

Space research v H2020

... a projektové možnosti pro členy SDT



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Ondřej Mirovský, TC AV ČR, s využitím podkladů DG ENTR

Nový rozpočet EU (MFF) a SPACE 2014-2020

~ 12.000 M€

~ 3.800 M€



~ 1.400 M€



~ 6.300 M€



Příprava a kontext SPACE v H2020

- logická návaznost na FP7
- EC vedla několik veřejných debat k obsahu WP SPACE v H2020 (Space Technology Workshop – leden 2013, Brusel; Space Science and Exploration Workshop, únor 2013, Madrid)
- ČS EU zapojeny do přípravy skrze konzultace v rámci „stínových výborů“ – nominování delegáti a pozic MŠMT
- priority ČR reflektovány, nabídka je velmi široká, nově SPACE V H2020 bez COPERNICUS/GMES tzn. více prostoru pro „standartní“ projekty + nově GALILEO/EGNOS

Obsah výzvy Space H2020

HORIZON 2020





Work Programme SPACE v H2020

WP SPACE publikován 11. 12. 2013

<http://ec.europa.eu/research/participants/portal>

Dvouletý WP pro 2014 a 2015

2015 nyní "indikativní" – finální rozhodnutí v roce 2014

Termín: **26. březen 2014** + konec listopadu (předběžně) 2014

Galileo/EGNOS 2014 – **4. duben. 2014**

4 základní priority WP SPACE

1. Enhance **competitiveness, non-dependence, and innovation** of EU space sector
 2. Enable advances in **space technologies**
 3. Increase **exploitation of space data**
 4. Enable participation in **international space partnerships**
-

- Satellite navigation
 - Earth observation
 - Protection of European space assets
 - Competitiveness
 - SME instrument
 - Other actions
-
- 2014 – 38 mil pro SatNav (Galileo)

téma je implementováno přímo GSA včetně managementu projektů a specifického poradenství

Priority výzev v H2020 (do r. 2020)

- podpora využívání aplikací
 - zajištění bezpečného využívání služeb (v rámci PRS)
 - příprava budoucí infrastruktury

 - Financování v H2020 je komplementární k vlastnímu rozpočtu pro EGNSS
 - Globální trh je odhadován na 240 miliardy EUR v roce 2020
-

Galileo 1 - EGNSS applications

Galileo 2 - SME based EGNSS applications;

Galileo 3 - Releasing the potential of EGNSS applications through international cooperation;

- Main aim is to ensure that Galileo is going to be used in the future...
- EGNSS offers various possibilities for the development of new space enabled applications based on continuous, real-time, reliable, accurate and globally available position, velocity and time.

The objective of all these 3 topics is to develop new and innovative GNSS-based applications.



Galileo 1 - EGNSS applications

15-20
M€

Témata:

1. Exploitation **of synergies** with other space-based services and systems in order to enable multi-use character of EGNOS and Galileo-enabled applications in all market segments,
2. Exploitation of the distinguishing features of EGNOS and Galileo signals and operational advantages in **downstream applications**,
3. Preparation for the use of **early services**, ensuring a greater precision and availability of signals,
4. Implementation of pilot projects for further development of EGNSS based applications,
5. Standardisation, certification, legal and societal acceptance, which will foster EGNSS adoption.

- **Maximalizovat potenciál EGNSS, synergie s dalšími GNSS, vnímat potřeby uživatelů, společenské přínosy, možnost komercializace!**
- **Mít zpracovaný business plán !**
- **1,5 - 4 mil. projekt**

SMEs based applications:

- LBS (Location based services) pro masové využívání – včetně studií proveditelnosti a testování trhu
 - široký záběr od vývoje, adaptace či integrace nového sw, hw, služeb či dat
 - důraz na „průlomová“ řešení s potenciálem komerčního využití
- SMEs povedou konsorcia!
 - mít zpracovaný business plán !
 - 0,5-1mil projekt

