve their proposal
- Management (or administrative) time has been optimised and is 50% lower than comparable Calls

Distribution of time used in critical path
100% = 9 months



Specific recommendations

Content

- Get the project basic concept right – do not try to “fit” the work programme or to please us
- Explain clearly and honestly how the consortium will gain commercially from the project

Process

- Start early, especially in finding partners
- Watch the deadline, it is strictly enforced and make sure you foresee sufficient time for the EPSS process – don't upload the last minute
- Contact GSA if in doubt – via research@gsa.europa.eu or gsa-fp7-call-1@gsa.europa.eu– we are there to help

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Work Programme 2011 overview – 14 Topics

Activity 1 40-50%	Exploiting the Full Potential “applications”	<ul style="list-style-type: none">• 1. Professional applications• 2. Safety Of Life applications• 3. Scientific applications• 4. Innovative applications / SMEs
Activity 2 2-3%	Preparing the Tools and Creating the Appropriate Environment “tools”	<ul style="list-style-type: none">• <i>Continuation of the EDAS service for research*</i>
Activity 3 20-25%	Adapting Receivers to Requirements and Updating Core Technologies “receivers”	<ul style="list-style-type: none">• 5. Innovative receivers technology• 6. PRS receiver technologies• <i>Integrity receivers*</i>• <i>multi-constellation receivers*</i>• <i>Multi frequency antennas (E1, E6, E5)*</i>• <i>Integrated PMR and PRS*</i>
Activity 4 25-30%	Supporting Infrastructure Evolution, GSA and international „support“	<ul style="list-style-type: none">• 7. Networks of universities, research institutes & user fora• 8. International activities• <i>Mission evolution studies*</i>

* tender

8 topics currently open in 3 Calls

Call identifier	Budget (€mln)	# of topics	Resp	Funding Scheme	Link to CORDIS	Deadline for submitting proposals	Topics
FP7- GALILEO-2011 -GSA-1-a „regular CA“	17.5	6	GSA	CP + CSA	http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationDetailsCallPage&call_id=325	16/12/2010	<ul style="list-style-type: none"> •4 application topics • networks of universities and user for a •international activities
FP7- GALILEO-2011 -GSA-1-b „SME“	10	1	GSA	CP	http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.CooperationDetailsCallPage&call_id=326	Stage 1: 05/10/2010 Stage 2: 13/01/2010	GNSS applications (targeted to SMEs), e.g., LBS, road
FP7- GALILEO-2011 -ENTR-1 „EC“	3	1	EC	CP	http://cordis.europa.eu/fp7/dc/index.cfm?fuseaction=UserSite.FP7DetailsCallPage&call_id=356	16/12/2010	Innovative receivers technology

The 6 tenders will be published at a later stage

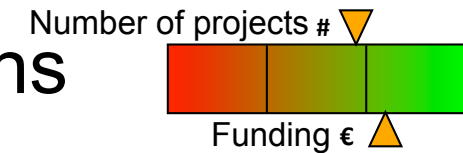
Applications – how does a perfect proposal look like

- Develops end-to-end application + trial
- Clear commercial intent
- Contributes to the adoption of Galileo, EGNOS or EDAS
- Provides public benefits
- Innovative, beyond state-of-the-art
- Strengthens the community of GNSS developers
- Takes into account relevant standards and regulations on e.g., safety and security



We do not expect all of this in one proposal

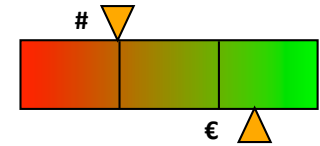
1. Professional applications: fleet management and logistics applications



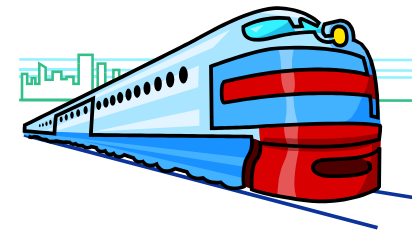
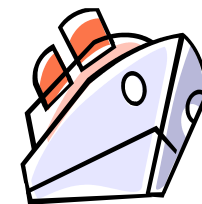
- The topic will address the use of EGNOS (via satellite and via EDAS) for the professional market requiring:
 - High accuracy (e.g. precision agriculture, mapping, geoinformation, or location of work teams and individuals, with application in positioning of, for instance, construction machinery or the conservation of highways and railways), and/or
 - Signal reception capability under difficult RF circumstances (e.g. indoor), and/or
 - PRS for applications under government control, requiring high robustness, anti-spoofing and anti-jamming capabilities
- The use of early Galileo services demonstrated through IOV satellites can also be envisaged
- Highlighted sectors: high precision, road and transport, agriculture and “new technologies”
- Specific GSA expectations: access to market and mature consortium is critical



