Informativni dan Obzorje 2020

GZS, Ljubljana

9. oktober 2015

Vodilna vloga industrije: **Vesolje**

Ivan Skubic, NCP Obzorje 2020 - Vesolje

Ministrstvo za izobraževanje, znanost in šport

Direktorat za znanost

Pregled predstavitve

- Predstavitev področja raziskav „Vesolje“
- Pregled dosedanjih rezultatov Slovenije
- Pregled delovnega programa 2016-2017
- Ostale informacije

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

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 €

European Commission

EVROPSKI VESOLJSKI PROGRAMI

GROWTH

Internal Market, Industry, Entrepreneurship and SMEs

Space

Space industry

[redacted]

EGNSS

[redacted]

Space and security

Space exploration

International aspects

European Space Expo

Your Learning Space

Space

The main aim of the EU's space policy is to use space-related technology to tackle some of the most pressing challenges today, such as fighting climate change, helping to stimulate technological innovation, and providing socio-economic benefits to citizens.

EU space programmes

Between 2014 and 2020, over EUR 12 billion will be spent on the implementation of the EU's three space programmes:

1. **Satellite navigation:** The Galileo and EGNOS programmes which provide positioning, navigation, and timing information worldwide.
2. **Earth observation:** The Copernicus programme

News

29/09/2015
LPV-200, an EGNOS Safety for Life (SoL) service, is now available to all European users

16/09/2015
New Galileo Open Service Signal-In-Space Operational Status Definition Document

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European Space Expo, Ljubljana marec 2015

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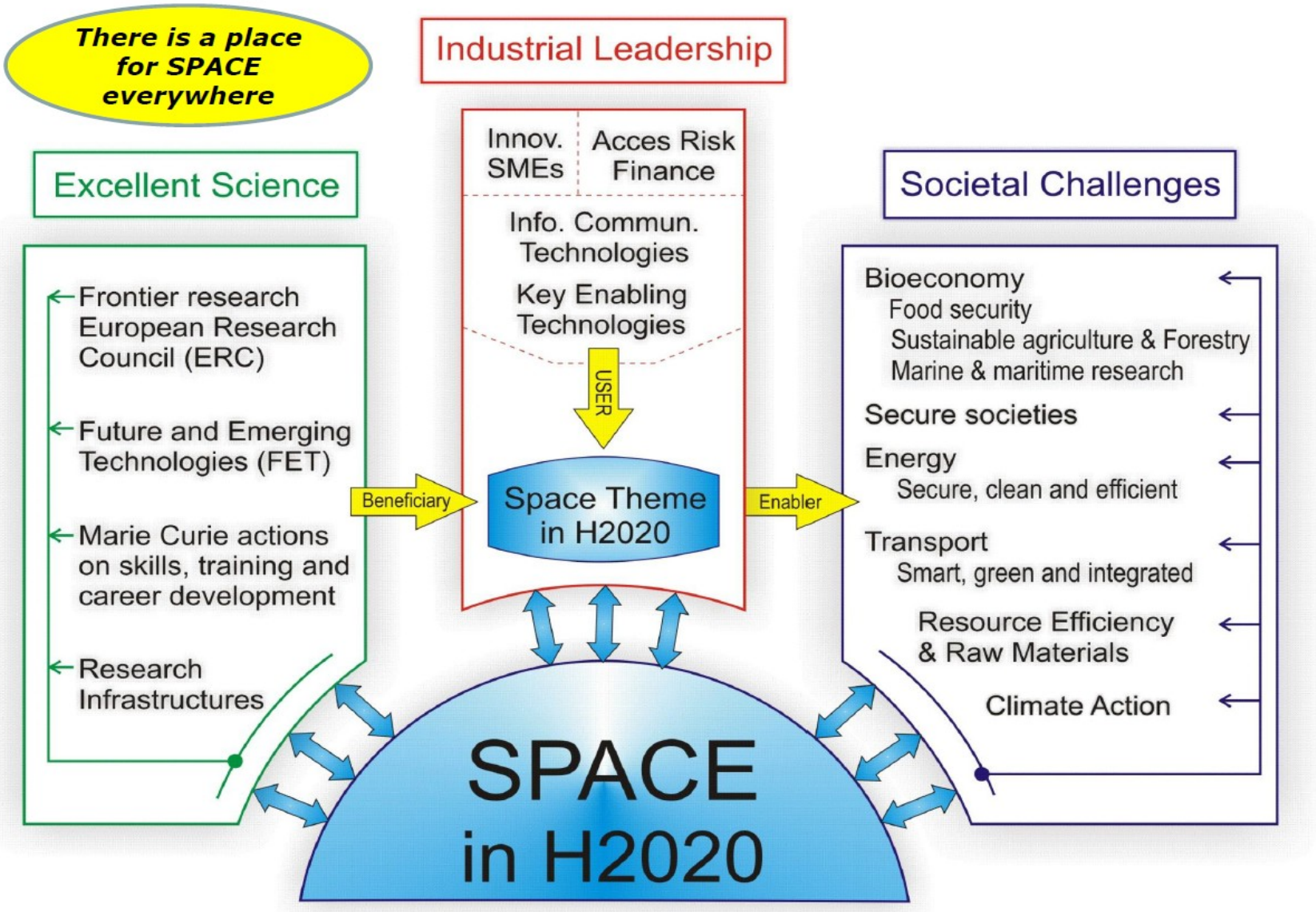
Vesolje v Obzorju 2020