5-10 M€

Galileo 3

Releasing the potential of EGNSS applications through international cooperation

- posílení mezinárodní dimenze Galilea
- nové aplikace, či adaptace stávajících aplikací pro řešení problémů mimo EU,
- synergické aplikace (Galileo ale primární technologií)
- spolupráce s třetími zeměmi k vývoji aplikací pro lokální využití
- zacílení na oblasti s tržním potenciálem pro EU
- 0,5 -1,5 mil. projekt

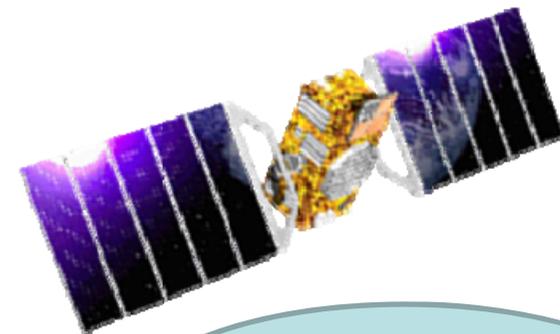
5-8 M€

Galileo 4

Galileo 4 - EGNSS awareness raising, capacity building and/or promotion activities in and outside of EU

- Awareness raising – knowledge and visibility of Galileo and EGNOS
- Capacity building – ability to benefit from services offered by Galileo and EGNOS
- Promotion activities – actions aims at promoting the use of innovative GNSS applications

- *The overall objective of this action is to use various means to promote the use of Galileo and EGNOS inside and outside of the EU.*



5-10M€



Research and Development activities related to Galileo Public Regulated Service (PRS) – other actions 2014

The Galileo **Public Regulated Service** or 'PRS' is an encrypted navigation service designed to be more resistant to jamming, involuntary interference and spoofing. It is similar to other Galileo services, but with some important differences:

- Ensures **continuity of service** to authorised users when access to other navigation services is denied.
- In cases of malicious interference, the PRS increases the likelihood of **continuous availability** of the Signal-in-Space.
- Provides an **authenticated position - velocity - timing service**

Procurement topics:

1. Development of enabling technologies for PRS
2. Enabling the development of low-end PRS receivers

The overall objective of these procurements is to enable space-related technologies and the demonstrators for PRS applications.

20 M€
Procurement
GSA

Galileo applications 2015

Galileo 1 - EGNSS applications

10-15M€

Galileo 2 - SME based EGNSS applications

5-10M€

Galileo 3 - Releasing the potential of EGNSS applications through international

0-5M€

2015 indicative

GNSS Evolution: R&D for enhanced mission and services

- R+D to achieve the best performance from the EGNSS infrastructure and to reap the full benefits of the initial services (2014-2020)
 - ★ Prospective research in advanced GNSS mission concepts
 - ★ R&D for enhanced services
 - Ionosphere modelling and prediction
 - Commercial service performance
 - Safety of Life Service, EU-US collaboration
 - ★ R&D in GNSS signal evolution