2. Use of EGNOS & GALILEO in SoL-applications for all transport modes

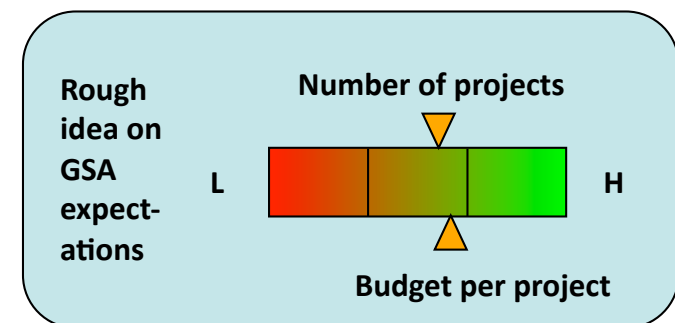


- Continue the effort for the introduction of EGNOS in aviation, both commercial and general aviation, and will prepare the adoption of GALILEO
- Also other domains of applications where the integrity concept might be of interest, e.g. road, railways, maritime and inland waterway transports, or any other domain outside the scope of transports
- Highlighted areas:
 - Aviation: accelerated EGNOS adoption (focus on underserved areas)
 - Maritime: inland waterways navigation, development of RIS, portal and coastal operations, maritime mapping
 - Rail: signalling for e.g. low density lines
 - Road: ADAS, monitoring of specialised transports, cargoes and container management, all applications where a guarantee of positioning is required



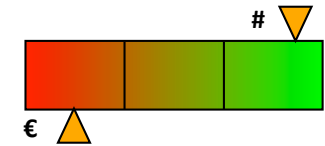
3. Use of Galileo and EGNOS for scientific applications and innovative applications in new domains

- The topic will address the benefits that the **scientific community** can derive from the use of GALILEO and/or EGNOS for the society at large, with a high degree of innovation. The **synergies with other satellite-based technologies** (e.g. GMES) will be addressed in this topic.
- Highlighted areas of R&D:
 - Earth observation and remote sensing
 - Innovative application domains e.g., authentication, pseudolites, high-accuracy
 - Focus on Galileo but also new uses of EGNOS and EDAS
- Specific GSA expectations:
 - The commercial aspects will be somewhat less emphasised than other application topics
 - However, we expect more than a feasibility study
 - The level of innovation is critical



4. Use of Galileo and EGNOS services for mass market and in niche sectors (to be mainly provided by SMEs)

- Mainly open for, but not limited to SMEs, universities, and R&D organisations (coordinator)
- Large industrial companies may participate if justified
- Focused projects run by small, focused consortia
- Emphasis on innovation
- Two-stage evaluation, deadline 1st stage: Oct 5th !!
- Despite often limited budget, we expect concrete results – not just a feasibility study
- PHD students are encouraged to participate
- TOTAL BUDGET = €10mln



5. Innovative receivers for the mass market or for professional use

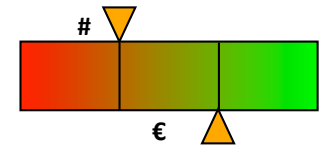
Managed by EC

- Objective: give research funding opportunities in the area of PNT devices.
- Two possible approaches:
 - Receiver Prototype Development
 - Prototyping towards a final product
 - Recommended: €1M, 24 months
 - Advanced Receiver Technologies
 - Focus on research, no HW development necessary
 - Recommended: €0.5M, 18 months
- Similar to FP7-2C
- Open to all user communities

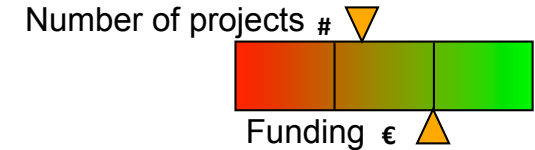


6. Technologies for PRS receivers

- Develop technologies useful for PRS receivers, including security modules; ASIC; tri-band RF front end; cryptographic protection technologies; MEMS for low-end receivers; smart small-size antennas for pedestrian applications (not necessarily pure PRS background)
- Expected outcome: development of enabling technologies for PRS receivers; and development of EU competence and innovation in receivers technology