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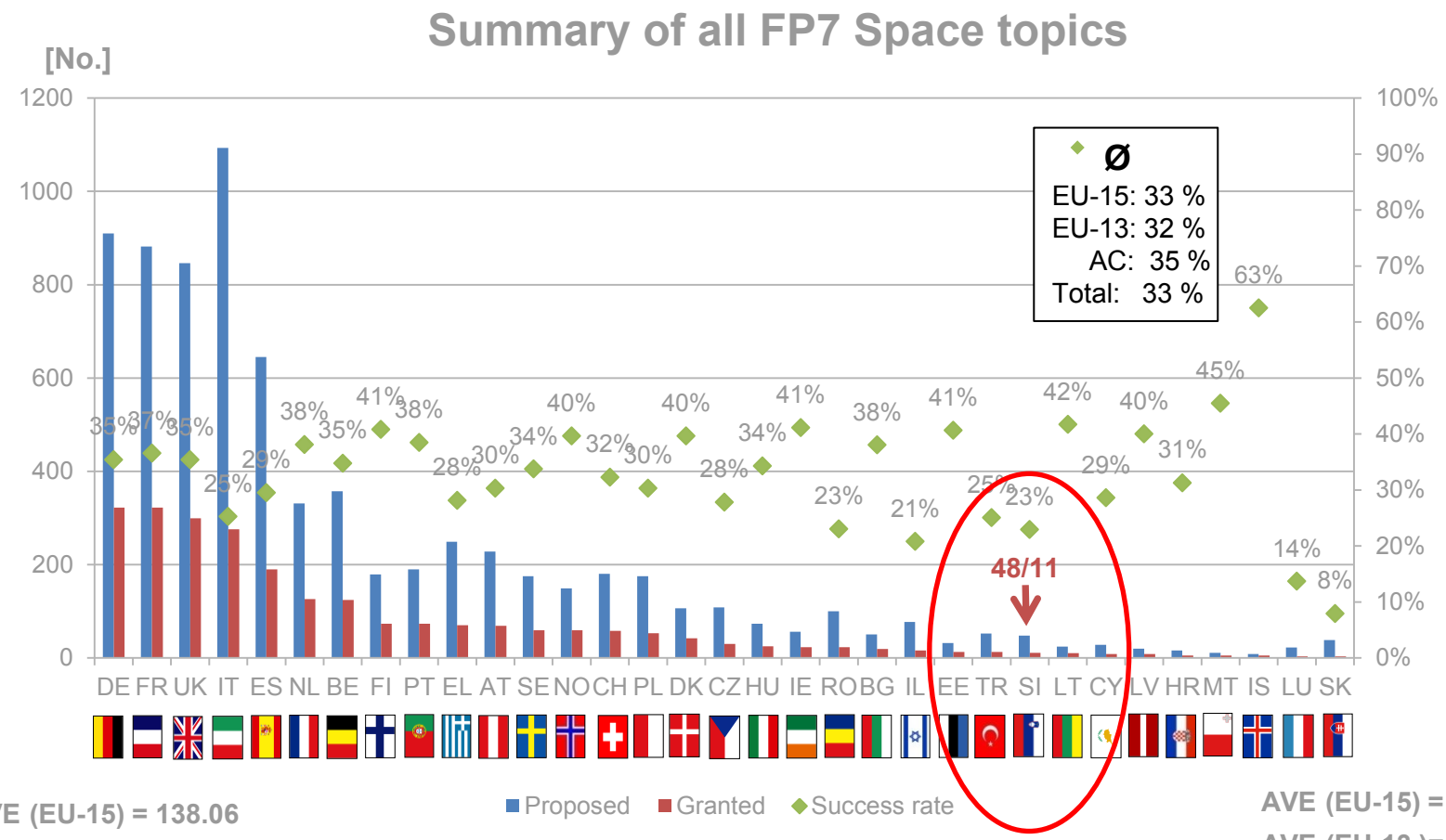
Dosedanji rezultati FP7



AVE (EU-15) = 138.06
AVE (EU-13) = 17.33
AVE (AC) = 26
AVE = 73.79

AVE (EU-15) = 33%
AVE (EU-13)= 32%
AVE (AC) =35%
AVE = 33%

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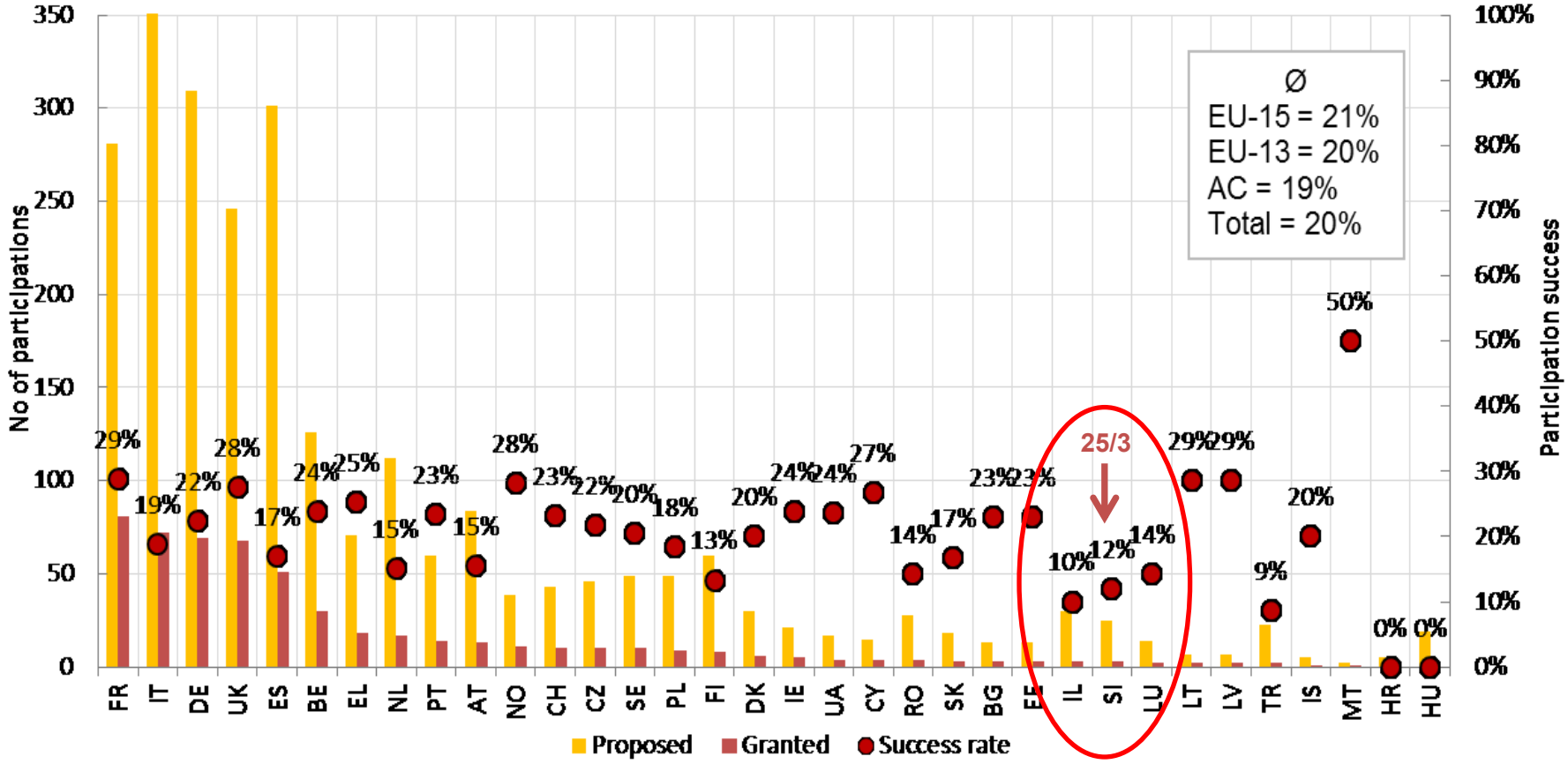
Rezultati H2020 Vesolje / 2014



Participations requested vs granted for all H2020 space topics and fully participating countries

Tekoči projekti H2020 Vesolje – REA:

