

Warszawa, 31 stycznia 2014

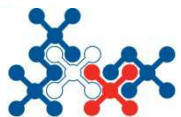
Szkolenie dla CAMK PAN i CBK PAN

Przestrzeń kosmiczna w programie HORYZONT 2020 pierwsze konkursy

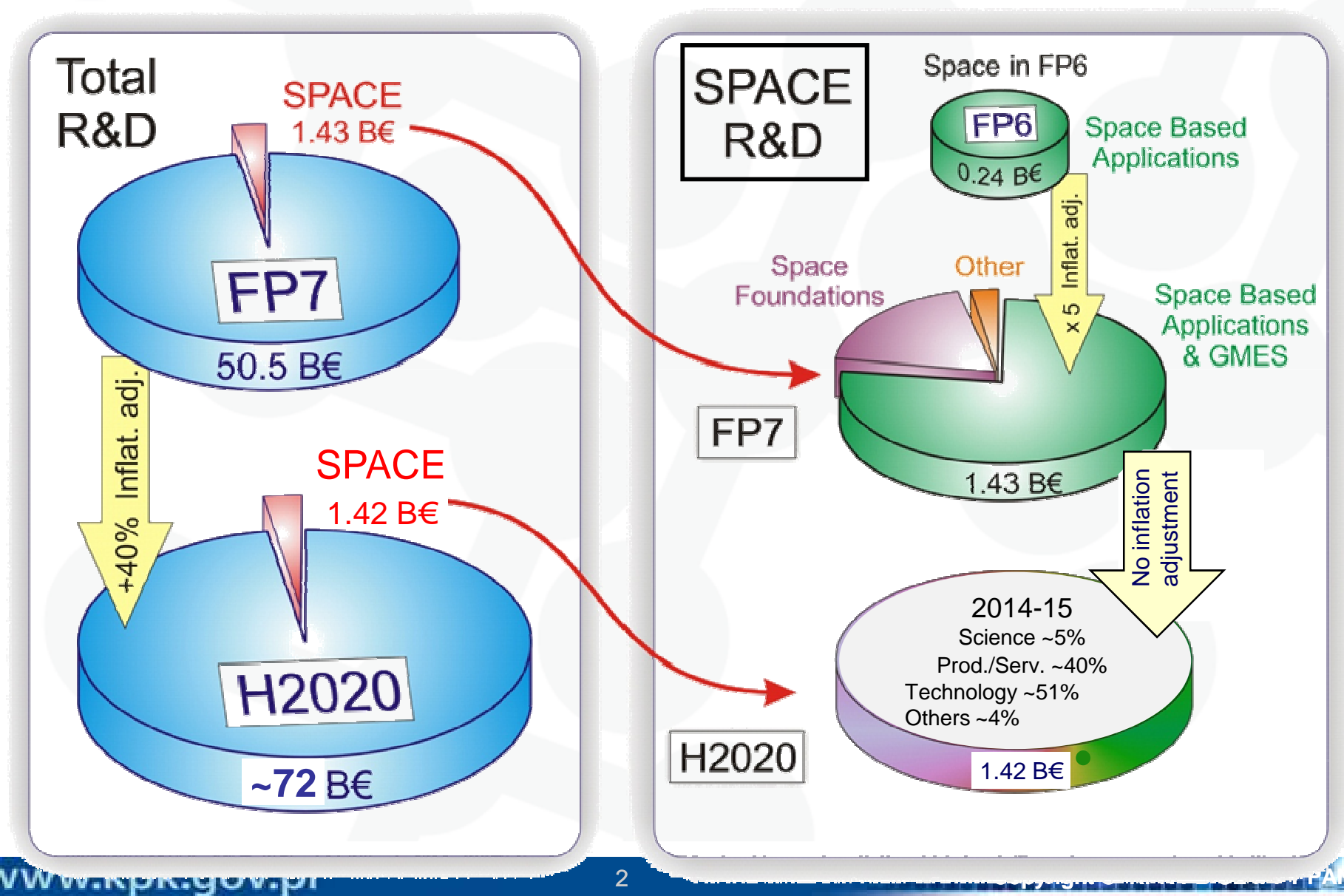
Piotr Świerczyński

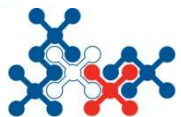
**Krajowy Punkt Kontaktowy
Programów Badawczych UE**
w Instytucie Podstawowych Problemów Techniki
Polskiej Akademii Nauk