7. Networks for universities and research institutes, and user fora



Special conditions

- Coordination and Support Actions – Coordination Type (CSA-C) 100% funded
- **Networks of universities and research institutions:** coordinator of the consortium should be a university or research institution and these types of organisations should perform at least 60% of the activities
- **User fora:** the consortium should include at least one high profile representative body* should perform at least 30% of the activities

Requirements

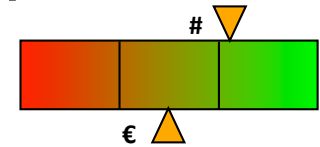
- **Focus** on only one of the two objectives of this topic (recommended)
- **Collaborate** with or **be part of** existing initiatives
- Focus on implementation and define **clear and measurable objectives**
- Use of **PHD students** is possible
- **Liaise** with already established European networks of cluster organizations. For example:

*such as a standardisation organisation or industry federation and these representative bodies



8. International activities – introduction

- Contribute to 3rd country collaboration by promoting EU GNSS services, applications and standards
- Focus on countries with collaboration agreement
- Provide guidance and support to non-EU countries and regions to set up regional and local facilities to adapt services to local needs and ensure that no unnecessary restriction to the use of the European GNSS is applied
- Two funding mechanisms : co-funded Collaborative Projects (CP) and 100% funded Coordination and Support Actions – Coordination Type (CSA-C). Any proposal that contains at least some RTD and/or technical demonstration activities shall be a CP



Work Programme: Tenders

Topic	Budget (tbc)
Integrity Receivers	€ 1.5 mln
Integrated PMR (Professional Mobile Radio) and Galileo PRS receiver architecture	€ 0.9 mln
SBAS L1/L5 multi-constellation receiver	€ 1.0 mln
Multi-frequency antennas (E1, E6, E5)	€ 0.5 mln
Mission evolution studies	€ 2.0 mln
Provision of the EDAS service to the research community	€ 0.6 mln

Total: 6 topics for 6.5 mln (tbc)



THANK YOU



Reinhard Blasi

Market Development Officer
European GNSS Supervisory Authority

reinhard.blasi@gsa.europa.eu





Example Projects



High Precision, Low investment

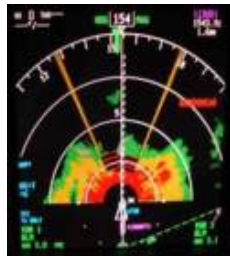


HElicopters Deploy GNSS in Europe

Objectives

- Develop the helicopter approach procedure assisted by EGNOS, including necessary avionics
- Develop helicopter procedures for mountain rescue and Helicopter Emergency Medical Services
- Perform demonstrations on four helicopters and one fixed-wing case (small aircraft/general aviation)

Concept



- EGNOS assistance enable rescue helicopter to fly under a greater range of daylight conditions and visibilities. The Eurocopter 135 helicopter from TAF Helicopters will be certified
- A new procedure for use in offshore operations (SOAP) provides evidence of the EGNOS benefits for navigation to the oil industry
- EGNOS expands the range of meteorological conditions that the emergency helicopters can fly and increase safety. The Agusta 109 helicopter from Rega will be certified

Call	FP7 1 st
Topic	Aviation
Grant	0.85 €m
Budget	1.21 €m
Galileo	✗
EGNOS	✓
EDAS	✗
Start	25/02/2009
Duration	24 months
Leader	Helios

Results

- EGNOS assisted approach for ambulance helicopters has been demonstrated at Interlaken hospital on May 17th 2010
- The EGNOS based approach procedure for offshore operations has being designed and endorsed
- Prototype avionics for approach in offshore operations has been developed

ACCEPTA

ACCelerating EGNOS adoPTion in Aviation

Objectives

- To accelerate the development, certification, installation and marketing of EGNOS-enabled avionics
- To design, develop and publish details of EGNOS LPV approach procedures at airports throughout Europe

Concept



- The project will operationally introduce the EGNOS aviation applications in the most promising key niche markets namely regional airlines and business aviation market
- EGNOS receivers and the complete required avionics will be installed in the fleet of the regional airlines and corporate users
- Expected wide-scale adoption of the EGNOS-enabled LPV approach throughout European airports where the SBAS signal is available and certified

Call	FP7 2 nd
Topic	Aviation
Grant	2.50 €m
Budget	4.53 €m
Galileo	✘
EGNOS	✓
EDAS	✘
Start	01/03/2010
Duration	24 months
Leader	INECO

Results

- Customised cost benefit analysis is being developed for 3 regional and business airlines
- Procedures co-financed in FR, ES, IT, PL, UK, CH by EU funding