About us - Activities - H2020 Space projects

2014

Earth observation (EO)	Protection of European assets in and from Space (PROTEC)	Competitiveness of European Space Technology (COMPET)
BACI (149 kB)	NEOShield-2 (96 kB)	COSMOS2020 (101 kB)
EGSIEM (105 kB)	FLARECAST (30 kB)	EDEN ISS (108 kB)
EUSTACE (104 kB)	PROGRESS (30 kB)	EPIC (96 kB)
FIDUCEO (108 kB)		EURO-CARES (108 kB)
GAIA-CLIM (110 kB)		EUSPACE-AWE (97 kB)
URBANFLUXES (40 kB)		GOTOFLY (94 kB)
		GRAIL (38 kB)
		HYPROGEO (45 kB)
		INVEST (37 kB)
		IODISPlay (100 kB)
		IRENA (96 kB)
		II (32 kB)
		(37 kB)
		(38 kB)
		PERASPERA (94 kB)
		PHySIS (38 kB)
		PLUGIN (36 kB)
		R2RAM (100 kB)
		REACT (40 kB)
		Rheform (40 kB)
		SCREEN (38 kB)
		TCLS ARM FOR SPACE (38 kB)
		TIME SCALE (94 kB)
		UPWARDS (96 kB)

Other actions:

MACC-III (127 kB), MyOcean-FO (77 kB), PASS (95 kB)

Tekoči projekti H2020 Vesolje – GSA:

http://www.gsa.europa.eu/news/25-projects-awarded-horizon-2020-funding

Tekoči projekti H2020 Vesolje SME Instrument – EASME:

https://ec.europa.eu/easme/en/sme-instrument-beneficiaries

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Obzorje 2020 Vesolje Delovni program 2016-2017

Uradno veljavni delovni program še ni objavljen (objavljen bo predvidoma do srede oktobra 2015)

Na voljo je osnutek delovnega programa:

https://ec.europa.eu/programmes/horizon2020/en/draft-work-programmes-2016-17

POZOR (podporni dokumenti k delovnemu programu!):

Poleg delovnega programa je za posamezne razpise predvidenih več podpornih (tehničnih) dokumentov, katerih osnutki so objavljeni na:

http://ec.europa.eu/growth/sectors/space/research/horizon-2020/

EU agencije, ki so vključene v izvedbo delovnega programa Obzorje 2020 - Vesolje:

Research Executive Agency (REA): http://ec.europa.eu/rea/index_en.htm

European GNSS Agency (GSA): http://www.gsa.europa.eu/

Executive Agency for SME (EASME): https://ec.europa.eu/easme/

Naloge EU agencij: Vodenje postopkov razpisov, prejemanje predlogov projektov, vodenje postopkov ocenjevanja, priprava donacijskih pogodb in podpisovanje, pregled poročanja, plačila, nadzor…

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Struktura programa raziskav vesolje 2016-2017

EGNSS
Galileo & EGNOS applications and infrastructure

Calls for proposals:
- EGNSS applications

Other actions:
- Evolution of EGNSS infrastructure, mission and services

EO
Earth Observation applications and services

Calls for proposals:
- EO downstream applications
- Evolution of Copernicus services
- EO „big data“ shift

COMPET
Competitiveness of the European Space sector (Technology and Science, incl. Space Weather)

Calls for proposals:
- Critical space technologies
- EO & SatCom technologies
- Science and Exploraton
- Space Weather
- Space Portal
- Technology Transfer

Other actions:
- ESA Engineering support
- Horizon prize on low-cost access to space

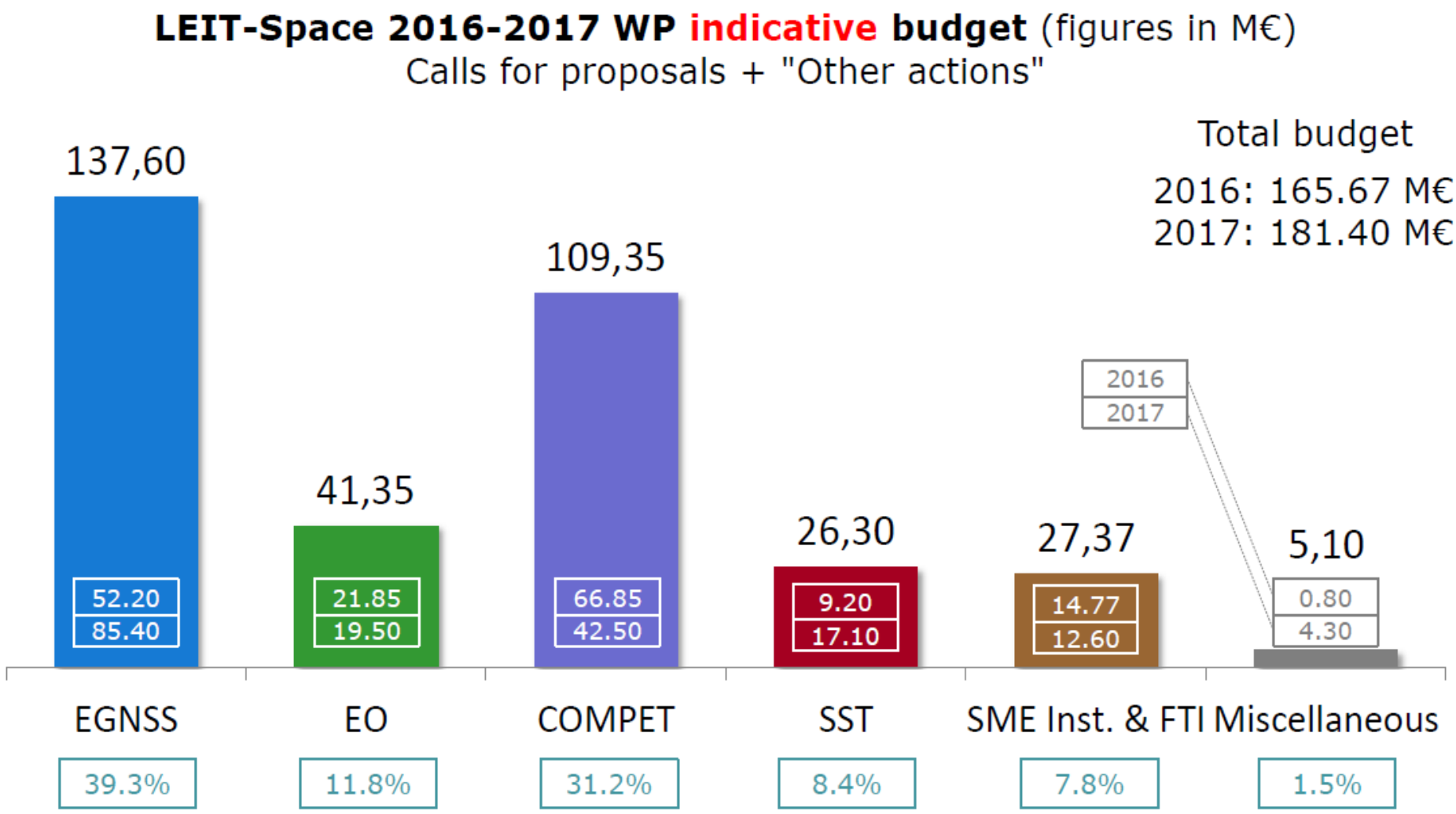
SST
Space Surveillance and Tracking support framework

Other actions:
- Contribution to the SST support framework
- Improving the performance of SST at European level