W niniejszej prezentacji wykorzystano materiały udostępnione m.in. przez KE i/lub Ministerstwa oraz Agendy RP



From FP6 → FP7 → H2020



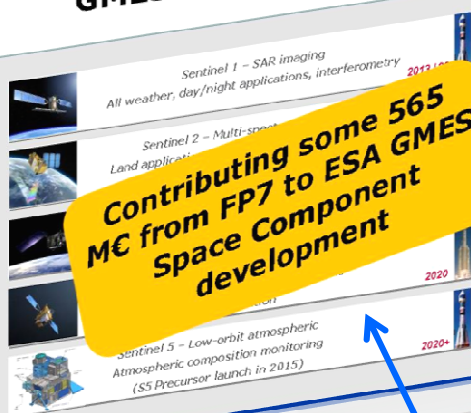


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Infrastructures

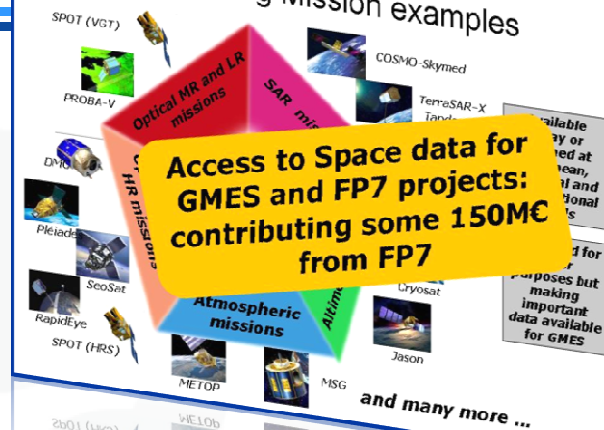
GMES Sentinel satellites

Contributing some 565
M€ from FP7 to ESA GMES
Space Component
development



Data for exploitation

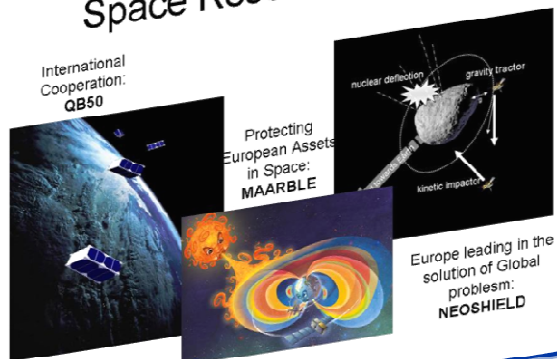
GMES Space Component: Contributing Mission examples



Access to Space data for
GMES and FP7 projects:
contributing some 150M€
from FP7

Space Foundations

Space Research Projects

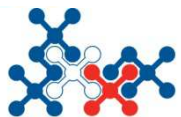


Applications & Services

GMES Services



Activities
developed
under the
FP7 / SPACE



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The R&D Projects in FP7/Space

