REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

European Commission

Obzorje 2020 - Vesolje

Dr. Ivan Skubic

Informativni dan - Obzorje 2020
Gospodarska zbornica Slovenije, 13.-14. januar 2014

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OBZORJE 2020

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I. ODLIČNA ZNANOST

1. Evropski raziskovalni svet (ERC)
2. Prihodnje in nastajajoče tehnologije (FET)
3. Ukrepi Marie Curie za razvoj spretnosti, usposabljanje in poklicni razvoj
4. Evropske raziskovalne infrastrukture

II. VODILNI POLOŽAJ V INDUSTRIJI

1. Vodilni položaj na področju ključnih podpornih in industrijskih tehnologij (LEIT)
   - (i) IKT (vključno z mikro in nano elektroniko in fotoniko)
   - (ii) Nanotehnologije, napredni materiali, biotehnologija, sodobna proizvodnja & predelava
   - **(iii) Vesolje**
2. Dostop do tveganega kapitala
3. Inovacije v MSP

III. DRUŽBENI IZZIVI

1. Zdravje, demografske spremembe in dobro počutje
2. Zanesljiva preskrba s hrano, trajnostno kmetijstvo, morsko in pomorsko raziskovanje ter biogospodarstvo
3. Zanesljiva, čista in učinkovita energija
4. Pametni, zeleni in integrirani prevoz
5. Podnebni ukrepi, učinkovita raba virov in surovine
6. Evropa v spreminjajočem se svetu - vključujoče, inovativne in odsevne družbe
7. Varne družbe - varovanje svobode in varnosti Evrope in njenih državljanov

OSTALO

1. Razširjanje odličnosti in širjenje udeležbe
2. Znanosti z in za družbo
3. EURATOM
4. Skupno raziskovalno središče (JRC)
5. Evropski inštitut za inovacije in tehnologijo (EIT)

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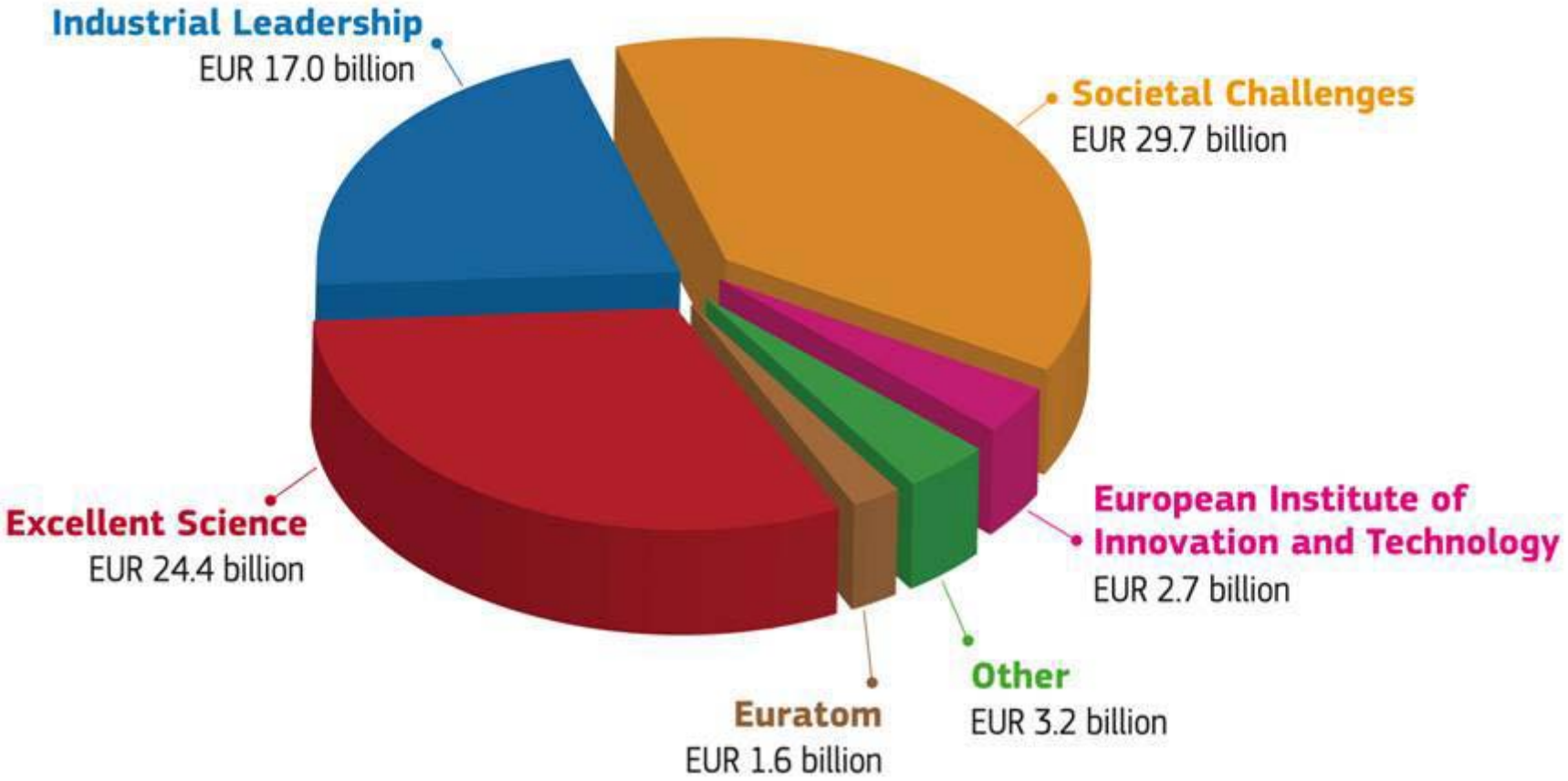
HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)