FOR ROAD USER CHARGING

High Flexibility, Low Investment



GINA - GNSS for INnovative road Applications

Objectives

- To accelerate the large scale take-off of road pricing and of value added services (VAS) based on EGNOS/Galileo, confirming the technical feasibility and economical viability of a large scale, GNSS-only road pricing scheme
- Identify the benefits related to congestion and pollution management
- Demonstrate the possibility of VAS running on a road-pricing operating platform

Concept



GINA focuses on three main activities:

- Proposing a solid business strategy for the exploitation of the use of GNSS in the road sector
- Understanding the added value of the EU technology in terms of performance or cost improvement compared to GPS-only
- Performing a large scale trial in the Netherlands to demonstrate and quantify the EGNOS benefits for nationwide road pricing schemes

Call	FP7 1 st
Topic	Road
Grant	1.31 €m
Budget	2.2 €m
Galileo	✗
EGNOS	✓
EDAS	✓
Start	05/03/2009
Duration	24 months
Leader	GMV

Results

- First exhaustive trial results demonstrate the successful use of EGNOS protection level for road pricing schemes. Results will be presented to stakeholders in September in Brussels with strong interest by motorway operators and public authorities which will participate
- Second end-to-end trial ongoing, involving 100 vehicles over 6 months

SCUTUM - SeCURING the EU GNSS adopTion in the dangeroUs Material transport

Objectives

- To achieve an EU-wide EGNOS use in the transport of hazardous goods. The project will implement a best-practice approach: the operational experience of the ENI company will be extended to France and Austria
- Perform a large-scale adoption of EGNOS in the freight transport market

Concept



- Enable the evolution of technological elements of the service provision from prototype to standardised products
- Enhance the evolution and enable them to use EDAS
- Technical standardisation related to EGNOS-based services for the transport of dangerous materials (aiming at publishing a CEN Workshop Agreement); workshop on 28 September in BXL
- The extensive large-scale trials in real-life cases will enable refinement of, the technology, the CWA work related to the service definition, and the operative procedures

Call	FP7 2 nd
Topic	Road
Grant	1.4 €m
Budget	2.2 €m
Galileo	✗
EGNOS	✓
EDAS	✓
Start	11/02/2010
Duration	21 months
Leader	Telespazio

Results

- The ENI monitoring system is enhanced to use EGNOS CS and is prepared to operate in large-scale trials involving 100 vehicles which transport hydrocarbon in Italy, France and Austria: ENI is implementing EDAS in the OBU in at least 100 trucks in an **operational system**



SIGNATURE

Simple GNSS-Assisted and TrUsted REceiver

Objectives

- To prototype a robust GNSS-based solution to enable flexible road user charging in a cost-effective and scalable manner, even in demanding urban environments.
- To demonstrate the benefit of EGNOS Data Access Service (EDAS) to reduce the time to first fix and the positioning integrity.

Concept



- Support EGNOS adoption as the core technology for applications such as congestion management, fair and flexible road pricing, and pay-as-you-drive insurance
- Provide assurance of positioning information embedded GNSS reliability algorithms into the OBU, provide assurance
- The prototype is being extensively tested in real environments in Torino and Nottingham

Call	FP7 1 st
Topic	SME/Road
Grant	0.30 €m
Budget	0.39 €m
Galileo	✗
EGNOS	✓
EDAS	✓
Start	01/02/2009
Duration	24 months
Leader	NSL

Results

- It is a robust positioning solution offering high availability and integrity, based on low-cost GNSS components assisted by EDAS
- The system is composed by an assistance server, OBU positioning algorithms and prototype OBU
- Innovative EDAS based robust solution for RUC Technology tested in RUC demo in Belgium



Professional applications

GOLDEN-ICE



GOLDEN-ICE

Aims at exploiting the EGNOS innovations in the field of winter services equipments (professional trucks and vehicles) with the objective to introduce advanced concepts in relation to salt spreading control, road safety and emergency.

Call	FP7 2 nd
Topic	Professional applications
Grant	0.49 mln
Budget	0.62 mln
Galileo	×
EGNOS	✓
EDAS	✓

ASPHALT



ASPHALT



ASPHALT

It offers high precision applications in road construction and fleet management and logistics in the construction just-in-time process chain, and are expected to be early adopters of both EGNOS and Galileo in an important professional high value EU market.

Call	FP7 2 nd
Topic	Professional applications
Grant	1.02 mln
Budget	1.35 mln
Galileo	×
EGNOS	✓
EDAS	×

IEGLO - Infrastructure-based EGNOS/Galileo receiver for personal mobility

Objectives

- To prove the added value of EGNOS in the healthcare and care-giving domains.
- To develop a sat-nav-based aids for Alzheimer's sufferers in emergency cases
- To provide support in protection areas and detection of distress situations..