SME Instrument

Fast Track to Innovation ˝pilot˝

Razrez sredstev po sklopih programa / 2016-2017



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Koledar izvedbe delovnega programa 2016-17

Razpisi	Začetek razpisa	Zaključek razpisa
EO-2016 COMPET-2016	10. november 2015	3. marec 2016
GALILEO-2017 EO-2017 COMPET-2017	8. November 2016	1. Marec 2017

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

2016 call topics

Opazovanje zemlje/ Earth observation

Indicative budget: **21.85 M€**

Deadline: 3 March 2016

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Earth observation - Copernicus

COPERNICUS SERVICES

http://www.copernicus.eu/main/overview/

Address six main thematic areas

- Land monitoring
- Marine monitoring
- Atmosphere monitoring
- Emergency management
- Security
- Climate change

Data access

- Copernicus users can also have a direct access to satellite data

COPERNICUS SPACE COMPONENT

- Earth Observation Satellites

http://www.copernicus.eu/main/satellites

NEW

COPERNICUS brochure

http://www.copernicus.eu/main/Brochure

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Opazovanje zemlje – povezani razpisi

Blue Growth – demonstrating an ocean of opportunities (H2020-BG-2016-2017):

- BG-9-2016: An integrated Arctic observing system
- BG-12-2016: Towards an integrated Mediterranean Sea Observing System

Sustainable Food Security – resilient agri-food chains (H2020-SFS-2016-2017):

- SFS-43-2017: Earth Observation services for the monitoring of agricultural production in Africa

Climate Action, Environment, Resource Efficiency and Raw Materials – Earth Observation (H2020-SC5-2016-2017):

- SC5-18-2017 - Novel in-situ observation systems
- SC5-19-2017 - Coordination of citizens' observatories initiatives
- SC5-20-2016 - European data hub of the GEOSS information system

Earth Observation (H2020-EO-2016 and H2020-EO-2017)

- EO-1-2016 and EO-1-2017: Downstream applications
- EO-2-2016: Downstream applications for public sector users
- EO-3-2016: Evolution of Copernicus services
- EO-2-2017: EO Big Data Shift

Competitiveness of the European Space Sector: Technology and Science (H2020-COMPET-2017)

- COMPET-2-2017: Competitiveness in Earth observation mission technologies

SME Instrument (H2020-SMEInst-2016-2017), although not dedicated uniquely to Earth Observation, is particularly well suited for SMEs addressing space based applications

- SMEInst-04-2016-2017: Engaging SMEs in space research and development
- SMEInst-12-2016-2017: Boosting the potential of small businesses in the areas and priorities of Societal Challenge 5

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Opazovanje zemlje EO-1-2016

EO-1-2016

Downstream applications

Proposals may address a wide variety of applications stemming from the use of Earth observation and its smart integration with other related technologies…

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…

Corresponding validations and customisations are to be undertaken, and the business case for the application is to be demonstrated…

The choice of EO application is left to the proposer…

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

1 to 2 M€

9,85 M€

Innovation Actions

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Opazovanje zemlje EO-2-2016

EO-2-2016

Downstream services for public authorities

To launch demand-driven innovation actions by public authorities aiming at customising Copernicus information as part of the solution for their needs…

…Application products are expected to adopt open standards for data documentation, data models and services…

The choice of Copernicus service and associated downstream EO-based services left to the proposer…

Coupling with European Structural and Investment Fund (ESIF) actions could facilitate this process and can ensure continuity

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

3 M€

Pre-Commercial procurement

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Opazovanje zemlje EO-3-2016

EO-3-2016

Evolution of Copernicus services

The RIA should aim at demonstrating the technical operational feasibility of a specific service evolution proposal.

The proposers are expected to demonstrate at the proposal stage an active link with the Copernicus service by suitable means...

... project should aim at providing a proof-of-concept or a prototype for a proposed evolution of the Copernicus services, respecting the border between Copernicus services and downstream services.

...should allow to demonstrate the appropriateness to implement the proposed evolution later on at European level, i.e. potentially with operational Copernicus funding.

...the activity should as well result into one or more possible scenarios how this evolution could potentially be integrated

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

1 to 2 M€

9 M€

Research and Innovation Actions

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Podporni dokument - Opazovanje zemlje

Designed to further elucidate the **research needs as identified in the context of provision of operational services in Copernicus** for the benefit of applicants to Horizon 2020

TABLE OF CONTENTS

GUIDANCE DOCUMENT: RESEARCH AND INNOVATION NEEDS OF COPERNICUS OPERATIONAL SERVICES

DRAFT VERSION: 3 (17/7/2015)

Opazovanje zemlje 2016-17: Povzetek

WP 2016/2017		
	2016	2017
Call for proposals	Indicative budget (M€)	Indicative budget (M€)
EO-1-2016/2017: **Downstream applications**	**9.85**	**12.0**
EO-2-2016: **Downstream services for public authorities**	**3.0**	**-**
EO-3-2016: **Evolution of Copernicus services**	**9.0**	**-**
EO-4-2017: **EO Big Data Shift**	-	**7.5**
Total EO-2016/2017	**21.85**	**19.5**

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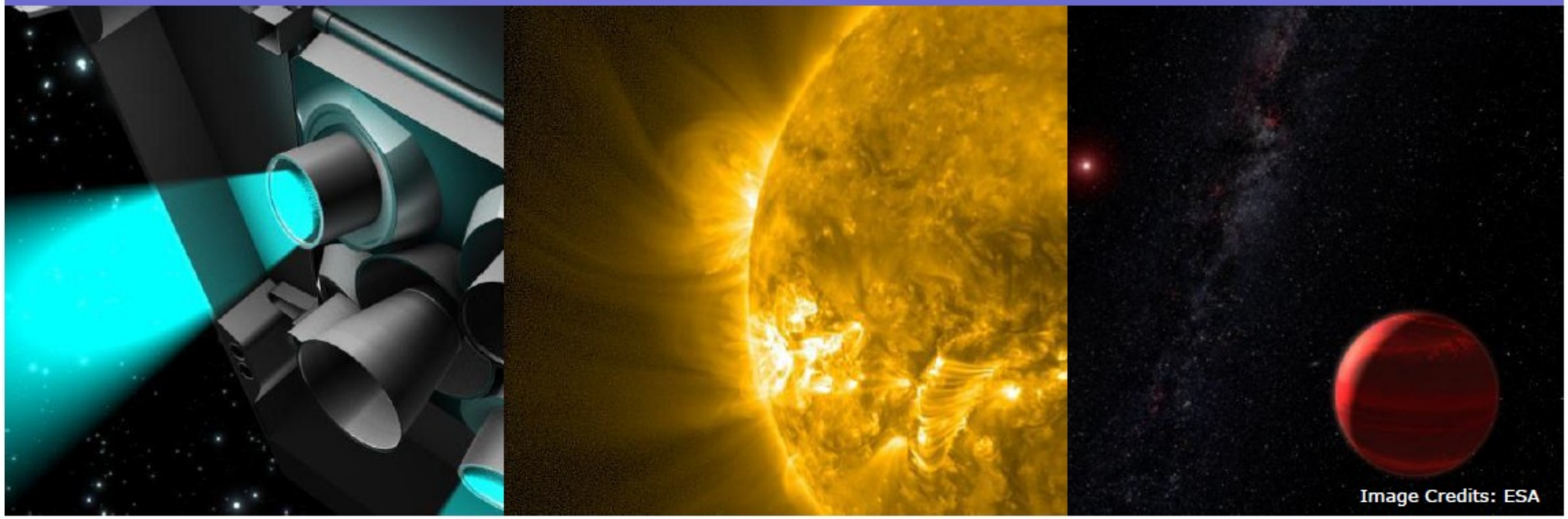
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