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Evropski vesoljski programi 2014 - 2020

~ 12 Mrd €

~ 1.4 Mrd €

GALILEO EGNOS
Navigation solutions powered by Europe

~ 6.3 Mrd €

opernicus
The European Earth Observation Programme

~ 3.8 Mrd €

Novo: Zaščita evropskih vesoljskih infrastruktur **„Space Surveillance and Tracking system (SST)“**

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Obzorje 2020 - Vesolje

1. Osnovni podatki o Obzorju 2020 – Vesolje in delovnem programu 2014 & 2015:
http://www.mizs.gov.si/si/obzorje2020

Objava razpisa: **11. december 2013**
Roki za prijavo za 2014: **26. marec 2014**, **3. april 2014**
Razpis za leto 2015 je indikativen (končna odločitev o vsebini v 2014)
Prvi možni datum za sklenitev pogodb: November 2014 (bolj verjetno 1.1.2015)

2. Oblike financiranja:

RIA: Research and Innovation Action (100%), **TRLs 3-6**
- 25% enotna stopnja za indirektne stroške = 125%

IA: Innovation Action (70%)
- 25% enotna stopnja za indirektne stroške 70% od (100%+25%) = 87.5%, **TRLs 5-8**
- Izjema: Neprofitne organizacije: 100% + 25% = 125%

CSA: Coordination and Support Action (100%)
- 25% enotna stopnja za indirektne stroške = 125% (izjeme! – npr. podpogodb.)

SME: SME Instrument [samo za „SME“] (RIA or IA, odvisno od vsebine)

PP: Public procurement

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Obzorje 2020 - Vesolje

3. Uvedba novih oblik delovanja:

PSA: Programme Support Activity (strateška zasnova za delovanje SRC)
SRC: Strategic Research Clusters (izhaja iz PSA, večji in dolgoročnejši projekti)
ESA: upravičena do sodelovanja, kjer je to posebej navedeno

4. Dopolnilni dokumenti k programskemu dokumentu:

Evropska komisija je objavila še dodatne podporne dokumente k programskemu dokumentu za vesolje:
http://ec.europa.eu/enterprise/policies/space/research/
(vodila za SRC: COMPET 3 – 2014, COMPET 4 – 2014, podrobnejše informacije o „Critical Space Technologies for European Strategic Non-depenence…“, vodila za predlagatelje projektov za „Earth Observation“ področje (EO 2014).

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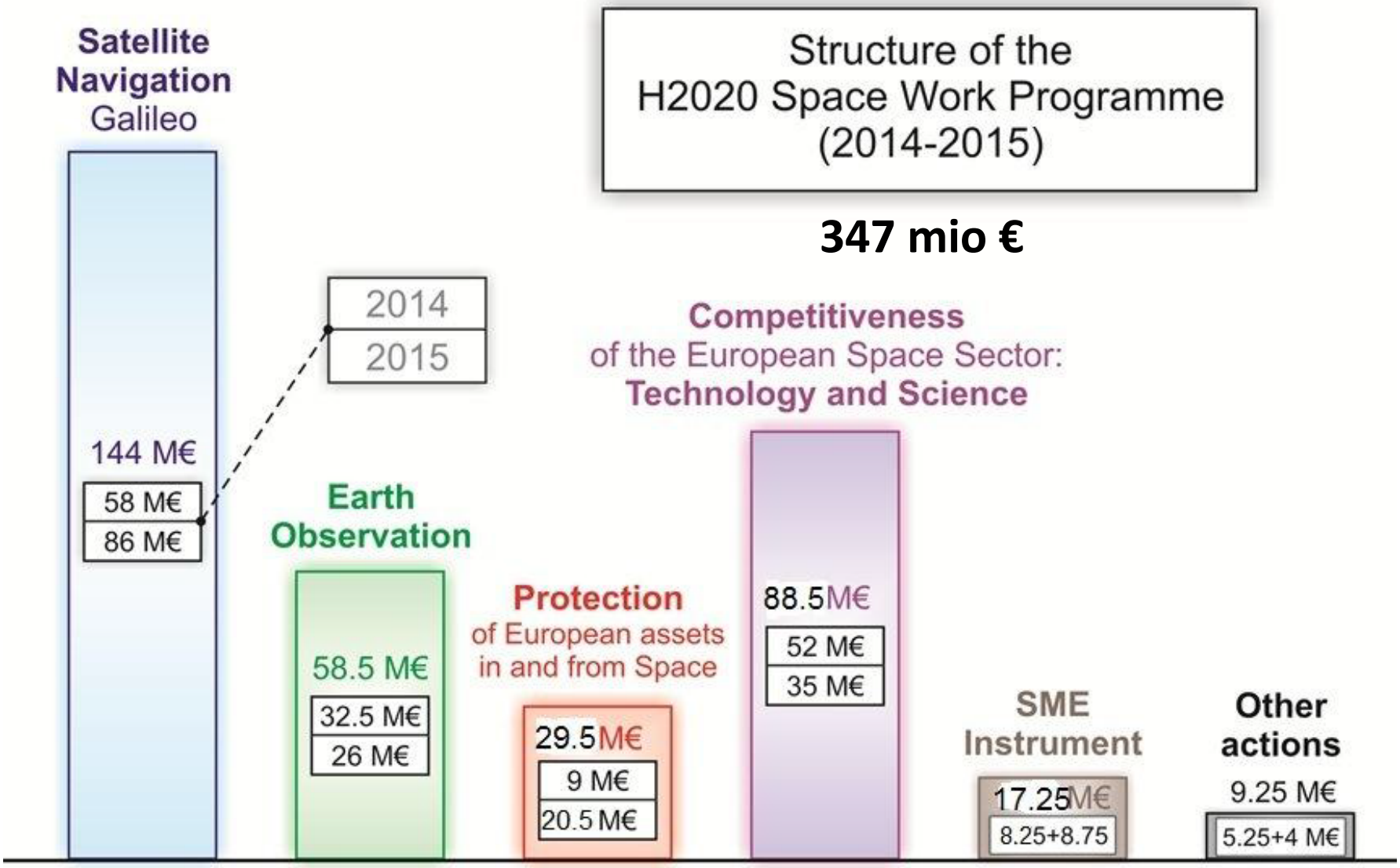
Struktura programa Vesolje