999 PROPOSALS submitted in 6 CALLS (Call 6th in negotiation)

259 PROJECTS funded by EC with ~ 654 M€*



Further information available ec.europa.eu/embrace-space

SPACE Programmes and Research

New Multiannual Financial Framework 2014 - 2020

~ 12.000 M€

~ 1.400 M€



~ 3.800 M€



~ 6.300 M€





Horizon 2020 Space

- **Horizon-2020 work programme is published**

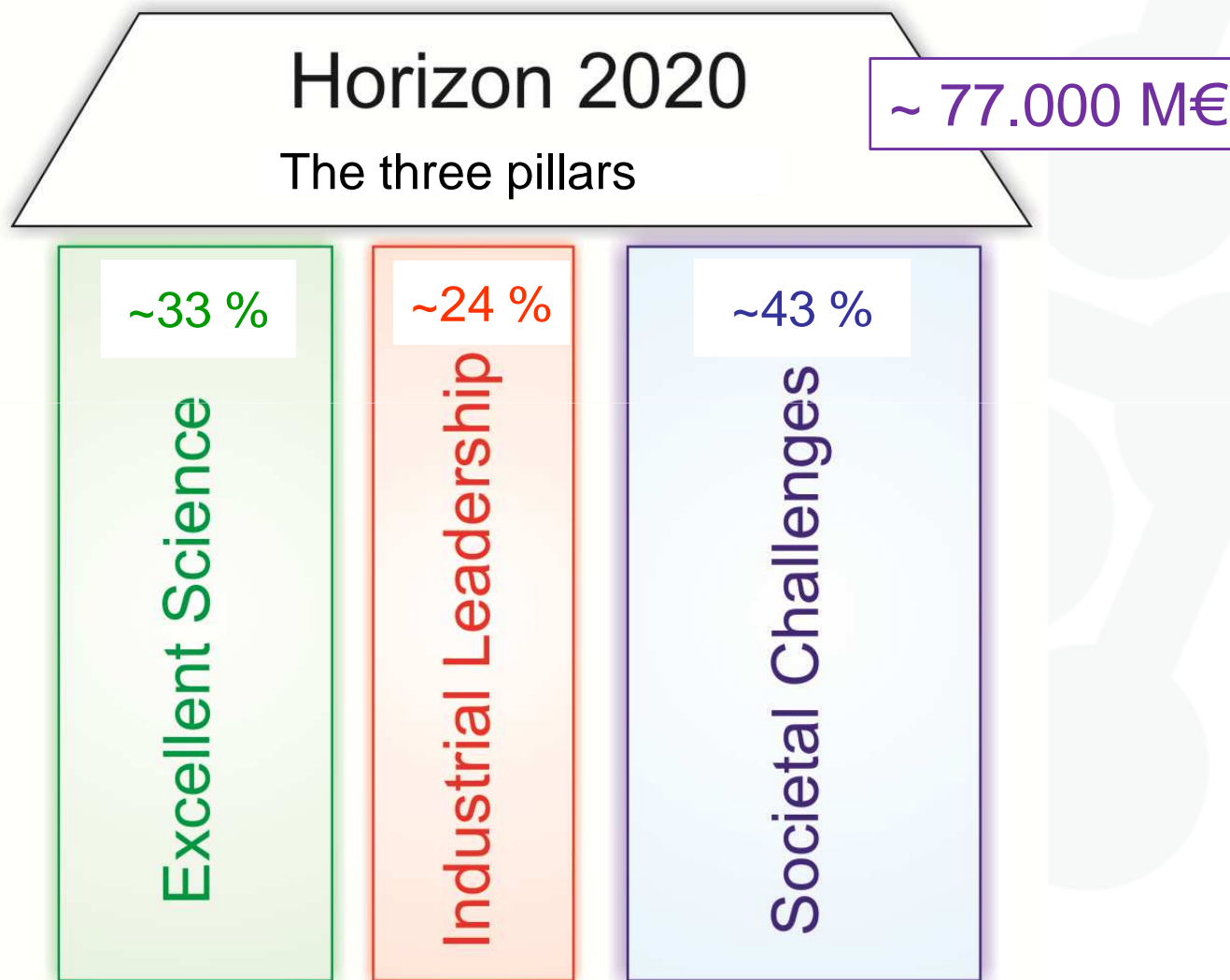
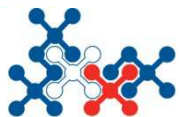
Discussions, 3 meetings with member states in September-November

Publication: 11 December 2013

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

A "two year" work programme 2014 and 2015

- 2015 "indicative" at this stage – final decision in 2014
- Call deadlines 26 March 2014 and end of 2014