2016 call topics

Competitiveness of the European Space Sector Technology and Science



Indicative budget: **65.85 M€**

Deadline: 3 March 2016

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COMPET-1-2016

COMPET-1-2016

Technologies for European non-dependence and competitiveness

Activities shall address technologies identified on the Joint EC-ESA-EDA Task Force list of Actions 2015-17

- *U14 - Active discrete power components*
- *U18 - Enhanced performance and space qualified detectors*
- *U19 - High speed DAC-ADC based on European technology*
- *U20 - Very high performance microprocessors*
- *U22 - ASICS: Deep Sub-Micron (DSM)*
- *N27 - RF components*

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

2 to 5 M€

14,85 M€

Research and Innovation Actions

The aim of identified actions is to contribute to ensuring European Non-dependence:

- "Independence" would imply that all needed space technologies are developed in Europe.
- "Non-dependence" refers to the possibility for **Europe to have free, unrestricted access** to any required space technology.

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COMPET-1-2016

Technologies for European non-dependence and competitiveness

Excerpt from

Critical Space Technologies

for

European Strategic Non-Dependence

Actions for 2015/2017

V1.16

Update for the 2016 Call of Horizon 2020

July 2015

Labels for Actions

Description and needed Action
Estimated Initial TRL:
Target TRL
Applicable Mission Class(es)*
Order of Magnitude of numbers of restricted export licences in the last 10 years for this function
Order of Magnitude of numbers of units sold per year worldwide
Industrial Non-Dependence Concern
Delegations/Agencies voicing non-dependence concern on the item
Reference(s):
Remarks / Justifications
Date of Entry / Last Date of Change

4.3 U19 – High speed DAC+ADC based on European Technology

Description and needed Action	Current status: the existing 10 & 12 bit high speed ADC and 12 bit DAC were developed and are successful products on the market. The 12 bit high speed DAC has even gained world leadership in the market and the 12 bit high speed ADC has world-class performance parameters. Future needs: - Fast, Low power Dual Channel ADC ; the next generation of European ADC (DUAL12b) has started development on BiCMOS process. - New DAC generation today not planned . Serial/deserial I/O are being considered (see also U21- Very high speed serial interfaces) - 1.5 Gsamples per Second target
Estimated Initial TRL:	2 (for next generation), > 6 for current generation
Target TRL	6 (for next generation)
Applicable Mission Class(es)*	Navigation, Earth Observation, Telecommunications, Science Mission, Human Spaceflight, Space Transportation, Robotic Exploration, Defence Applications
Order of Magnitude of numbers of restricted export licences in the last 10 years for this function	500 – 1000 (before the European products became available)
Order of Magnitude of numbers of units sold per year worldwide	> 100
Industrial Non-Dependence Concern	Consensus confirmed at the Non-Dependence Meeting (13 February 2015)
Delegations/Agencies voicing non-dependence concern on the item	Consensus confirmed at the Non-Dependence Meeting (13 February 2015)
Reference(s):	
Remarks / Justifications	Note 1 (2015): Additionally, photonic assisted ADC will be considered as a possible candidate to go beyond the limits of the current technology. This technology will be very useful for telecom digital payloads and digital antennas. EDA activities: on-going THIMS project, planned PICTURE project.
Date of Entry / Last Date of Change	1.9.2014

Page 11

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

COMPET-2-2016

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

COMPET-2-2016

Maturing satellite communication technologies

The aim of this topic is to demonstrate, in a relevant environment, technologies, systems and sub-systems for satellite communications…

2 to 4 M€

7 M€

Research and Innovation Actions

Proposals, **targeting TRL 6**, are sought with relevance for space in the following fields:

- *Advanced communication technologies…*
  … preparing satellite networking in the Terabit-throughput… including optical / RF…
- *Photonics technology…*
- *Active antennas building blocks…*
- *Flexible repeater…*
- *Reconfigurable coverages…*
- *New generation of waveforms and related protocols…*
- *End to end system enablers…*

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COMPET-3a/3b-2016

COMPET-3a-2016

In-Space electrical propulsion (EP) and station keeping - Incremental Technologies

Proposals shall enable incremental advances in technologies for Electric Propulsion systems based on:

1 - Hall Effect Thrusters (HET)

2 - Gridded Ion Engines (GIE)

3 - High Efficiency Multistage Plasma Thrusters (HEMPT)

HET 7.5 to 11 M€

GIE 5.5 to 7.5 M€

HEMPT 4.5 to 5.5 M€

18 M€

Innovation Actions

COMPET-3b-2016

In-Space electrical propulsion (EP) and station keeping – Disruptive Technologies

Proposals on potentially disruptive concepts in of EP which in the long term could change the landscape, addressing:

- *Transversal technologies for disruptive EP systems (not thrusters) → Maximum 1 proposal*
- *Technologies devoted to specific disruptive EP thrusters Maximum 4 proposals*