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European Commission

Satelitski navigacijski sistem „Galileo“

2014 – 2015*

* Podatki za leto 2015 so indikativni

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GALILEO

European Commission

European Global Navigation Satellite System (EGNSS)

H2020
Space research 2014&2015
144 Mio €

Upstream Technology Development

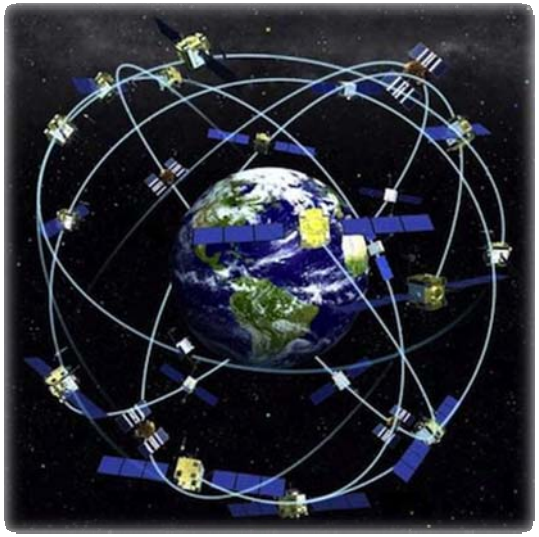
RTD for enhanced Missions & services

Calls

Galileo Applications

EGNSS awareness raising

R+D for Public Regulated Service



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European Commission

Galileo applications - 2014

Galileo 1 - EGNSS applications — *15-20 Mio €, 1.5-4 Mio/projekt*

Galileo 2 - SME based EGNSS applications — *5-10 Mio €, 0.5-1 Mio/projekt*

Galileo 3 - Releasing the potential of EGNSS applications through international cooperation — *5-8 Mio €, 0.5-1 Mio/projekt*

- The 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.

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European Commission

Galileo 2015*

Galileo 1 - EGNSS applications — *10-15 Mio €*

Galileo 2 - SME based EGNSS applications — *5-10 Mio €*

Galileo 3 - Releasing the potential of EGNSS applications through international cooperation — *0-5 Mio €*

Activity 1: GNSS Evolution, Mission and Services related R&D activities — *6 Mio € Javno naročilo*

Activity 2: GNSS evolution, infrastructure-related R&D activities — *55 Mio € (vodi ESA)*

* podatki za 2015 so indikativni

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European Commission

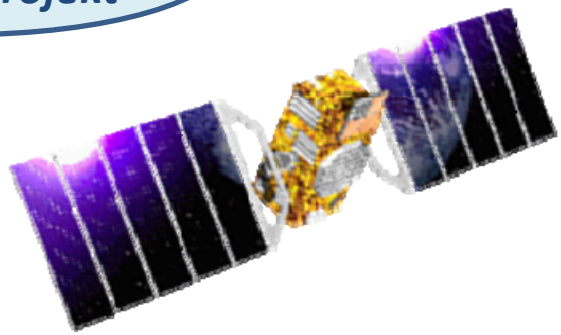
Galileo applications - 2014

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

5-10 Mio €
1-2 Mio/projekt

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.