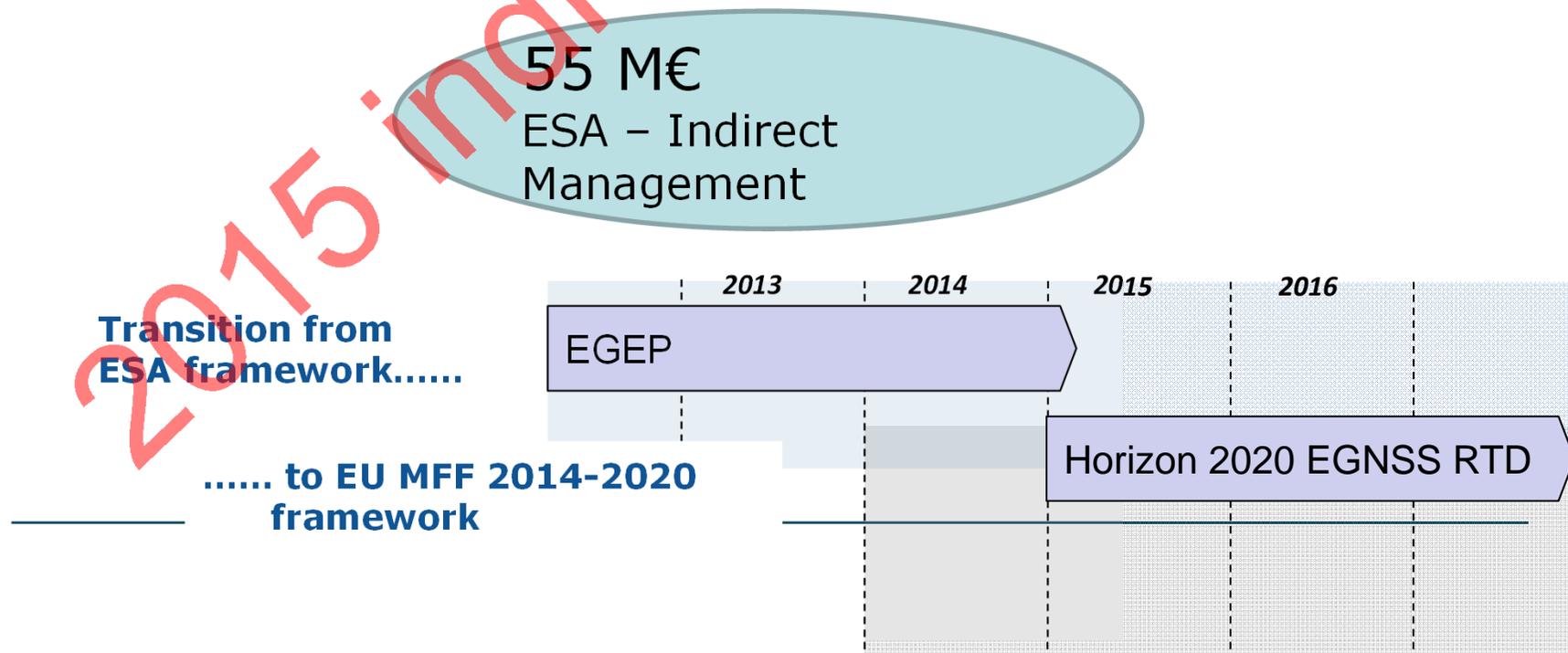
6M€
Procurement



GNSS Evolution: infrastructure-related R&D activities

Prepare for 2nd generation Galileo system

R+D to have European state-of-the-art and cost-effective technologies for the development of the next generation (>2020) Galileo system.



Jak se zapojit ?

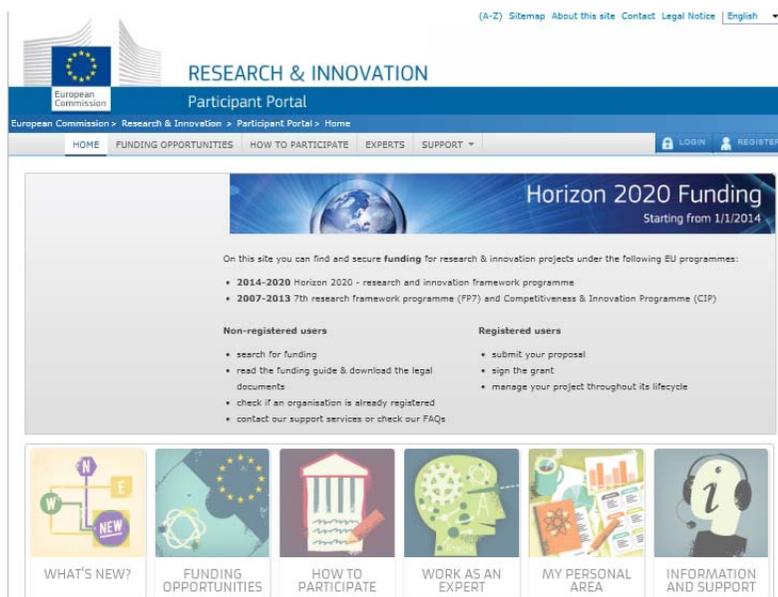
- najít partnery
 - např. skrze síť NCP COSMOS+
 - budování osobních vazeb
- poradit se s NCP a delegáty PC a **GSA**
- sepsat projekt / přispět k části projektu
- dobře zvážit strategii
- ...a mít štěstí při hodnocení!