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

1 to 1.5 M€

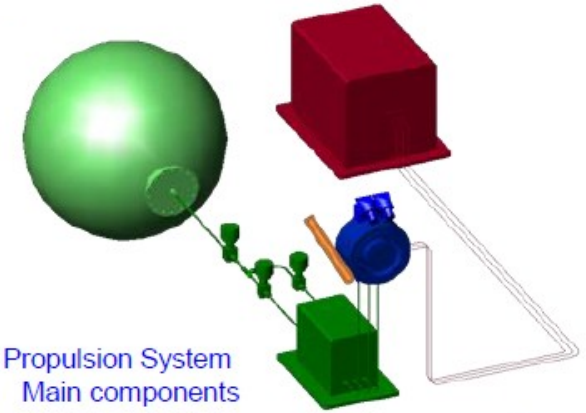
5 M€

Research and Innovation Actions

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

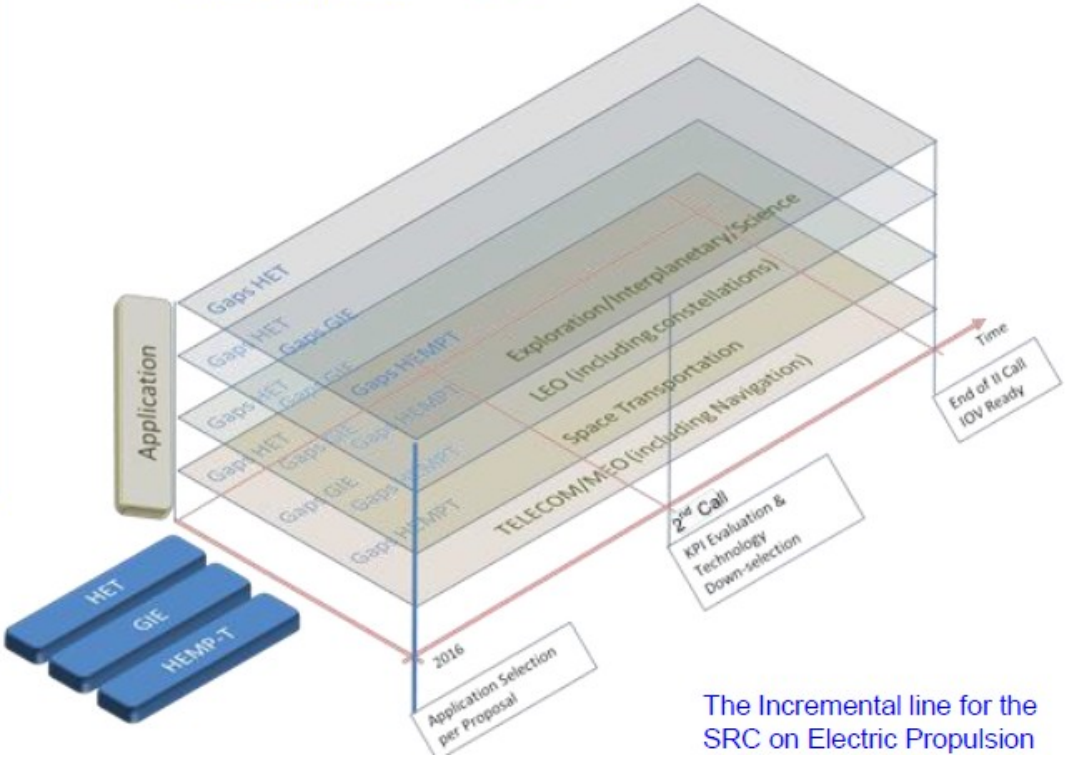
Podporni dokument – COMPET-3-2016

GUIDELINES FOR STRATEGIC RESEARCH CLUSTER ON IN-SPACE ELECTRICAL PROPULSION AND STATION KEEPING
HORIZON 2020 SPACE CALL 2016



Electric Propulsion System
Main components

Thruster components
Propellant Components
Power Components
Pointing Mechanism (optional)



The Incremental line for the SRC on Electric Propulsion

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COMPET-4-2016

COMPET-4-2016

SRC - Space Robotics Technologies

Proposals shall address one of the following six specific robotic building blocks:

a) *Space Robot Control Operating System*

b) *Autonomy framework Time/Space/Resources planning and scheduling*

c) *Common data fusion framework*

d) *Inspection Sensor Suite*

e) *Modular interfaces for Robotic handling of Payloads*

f) *Validation Platforms and Field Tests*

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

Building blocks

a) - e): 3 to 3,5 M€

f): 1 M€

18 M€

Research and Innovation Actions

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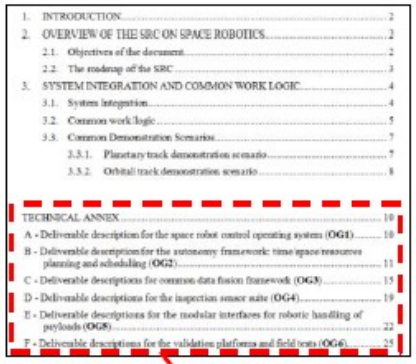
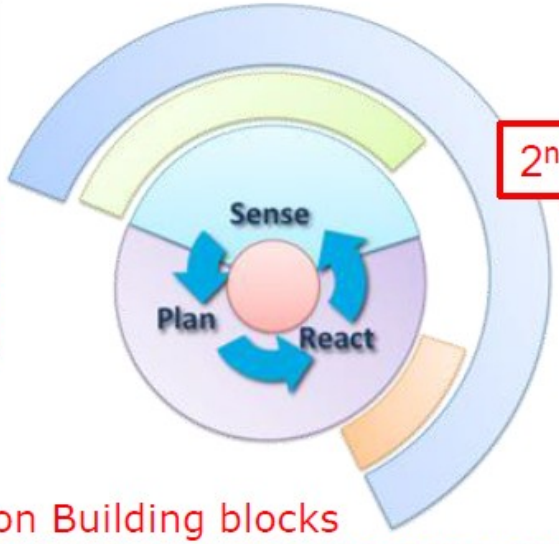
Podporni dokument – COMPET-4-2016

GUIDELINES FOR STRATEGIC RESEARCH CLUSTER ON SPACE ROBOTICS TECHNOLOGIES HORIZON 2020 SPACE CALL 2016

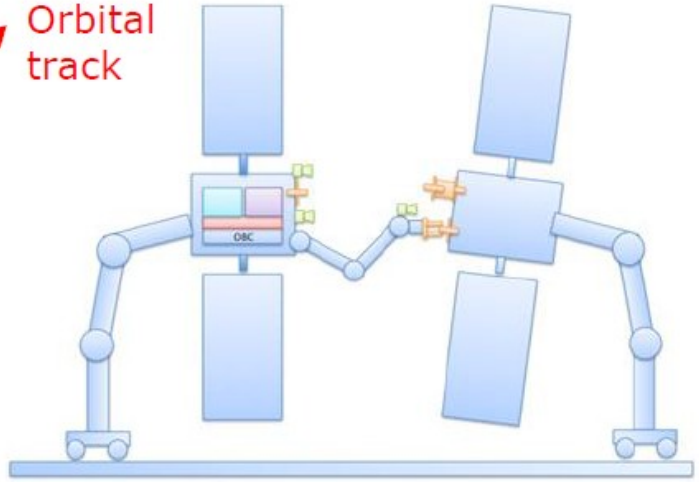


Call 2016

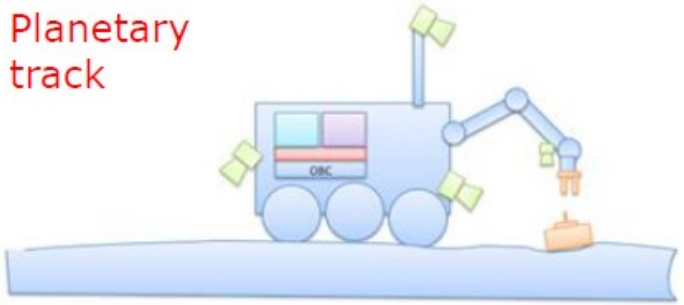


2nd Call

Orbital track



Planetary track



Common Building blocks

OG1	Produces the software base on which all other software OGs will run
OG2	Produces the generic "thinking and acting" core of a robot
OG3	Produces the generic perception core of a robot
OG4	Produces the generic suite of perception means
OG5	Produces the a suite hardware interfaces by which a robot can interact with man-made environment
OG6	Provides the physical test environments in which the above OGs can be installed and exercised

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

COMPET-5-2016

COMPET-5-2016

Scientific Instrumentation

Scientific instrumentation is understood in this context as mission payloads that perform scientific tasks

Proposals may cover different stages of development of scientific instrumentation from concepts, to breadboarding and prototype demonstration.