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European Commission

Activity 1 (2014): Developments for a Galileo Public Regulated Service (PRS) 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 Mio €
Javna naročila
(agencija GSA)

Call „Applications in Satelite Navigation – Galileo“ – 2014 & 2015

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
GALILEO 1	IA	**EGNSS applications**	2014 2015**	15-20 10-15	**3.4.2014** 4.2.2015
GALILEO 2	IA	**Small and Medium Enterprise (SME) based EGNSS applications (*)**	2014 2015**	5-10 5-10	**3.4.2014** 4.2.2015
GALILEO 3	IA	**Releasing the potential of EGNSS applications through international cooperation**	2014 2015**	5-8 0-5	**3.4.2014** 4.2.2015
GALILEO 4	CSA	**EGNSS awareness raising, capacity building and/or promotion activities, inside or outside of the European Union**	2014	5-10	**3.4.2014**

(*) za GALILEO 2 mora biti koordinator konzorcija MSP (Malo ali srednje podjetje)
(**) podatki za leto 2015 so indikativni

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European Commission

Opazovanje zemlje „Copernicus“

2014 – 2015*

* Podatki za leto 2015 so indikativni

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COPERNICUS

European Commission

The European Earth Observation Programme (EO)

H2020
Space research 2014&2015
58,5 Mio €

Other actions 2014 →

Transition towards Copernicus (MACC II, MyOcean 2)

Call 2014

EO 1: New ideas for Earth-relevant space applications

EO 2: Climate Change relevant space based data reprocessing and calibration

EO 3: Observation capacity mapping in the context of Atmospheric and Climate change monitoring

Call 2015*

EO 1: Bringing EO applications to the market

EO 2: Stimulating wider research use of Copernicus Sentinel data

EO 3: Technology developments for competitive imaging from space

* podatki za 2015 so indikativni

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European Commission

EO 1 - 2014

New ideas for Earth-relevant space applications

Scientific exploitation of existing and forthcoming European space infrastructure needs to be enhanced, by stimulating the emergence of novel ideas on what can be observed from space. Research to promote such new ideas will ensure Europe's leadership in space-enabled applications in the future. Copernicus data are expected to provide improved data quality, coverage and revisit times, and increase the value of Earth Observation data for scientific work and future emerging applications.

- ✓ **Development of new / emerging uses for Earth-relevant space-based data**
- ✓ **Could include a wide variety of Earth-relevant space-based data (e.g. remote-sensing data, gravity data, magnetic data, GNSS signals)**

10 Mio €

2.5 Mio € projekt

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European Commission

EO 2 (2014)

Climate Change relevant space-based Data reprocessing and calibration

The data from past remote sensing missions available either from European and non-European missions, must be made accessible in a way to establish seamless time series of similar observations, contributing to the generation of Climate Data Records across sensors and technologies over two decades and more.

5,5 Mio €

EO 3 (2014)

Observation capacity mapping in the context of Atmospheric and Climate change monitoring

Research is needed to assess gaps in remote observation availability and suitable approaches for defining virtual observation constellations. It should include mapping of ground based networks, airborne, balloons and sub-orbital platforms as well as space based sensors. Appropriate calibration and validation of data to be assessed… Mobilisation of key players across Europe and globally, best practicess and consensus on the strategies proposed.

6 Mio €

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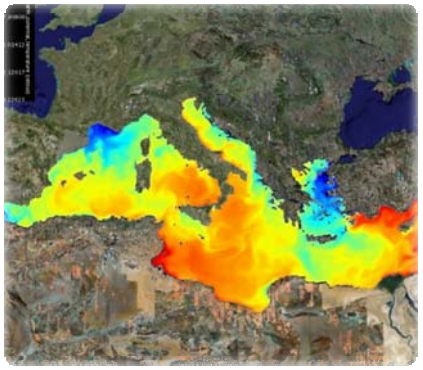
European Commission

Activity 5 (2014): Transition towards Copernicus

Program Obzorje 2020 Vesolje zagotavlja kontinuiteto dela na področju monitoringa atmosfere (FP7 - MACC II) in morja (FP7 – MyOcean2). Po sprejetju EU predpisa, ki ureja delovanje projekta Copernicus (2015?) bosta obe aktivnosti financirani neposredno iz sredstev programa Copernicus.

11 Mio €



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European Commission

EO 1 (2015*)

Bringing EO applications to the market

It is essential that EO products and information generation are taken out of the research environment and products are put into the market. The outcome of this innovation project should be a commercial service platform, sustained by a production process capable to deliver to the user a product which is validated and accepted as a marketable product (often highly automated proces

10 Mio €
1-2 Mio € projekt

EO 2 (2015*)

Stimulating wider research use of Copernicus Sentinel Data

Sentinel data streams are expected to amount to several terabyte per satellite orbit, thereby delivering unprecedented temporal and spatial resolution and data continuity, calling for new data handling and processing paradigms. To utilise the high scientific potential of the Sentinel data, stable and predictable access methods need to be developed.

11 Mio €
2-3 Mio € projekt

* podatki za 2015 so indikativni

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European Commission

EO 3 (2015*)

Technology developments for competitive imaging from space

Research should be undertaken to review the emerging fractionated observation system concepts. The required technology challenges as regards interfacing, formation flying, communication within the constellation or with ground stations are to be identified. Potential benefits for EO are to be examined.