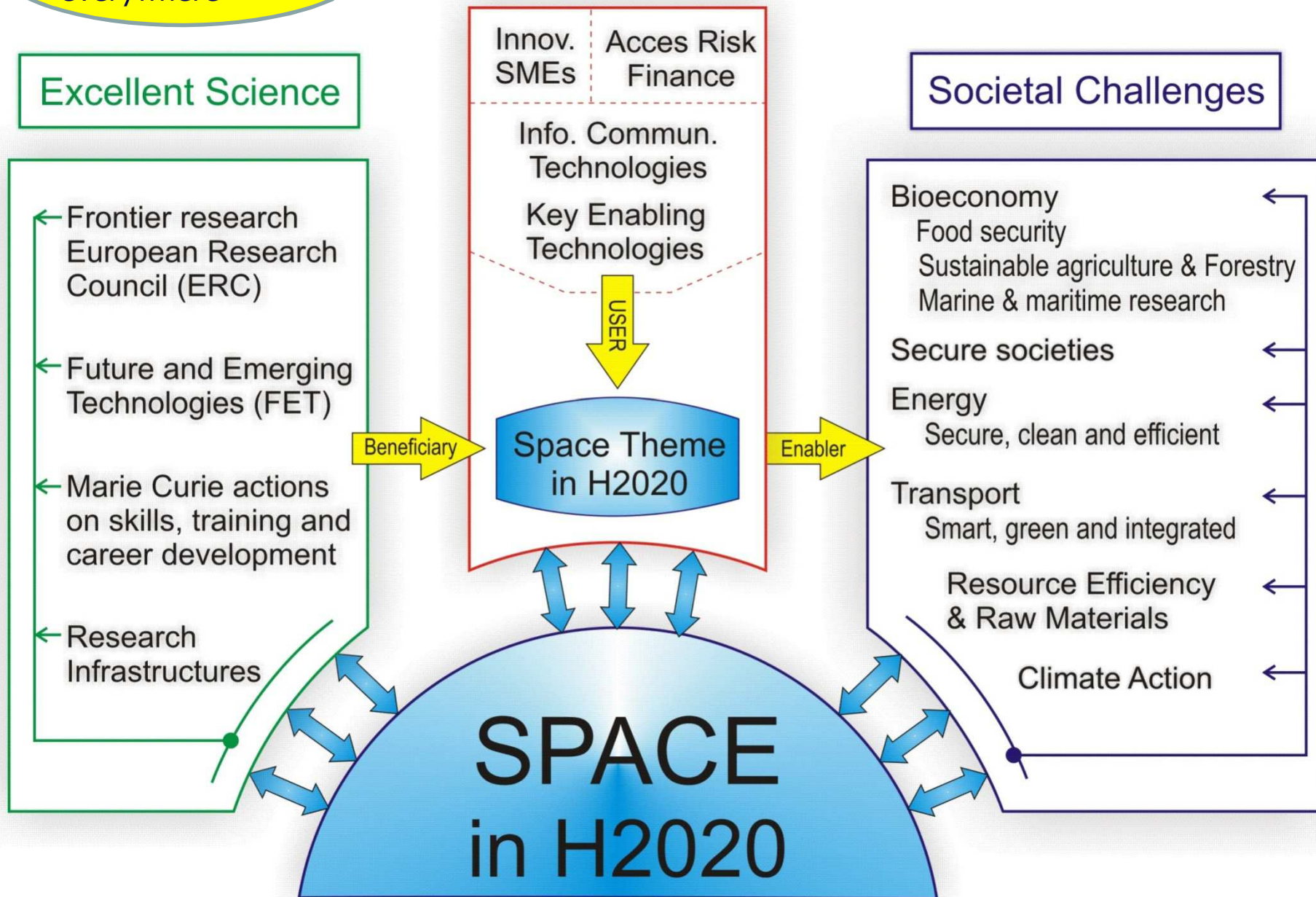


There is a place
for SPACE
everywhere

Industrial Leadership

Excellent Science

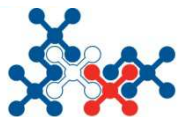
Societal Challenges