Proposals are particularly welcome that develop novel and advanced technologies, such as new sensors and other sub-systems that may be used in scientific instrumentation

Projects should address planned and future European scientific and exploration missions, as well as collaboration in the context of third country missions as a European contribution to global efforts.

- Priporočena velikost projekta
- Skupna sredstva
- Tip projekta

1.5 to 3 M€

3 M€

Research and Innovation Actions

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

COMPET 2016-17: Povzetek

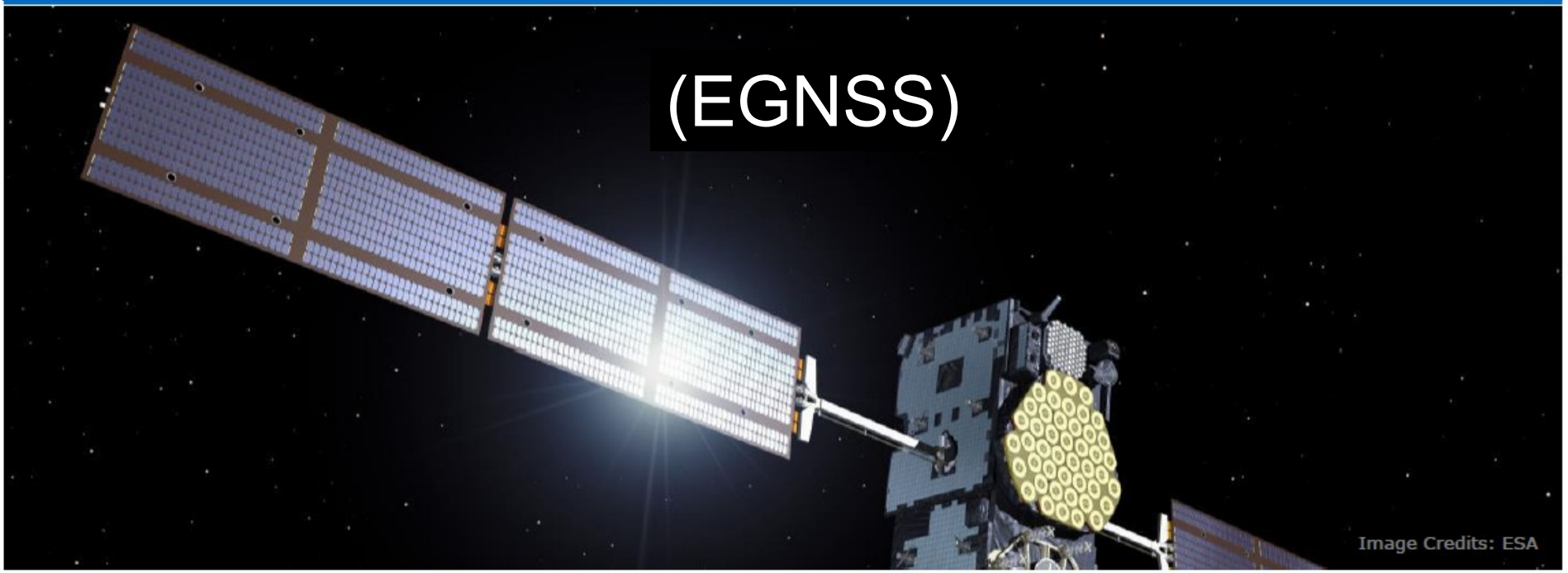
WP 2016	
Call for proposals	Indicative budget (M€)
COMPET-1-2016: **Technologies for European non-dependence and competitiveness**	**14.85**
COMPET-2-2016: **Maturing Satellite Communication technologies**	**7.0**
COMPET-3-2016: **SRC – In-Space electrical propulsion and station keeping**	**23.0**
COMPET-4-2016: **SRC – Space Robotics Technologies**	**18.0**
COMPET-5-2016: **Scientific instrumentation**	**3.0**
Total COMPET-2016	**65.85**
Other actions (Part B)	Indicative budget (€ million)
Activity 8 - **Engineering support by ESA**	**1.0**

WP 2017	
Call for proposals	Indicative budget (M€)
COMPET-1-2017: **Technologies for European non-dependence and competitiveness**	**15.0**
COMPET-2-2017: **Competitiveness in Earth observation mission technologies**	**7.0**
COMPET-3-2017: **High speed data chain**	**10.0**
COMPET-4-2017: **Scientific data exploitation**	**5.0**
COMPET-5-2017: **Space Weather**	**3.0**
COMPET-6-2017: **Space portal**	**0.5**
COMPET-7-2017: **Technology transfer and business generators**	**1.0**
Total COMPET-2017	**41.5**
Other actions (Part B)	Indicative budget (€ million)
Activity 11 - **Horizon Prize for low cost access to space (4M€ prize from 2020 budget)**	-
Activity 18 - **Engineering support by ESA**	**1.0**

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

Satelitska navigacija – Galileo in EGNOS

(EGNSS)



2016 Other actions

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

GALILEO 2016-17: Povzetek

WP 2016	
Other actions (Part B)	Indicative budget (M€)
Activity 1 - Galileo Evolution, Mission and Service related R&D activities	**3.3**
Activity 2 - EGNOS, Mission and Service related R&D activities	**0.9**
Activity 4 - GNSS evolution, infrastructure-related R&D activities	**48.0**

„Other actions“: Javna naročila EU so objavljena na: TED (Tenders Electronic Daily), http://ted.europa.eu

WP 2017	
Call for proposals	Indicative budget (M€)
GALILEO-1-2017: EGNSS Transport applications	**14.5**
GALILEO-2-2017: EGNSS mass market applications	**9.0**
GALILEO-3-2017: EGNSS professional applications	**8.0**
GALILEO-4-2017: EGNSS awareness raising and capacity building	**1.5**
Total GALILEO-2017	**33.0**
Other actions (Part B)	Indicative budget (€ million)
Activity 12 -GalileoEvolution, Mission and Services related R&D activities	**3.4**
Activity 13 - EGNOS, Mission and Service related R&D activities	**0.5**
Activity 15 – GNSS evolution, infrastructure-related R&D activities	**48.5**

Galileo – sinergije z drugimi področji Obzorja

To facilitate access to opportunities for applicants the **following list includes dedicated 'Applications in Satellite Navigation – Galileo' activities** in related calls and topics:

- Societal Challenge Smart Green and Integrated Transport:
  - Automated Road Transport:
    - **ART-02-2016: Automation pilots for passenger vehicles**
- Mobility for Growth:
  - **MG-5.2-2017: Innovative ICT solutions for future logistics operations**
- SME Instrument (H2020-SMEInst-2016-2017), although not dedicated uniquely to Satellite Navigation, is particularly well suited for SMEs addressing space based applications:
  - SMEInst-04-2016-2017: **Engaging SMEs in space research and development**