5 Mio €

2,5 Mio € projekt

* podatki za 2015 so indikativni

Call „Earth Observation“ – 2014

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
EO 1	RIA	**New ideas for Earth-relevant space applications**	2014	10	**26.3.2014**
EO 2	RIA	**Climate Change relevant space-based data reprocessing and calibration**	2014	5,5	**26.3.2014**
EO 3	RIA	**Observation capacity mapping in the context of Atmospheric and Climate change monitoring**	2014	6	**26.3.2014**

Call „Earth Observation“ – 2015*

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
EO 1	IA	**Bringing EO applications to the market**	2015*	10	27.11.2014
EO 2	RIA	**Stimulating wider research use of Copernicus Sentinel Data**	2015*	11	27.11.2014
EO 3	RIA	**Technology developments for competitive imaging from space**	2015*	5	27.11.2014

(*) podatki za leto 2015 so indikativni

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European Commission

Zaščita evropskih sredstev v in iz vesolja

2014 – 2015*

* Podatki za leto 2015 so indikativni

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European Commission

Protection of European assets in and from space

H2020
Space research 2014&2015
29,5 Mio €

Other actions

2014: SST: Participation of the EU Satelite Centre in the SST Service Function
2015: Space Surveillance and tracking (SST)

Call 2014

PROTEC 1: Space Weather
PROTEC 2: Access technologies and characterisation for Near Earth Objects (NEOs)

Call 2015

PROTEC 1: Passive means to reduce the impact of Space Debris

* podatki za 2015 so indikativni

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European Commission

PROTEC 1 / 2 (2014)

Space Weather

Exploratory work studying new ideas for data analysis and modelling of space weather with a view to enhancing the performance of space weather prediction

- **Focus on international aspects**

Access technologies and characterisation for Near Earth Objects

8 Mio €

2-4 Mio € projekt

Account should be taken of complementary efforts currently in progress (UN Action Team 14, ESA's SSA and other national programmes, e.g. US, RU, Japan, China).

- **Physical characterization & modelling (thermal properties, Yarkovsky drift, structure, reaction to impactor…)**
- **Investigate feasible mitigation techniques**

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European Commission

Activity 2 (2014): Participation of the EU Satcen in the SST Service Function

Objectives

- contribute to the identification of the necessary functional elements of the SST service delivery function.
- assess the type of data and interfaces which could be made available to the various users
- contribute to the design of the SST at European level but also propose improvements which could be undertaken among the SST users.

Consistent with the proposal for establishing an SST support programme (COM 2013 107)

security classification

1 Mio €
(znan upravičenec)

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PROTEC 1 (2015*)

Passive means to reduce the impact of Space Debris

To develop and test concepts and technologies needed for

- prevention measures in adding new debris
- de-orbiting solutions for satelites and launcher upper stages at the end of operational life
- protection i.e. shielding techniques from impast of small debris.

Alignment with international and European guidelines and legal requirements.

6,5 Mio €

* podatki za 2015 so indikativni

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European Commission

Activity 3 / 4 (2015*)

3. Space surveillance and tracking (SST)

- *H2020 Contribution to the funding of the SST support programme (Commission proposal (COM (2013)107 final)*

2 Mio €
(znan upravičenec)

4. Improving the Performances of the SST at European Level

- *action plan (including scope and priorities) for future EU research and innovation*
- *actions to upgrade and develop new assets which form the SST at European Level.*

Consistent with the proposal for establishing an SST support programme (COM 2013 107)

security classification

12 Mio €
(znan upravičenec)

* podatki za 2015 so indikativni

Call „Protection of European assets in and from space“ – 2014

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
PROTEC 1	RIA	**Space Weather**	2014	8 (PROTEC 1 + PROTEC 2)	**26.3.2014**
PROTEC 2	RIA	**Access technologies and characterisation for Near Earth Objects (NEOs)**	2014	8 (PROTEC 1 + PROTEC 2)	**26.3.2014**

Call „Protection of European assets in and from space“ – 2015*

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
PROTEC 1	RIA	**Passive means to reduce the impact of Space Debris**	2015*	6,5	27.11.2014

(*) podatki za leto 2015 so indikativni

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European Commission

Konkurenčnost evropskega vesoljskega sektorja

- Neodvisnost in tehnološki razvoj
- Raziskovanje vesolja in znanost

2014 – 2015*

* Podatki za leto 2015 so indikativni

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Competitiveness of the European Space Sector

European Commission

H2020
Space research 2014&2015
84,5 Mio €

Non-dependence & Technology development 56 Mio €

- ✓ Technologies for European non-dependence and competitiveness
- ✓ Independent access to space
- ✓ In-Orbit demonstration / validation (IOD / IOV)
- ✓ Bottom up space technologies at low TRL
- ✓ Launch of two Strategic Research Clusters:
  - ✓ In-space electrical propulsion and station keeping
  - ✓ Space robotic technologies

Space exploration & science 28,5 Mio €

- ✓ Space exploration – Life support; Habitat management
- ✓ Science in context:
  - ✓ European sample curation facility
  - ✓ Scientific exploitation of Mars data
  - ✓ Scientific exploitation of data
    - ✓ astrophysics, planetary and comet data
- ✓ International cooperation
  - ✓ Technology demonstrator projects for exploration
  - ✓ Space science