Concept



- In Europe, there are approximately 4,000,000 people ridden with Alzheimer disease which can benefit from this application.
- A mobile device incorporates assisted GNSS and infrastructure based technology (WLAN, RFID) enabling seamless indoor and outdoor positioning.
- The information about the supervised person is sent via a secure communication channel to a service center, which administrates the emergency events

Call	FP7 1 st
Topic	SME/LBS
Grant	0.30 €m
Budget	0.39 €m
Galileo	×
EGNOS	✓
EDAS	✓
Start	15/01/2009
Duration	18 months
Leader	Teleconsult Austria

Results

- The IEGLO prototype is ready for industrialization
 - Validated by final users, and nursing homes in three testbeds in Braunschweig (Germany), Pettenbach (Austria) and Warsaw (Poland).
 - Red Cross is interested
 - Commercial agreements are being put in place to bring the product to the market.

Livesailing For Professionals

Objectives

To develop the ultimate system for sailing professionals and rely on precise position provided by EGNOS.

- Improve their sailing skills
- Watch and supervise a regatta

Concept



Boats and buoys are equipped with wind and positioning sensors. This information is transmitted in real time and recorded in a database.

After a race, a sailor can understand

- How good he was during the race.
- How far he was the benchmark performance of his boat.

During a race, the race organizers can have:

- A certified ranking
- A certified list of boat that took a false start
- A very precise wind measurement even when the boat is moving

Call	FP7 2 nd
Topic	SME/LBS
Grant	0.48 €m
Budget	0.67 €m
Galileo	×
EGNOS	✓
EDAS	×
Start	01/01/2010
Duration	18 months
Leader	BeTomorrow

Results

- The LS4P system is endorsed by the official timekeeper of the London Olympic Games
- It will be tested in real conditions for a two-months period, during the Skandia Sail for Gold Regatta, 9th - 14th August 2010 at the Weymouth and Portland National Sailing Academy (UK).
- The English Olympic sailing team is committed to train with LS4P prototype.



ANNEX



QUICK-START GUIDE

New funding opportunities in the European GNSS programmes



Introduction

Summary

- On July 20th 2010 the EU launched a series of Calls for Proposals on **satellite navigation** in the **FP7** programme
- emphasis is on mature and commercially viable research – with an immediate impact on the market
- EU is open to innovative ideas from the market and welcomes proposals from small companies and newcomers to FP
- The programme stimulates the EU GNSS programmes Galileo and EGNOS
- GSA will be responsible for most of the management activities (under powers delegated by the European Commission)

Key facts

- 8 topics are currently open
- €30.5 mln of funding is currently available
- Deadlines:
 - SME stage-1: October 5th
 - SME stage-2: January 13th
 - All other topics: December 16th
- Tentative timing
 - Evaluation feedback: end of February 2011
 - Project start: end of April 2011
- Information event ‘Growing Galileo’ on September 22nd in Brussels
- 2-stage evaluation for “SME” topic (€10mln), single stage for all other topics
- Funding level for RTD activities:
 - 60% for SME and R&D institutes
 - 40% for large companies
- Classified proposals can be accepted



Process after submitting a proposal

- In case you participate in the 2-stage process, it will be evaluated by independent experts and you will receive feedback and possibly an invitation for the 2nd stage by end of October
- Your final proposal (all cases) will be evaluated and ranked by independent experts, you will receive feedback on this by the end of February 2011
- Based on the evaluations, GSA and Commission will draw up a list of selected projects up to the available funding and a reserve list
- Negotiations with successful candidates will start soon after the evaluations and cover technical and legal/financial issues. In case selected consortia drop out, the reserve list may be used
- As soon as negotiations are completed and the necessary paperwork is received, we will sign a grant agreement with each consortium. Project activities are expected to start as from **April 2011**

Basic rules for FP7 grants

Collaborative Projects

- Co-funded
- Need at least 3 partners from 3 different EU or Associated countries
- New IPR belongs to consortium and can be exploited
- Main project focus on RTD activities

General

- Not a procurement but a grant
- Large flexibility for industry and research community to propose innovative ideas
- Evaluation of proposals driven by independent experts
- Large up-front payment (pre-financing)
- Interim and final payments based on reimbursement rate of eligible costs

Coordination and Support Actions – Supporting Type

- 100% funded
- Need at least 3 partners from 3 different EU or Associated countries
- Aimed at coordinating research activities and policies
- No RTD activities