Kde najít informace?

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

<http://www.gsa.europa.eu/r-d/h2020>



RESEARCH & INNOVATION
Participant Portal

European Commission > Research & Innovation > Participant Portal > Home

HOME FUNDING OPPORTUNITIES HOW TO PARTICIPATE EXPERTS SUPPORT

LOGIN REGISTER

Horizon 2020 Funding

Starting from 1/1/2014

On this site you can find and secure **funding** for research & innovation projects under the following EU programmes:

- 2014-2020 Horizon 2020 - research and innovation framework programme
- 2007-2013 7th research framework programme (FP7) and Competitiveness & Innovation Programme (CIP)

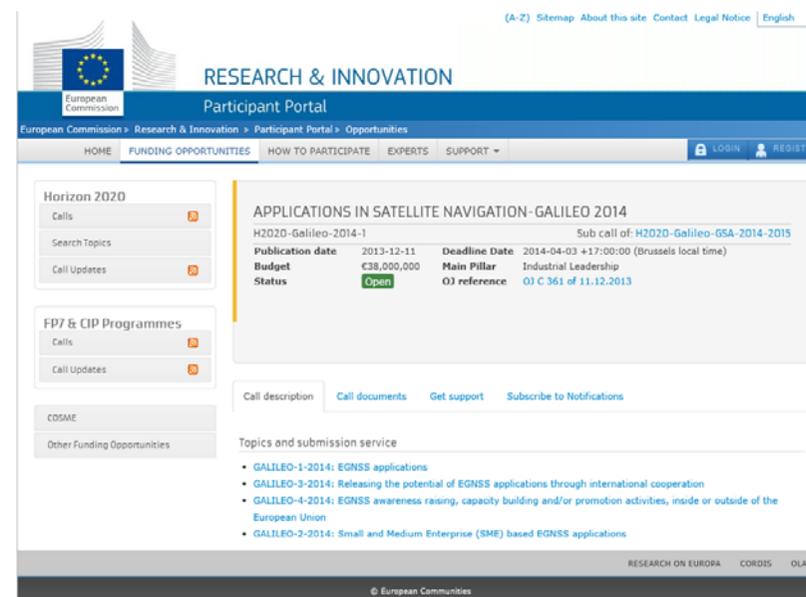
Non-registered users

- search for funding
- read the funding guide & download the legal documents
- check if an organisation is already registered
- contact our support services or check our FAQs

Registered users

- submit your proposal
- sign the grant
- manage your project throughout its lifecycle

WHAT'S NEW? FUNDING OPPORTUNITIES HOW TO PARTICIPATE WORK AS AN EXPERT MY PERSONAL AREA INFORMATION AND SUPPORT



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Horizon 2020

Calls Search Topics Call Updates

FP7 & CIP Programmes

Calls Call Updates

COSME

Other Funding Opportunities

APPLICATIONS IN SATELLITE NAVIGATION-GALILEO 2014

H2020-Galileo-2014-1 Sub call of: H2020-Galileo-GSA-2014-2015

Publication date	2013-12-11	Deadline Date	2014-04-03 +17:00:00 (Brussels local time)
Budget	€38,000,000	Main Pillar	Industrial Leadership
Status	Open	OJ reference	OJ C 361 of 11.12.2013

Call description Call documents Get support Subscribe to Notifications

Topics and submission service

- GALILEO-1-2014: EGNSS applications
- GALILEO-3-2014: Releasing the potential of EGNSS applications through international cooperation
- GALILEO-4-2014: EGNSS awareness raising, capacity building and/or promotion activities, inside or outside of the European Union
- GALILEO-2-2014: Small and Medium Enterprise (SME) based EGNSS applications

RESEARCH ON EUROPA CORDIS DLAF

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Děkuji za pozornost!

724 833 286
mirovsky@tc.cz
www.tc.cz