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European Commission

Konkurenčnost evropskega vesoljskega sektorja

Neodvisnost in tehnološki razvoj

2014 – 2015*

* Podatki za leto 2015 so indikativni

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European Commission

COMPET 1 (2014): Technologies for European non-dependence and competitiveness – Urgent Actions

1) Application Specific Integrated circuits (ASCIS) for Mixed Signal Processing (U11)
2) Advanced thermal control systems (U2)
3) Space qualification of low shock non-explosive actuators (U1)
4) Alternative to Hydrazine in Europe (U5)
5) High density (up to 1000 pins and beyond) assemblies on PCB (U17)

10 Mio €
2,5 Mio € projekt

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European Commission

COMPET 1 (2015*): Technologies for European non-dependence and competitiveness – Urgent actions

1) Advanced materials and material technology for combustion chambers (U4)
2) Fiber Optic gyro (FOG) based Inertial Measurement Unit (U6)
3) Power amplification: Travelling Wave Tube (TWT) materials (U7)
4) Passive components (U13)
5) Active discrete components (U14)

10 Mio €

* podatki za 2015 so indikativni

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COMPET 2 (2014-2015*): Independent access to space

All possible complementary technologies no overlapping with on-going launcher developments. Proposals are expected in:

- Conventional launching systems
- Innovative systems to access to Space

The objective is to develop technology for relevant optimisation of the launch propulsion systems to foster the European capabilities of accessing space.

Open size projects

8 Mio €
2014

6 Mio €
2015*

* podatki za 2015 so indikativni

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European Commission

COMPET 3 / 4 (2014): Strategic Research Clusters – Call for Programme Support Activity (PSA)

- Programme Support Activity (PSA), for the future implementation of a Strategic Research Cluster (SRC)
- **PSA**
  - **≥3 partners from ≥3 member states or associated states**
  - **open to ESA participation**
  - **PSA partners may participate in operational calls (restrictions apply)**
- **SRC:** System of operational grants connected through to a roadmap designed by a separate consortium receiving a PSA grant
- As part of the application, **PSA** presents a WP for itself and for SRC.
- During its 5-year life: identifies activities, delivers a detailed master plan, a plan for analysis and evaluation of results, a plan for the specific exploitation and potential use of SRC outputs, risk assessment and contingency analysis of the SRC
- COM remains responsible for calls for operational SRC grants to be included in future WP of Horizon 2020

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European Commission

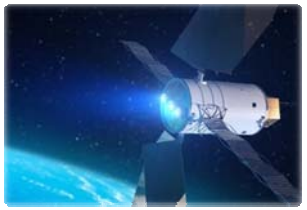
COMPET 3 (2014): PSA for In-Space electrical propulsion and station keeping

4 Mio €
1 PSA

Major advances in electric propulsion to guarantee the leadership of European capabilities at world level within the 2020-2030 timeframe in:

- Incremental advances in the development of thrusters (with an in-orbit validation not later than 2023)
- Promoting possible disruptive RTD in the field of in-space electrical propulsion

Open for ESA participation



COMPET 4 (2014): PSA for Space Robotics Technologies

4 Mio €
1 PSA

- To enable major advances in space robotic technologies for future on-orbit satellite servicing.
- **<u>The final objective</u>** of the SRC in H2020 is to achieve an in-orbit demonstration of an autonomous system (at a significant scale) for on-orbit satellite servicing (not later than 2023)

Open for ESA participation

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COMPET 5 (2014): In-Orbit demonstration/Validation (IOD/IOV)

The objective of this topic is to motivate studies to help define the envelope and the requirements for the implementation of affordable missions of IOD/IOV (in combination with the launching system to be selected) within the Horizon 2020.

2 Mio €
0.3-05 Mio € projekt

COMPET 6 (2014-2015*): Bottom-up space technologies at low TRL

Spinning-in of new Enabling Technologies (e.g. KETs) with TRL 1-3 to space systems up to TRL 4-5.

2014:
1) High-resolution imagery
2) Radiation-hardened instrument components
3) In-situ sensors/instruments of physical parameters
4) Advanced satellite communications techniques

5 Mio €
1 Mio € projekt

2015*:
1) Energy storage
2) Energy production
3) Materials and structures
4) Wireless power transmission
5) Thermal management systems

5 Mio €
1 Mio € projekt

* podatki za 2015 so indikativni

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Konkurenčnost evropskega vesoljskega sektorja

Raziskovanje vesolja in znanost

2014 – 2015*

* Podatki za leto 2015 so indikativni

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COMPET 7 (2014): Space Exploration – Life Support

This call focus on closed loop regenerative support system technologies. Synergies between space and non-space sectors actors is expected. Participation from SMEs and academia is encouraged.

Open for ESA participation

8 Mio €

2-4 Mio € projekt

COMPET 8 (2014): Science in context: sample curation facility and scientific exploitation of data from Mars missions

A) Roadmap for the implementation of a European extra-terrestrial sample curation facility (Moon, Mars, Asteroids)

B) Development of tools for the exploitation Mars data for scientific research, and analysis in preparation of the ExoMars missions (2016 / 2018)

4 Mio €

2 Mio € projekt

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COMPET 4 (2015*): Space Exploration – Habitat management

ISS is the current cornerstone of European activities in human spaceflight. Its scientific and technological utilisation should be strengthened as a platform for the preparation of the next steps in human exploration. Life support is one of technological priorities for Europe (microbial quality control of indoor environment in space). Synergies between space and non-space sectors actors are expected. Participation from SMEs and academia is encouraged.