GALILEO 2016: „Other actions“

Activity 1 (Galileo Evolution, Mission and Service related R&D activities)

- 2nd Generation of Galileo: Development of new and innovative mission concepts fulfiling evolving users needs

Activity 2 (EGNOS, Mission and Service related R&D activities)

- Evolution of the current services (Open Service, Safety of Life, …)
- Development of innovative concepts for new services
- Adaptation to international Satellite-based augmentation systems (SBAS) standards

GALILEO 2016: „Other actions“

Activity 4 (GNSS evolution, infrastructure-related R&D activities)

Implemented through a **delegation agreement with ESA** (to be concluded):

- R&D actions to be implemented through procurement, grants and prizes in the EU R&D community
  - Galileo and EGNOS system R&D
  - EGNSS enabling technologies
  - Scientific research for future EGNSS
- ESA Technical activities
- Management, including e.g. monitoring, road mapping, outreach

General participation limited to EU and associated states, further limitations on a case-by-case basis (e.g. Security)

REPUBLIKA SLOVENIJA
MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

”Space Surveillance and Tracking”

2016 Other actions

„Space Surveilance and Tracking - SST“

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014D0541&from=EN

27.5.2014 EN Official Journal of the European Union L 158/227

DECISIONS

DECISION No 541/2014/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

of 16 April 2014

establishing a Framework for Space Surveillance and Tracking Support

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

… Council recalled that space assets have become indispensable for our economy and that their security must be ensured. It underlined the ‘need for Europe […] **to develop a European capability for the monitoring and surveillance of its space infrastructure and space debris**, initially based on existing national and European assets…

SST – „Other actions“

WP 2016	
Other actions (Part B)	Indicative budget (€ million)
Activity 5 - **Framework Partnership Agreement on the SST Support Framework**	-
Activity 6 – **SST contribution to the support Framework**	**1.2**
Activity 7 - **Improving the Performances of the SST at European Level**	**8.0**

WP 2017	
Other actions (Part B)	Indicative budget (€ million)
Activity 16 - **SST contribution to the support Framework**	**1.6**
Activity 17 - **Improving the Performances of the SST at European Level**	**15.5**

„Other actions: Preselected beneficiary EU SATCEN“ (vključuje države članice EU)

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

„SME Instrument“ in „Fast Track to Innovation“

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

„SME instrument“ in „Fast track to Innovation“: Povzetek

WP 2016/2017		
	2016	**2017**
Call for proposals	Indicative budget (€ million)	Indicative budget (€ million)
SME-SPACE-1-2016/2017: **SME instrument Phases 1&2**	**11.37**	**12.60**
Fast Track to Innovation	**2.88**	-

WP 2016/2017 – Call for proposals

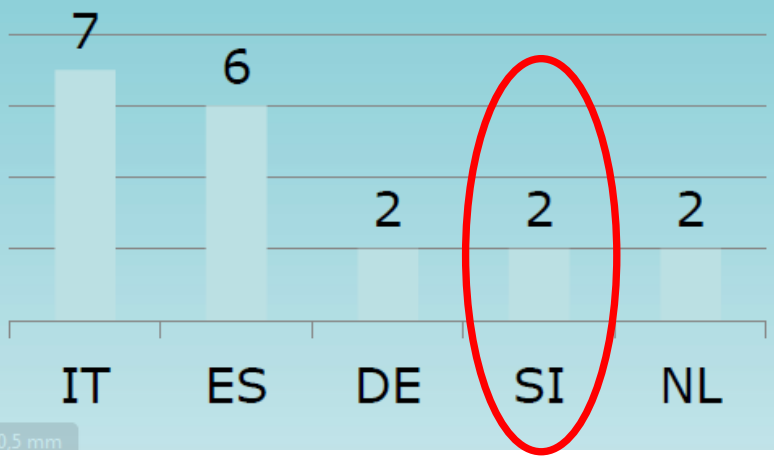
SME-SPACE-1-2016/2017: **SME instrument Phases 1&2**	Bottom-up non-prescriptive topic. Highlight: Actions in the areas of applications (Galileo and Copernicus), spinning-in and the development of certain critical technologies.
Fast Track to Innovation	Contribution from H2020 LEIT Space to FTI pilot.

Podrobnejši napotki glede prijav: https://ec.europa.eu/easme/en/horizons-2020-sme-instrument

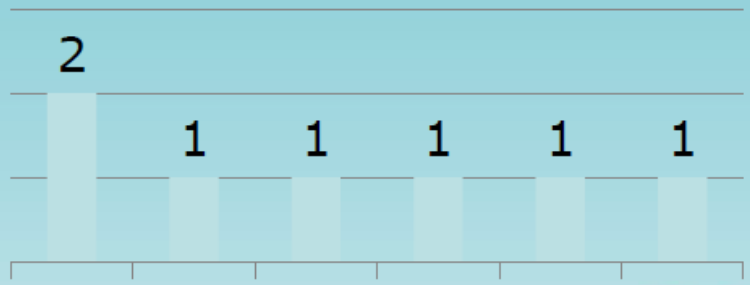
Rezultati „SME instrument - Vesolje“ 2014

Space – SME – 2014	Phase 1	Phase 2
Proposals evaluated	142	8
Proposals above threshold	21	5
Proposals funded	21	4
Budget allocated	1.050.000€	4.867.743€

Phase 1 – SMEs above threshold per country (partners included)



Phase 2 – SMEs above threshold per country (partners included)



Executive Agency for SMEs

EASME

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Ostale informacije - Vesolje

Vstopne točke za pridobivanje informacij so:

NKO: http://www.mizs.gov.si/si/obzorje2020/
Portal Horizon2020: www.ec.europa.eu/research/horizon2020
Participants Portal: http://ec.europa.eu/research/participants/portal/desktop/en/home.html
Prijava evalvatorjev: http://ec.europa.eu/research/participants/portal/desktop/en/experts/index.html
Splošna vprašanja (Research Enquiry Service): http://ec.europa.eu/research/index.cfm?pg=enquiries

Obzorje2020 – Vesolje (NKO, MIZŠ):

- **NKO, Dr. Ivan Skubic, ivan.skubic@gov.si , 01 478 4670, MIZŠ Kotnikova 38, 1000 Ljubljana**
- **Informacije Obzorje 2020 – Vesolje (po e-pošti, mesečno) naročite na e-naslovu NKO,**

COSMOS SPACE NCP NETWORK (http://ncp-space.net/)

- **Partner search**
- **Newsletter** (flurina.schaffer@euresearch.ch, 'Newsletter' in the header)
- **Helpdesk**

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MINISTRSTVO ZA IZOBRAŽEVANJE, ZNANOST IN ŠPORT

H2020 Vesolje 2016 v Ljubljani !

„ Regional H2020 Space Info Day and Workshop on Space Science and Technology Co-operation - Western Balkans“

Ljubljana, 19.-20. april 2016

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Hvala za pozornost!

Nacionalna kontaktna oseba

Ivan Skubic

NCP mrežo tvorijo predstavniki

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SPIRIT SLOVENIJA
JAVNA AGENCIJA
I FEEL SLOVENIA

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