6 Mio €
3 Mio € projekt

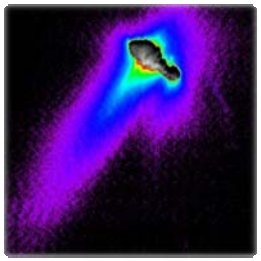
Open for ESA participation

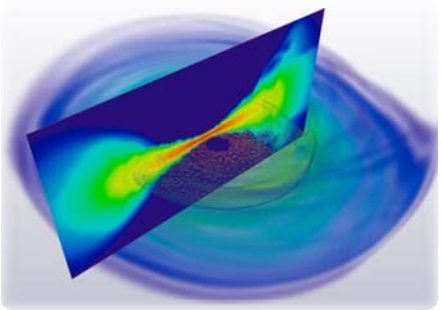
COMPET 5 (2015*): Scientific exploitation of astrophysics, planetary and comets data

Supporting space astronomy observation proposals in Astrophysics and comets data.

4 Mio €
2 Mio € projekt

Objective: the development of **tools for advanced processing** and the generation of **high-level data products**. These will be made available through appropriate archives (ESA, NASA, JAXA…)





* podatki za 2015 so indikativni

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COMPET 9 (2014): Technology "demonstrator" projects for exploration

Demonstrator projects would target underpinning enabling technologies for space exploration (e.g. robotics, energy, propulsion or life support).

3 Mio €
1 Mio € projekt

COMPET 6 (2015*): International Cooperation in space science

Europe should continue to play a leading role in planetary science shaping the research in the field, including the elaboration of Planetary protection guidelines.

1.5 Mio €
0.75 Mio € projekt

* podatki za 2015 so indikativni

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COMPET 10 – 2014: Outreach through education

One of the main obstacles for the development and sustainability of the European space industrial fabric (and the delivery of cutting-edge scientific achievements) is the lack of scientists, engineers and technicians with specific interest on the area of space research and development.

4 Mio €

COMPET 11 – 2014: Transnational and international cooperation amnog NCPs

Support will be given to a network of formally nominated NCPs in the area of Space.

Call „Competitiveness of the European Space Sector: technology and Science“ – 2014

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
COMPET 1	RIA	**Technologies for European non-dependence and competitiveness**	2014	10	**26.3.2014**
COMPET 2	RIA	**Independent access to space**	2014	8	**26.3.2014**
COMPET 3 (**)	CSA(*)	**In-Space electrical propulsion and station keeping**	2014	4	**26.3.2014**
COMPET 4 (**)	CSA(*)	**Space Robotics Technologies**	2014	4	**26.3.2014**
COMPET 5	CSA	**In-Orbit demonstration/Validation (IOD/IOV)**	2014	2	**26.3.2014**
COMPET 6	RIA	**Bottom-up space technologies at low TRL**	2014	5	**26.3.2014**
COMPET 7 (**)	RIA	**Space exploration – Life support**	2014	8	**26.3.2014**

(*) one action (PSA) to be selected for the future implementation of SRC

(**) ESA is eligible to participate in consortia of proposals submitted under this call

Call „Competitiveness of the European Space Sector: technology and Science“ – 2014 (cont.)

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
COMPET 8	RIA	**Science in context: sample curation facility and scientific exploration of data from Mars missions**	2014	4	**26.3.2014**
COMPET 9	CSA	**Technology „demonstrator projects“ for exploration**	2014	3	**26.3.2014**
COMPET 10	CSA	**Outreach through education**	2014	4 (COMPET 10 + COMPET 11)	**26.3.2014**
COMPET 11	CSA	**Transnational and international cooperation among NCPs**	2014	4 (COMPET 10 + COMPET 11)	**26.3.2014**

Call „Competitiveness of the European Space Sector: technology and Science“ – 2015**

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave
COMPET 1	RIA	**Technologies for European non-dependence and competitiveness**	2015**	10	27.11.2014
COMPET 2	RIA	**Independent access to space**	2015**	6	27.11.2014
COMPET 3	RIA	**Bottom-up space technologies at low TRL**	2015**	7	27.11.2014
COMPET 4 (*)	RIA	**Space exploration – Habitat management**	2015**	6	27.11.2014
COMPET 5	RIA	**Scientific exploration of astrophysics, comets, and planetary data**	2015**	6	27.11.2014
COMPET 6	RIA	**International Cooperation in space science**	2015**	1,5	27.11.2014

(*) ESA is eligible to participate in consortia of proposals submitted under this call
(**) podatki za leto 2015 so indikativni

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„SME“ Instrument

2014 – 2015*

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SME INSTRUMENT

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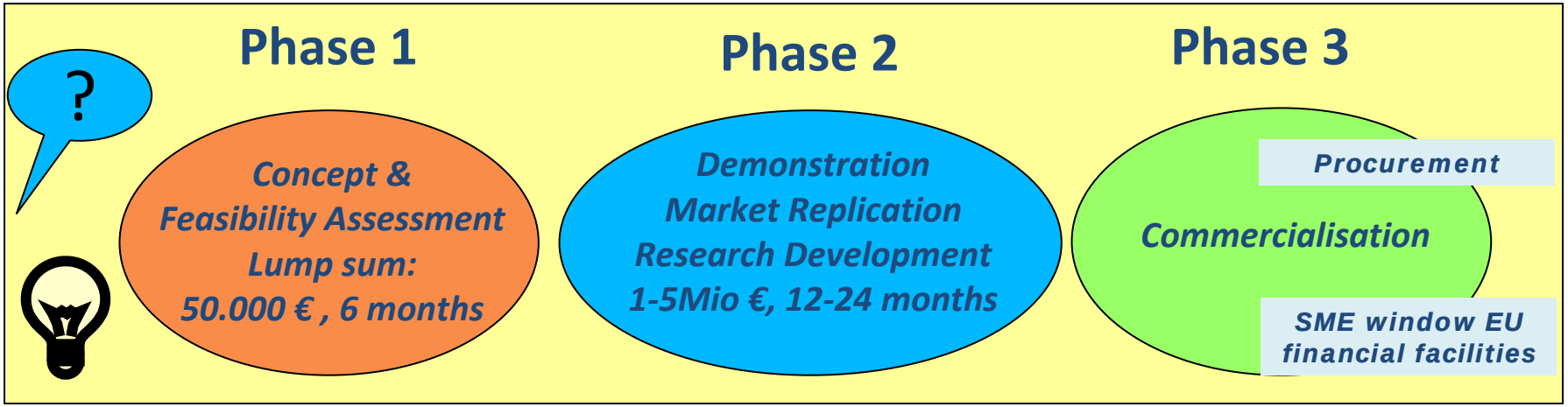

- Targeted at all types of innovative SMEs showing a strong ambition to develop, grow and internationalise
- Only SMEs allowed to apply for funding and support
- Single company support possible
- No obligation for applicants to sequentially cover all three phases; each phase open to all SMEs
- Combination of demonstration activities (testing, prototyping, …), market replication encouraging the involvement of end users or potential clients, and research

17,25 Mio €
2014&2015

Call „SME Instrument“ – 2014 & 2015

Oznaka razpisa	Shema financiranja	Tema	Leto	Okvirna Sredstva (mio EUR)	Rok prijave (*)
SME instrument	SME (RIA, IA)	**Any aspect of the Specific programme for Space**	2014	8.5	**Phase 1:** - 18.6.2014 - 24.9.2014 - 17.12.2014 **Phase 2:** - 9.10.2014 - 17.12.2014
SME instrument	SME (RIA, IA)	**Any aspect of the Specific programme for Space**	2015	8.75	(**) **Phase 1:** - 18.3.2015 - 17.06.2015 - 17.9.2015 - 16.12.2015 **Phase 2:** - 18.3.2015 - 17.6.2015 - 17.9.2015 - 16.12.2015

(*) Publication date: 11th Dec. 2013, opening date 1.3.2014 (Phase 1 & Phase 2)

(**) Dates are indicative

Other actions – 2014 & 2015*

Vsebina	Shema financiranja	Okvirna Sredstva (mio EUR)
Activity 1 (2014): **Developments for a Galileo Public Regulated Service (PRS)**	PP	20
Activity 2 (2014): **SST: participation of the EU Satelite Centre at the SST Service Function**	CSA, GIB	1
Activity 3 (2014): **Studies & Communication**	PP	1,5
Activity 4 (2014): **Horizon 2020 proposal evaluation, monitoring and audits (EGNS)**	EC/PP	2
Activity 5 (2014): **Transition towards Copernicus**	CSA, GIB	11
Activity 6 (2014): **Horizon 2020 proposal and proposal evaluation**	EC	2
Activity 1 (2015): **GNSS Evolution, Mission and Services related R&D activities**	PP	6
Activity 2 (2015): **GNSS evalution, infrastructure-related R&D activities**	Managed by ESA	55
Activity 3 (2015): **Space Surveillance and tracking (SST)**	RIA, GIB	2
Activity 4 (2015): **Improving the Performance of SST at the European Level**	CSA, GIB	12
Activity 5 (2015): **Studies & Communication**		1
Activity 6 (2015): **Horizon 2020 proposal evaluation, monitoring and audits (EGNS)**	EC/PP	2
Activity 7 (2015): **Horizon 2020 proposal and proposal evaluation**	EC	1

PP – Public procurement GIB – Grant to predefined beneficiary EC – Expert contracts

* Podatki za 2015 so indiktivni

Uporabne povezave

Participant Portal:
http://ec.europa.eu/research/participants/portal/desktop/en/home.html

- Razpisna dokumentacija
- Dokumenti Obzorja 2020
- Podpora
- Evalvatorji: http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html

Dodatne informacije o H2020

www.ec.europa.eu/research/horizon2020

Objavljeni osnutki delovnih programov in drugi dokumenti

http://ec.europa.eu/research/horizon2020/index_en.cfm?pg=h2020-documents

Obzorje 2020 na spletni strani MIZŠ, kjer so obvestila in domači dogodki

http://www.mizs.gov.si/si/obzorje2020

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Hvala za pozornost!

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