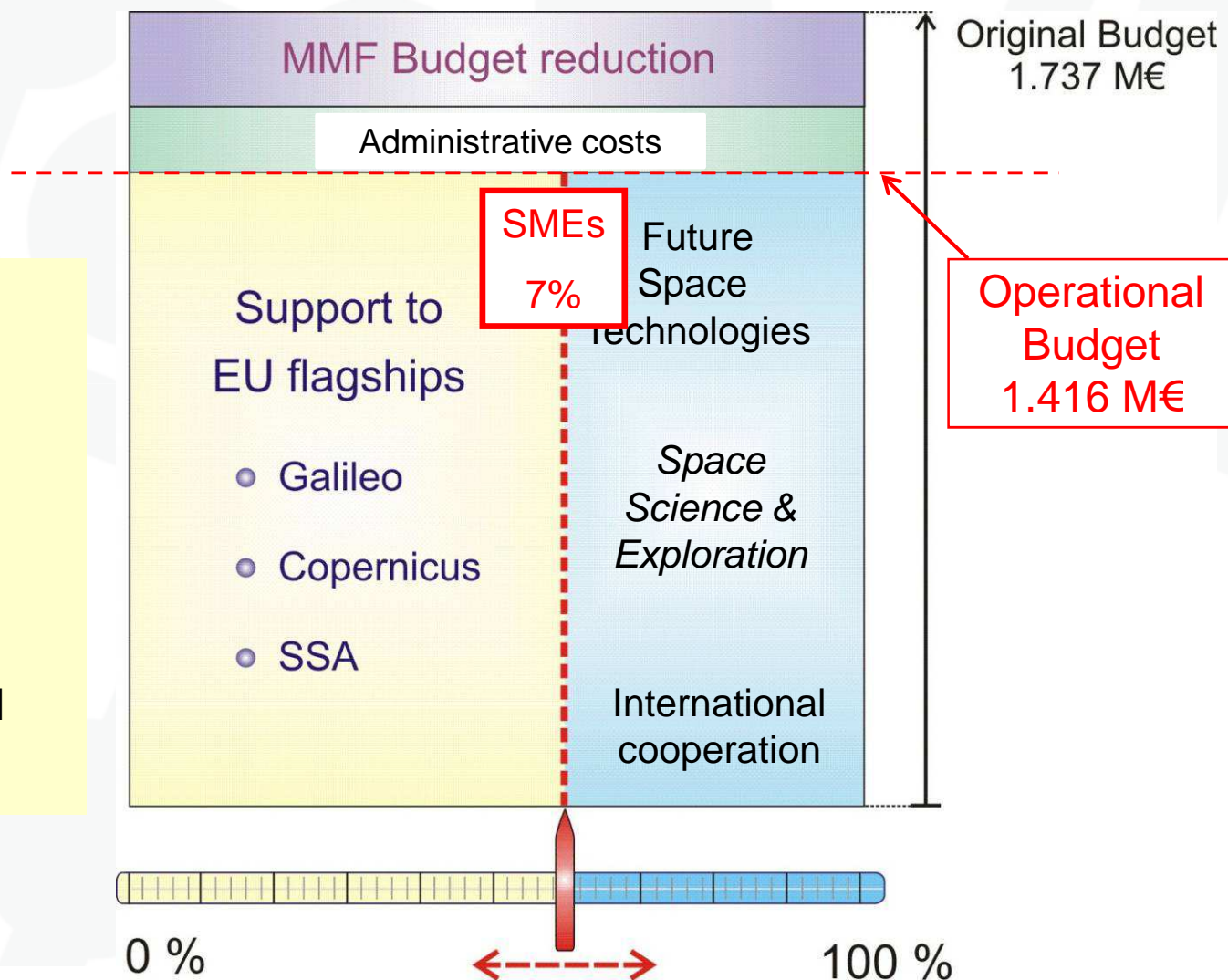
Four objectives (Specific Programme)

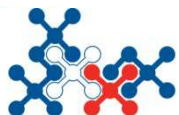
1. Enhance **competitiveness, non-dependence, and innovation** of **EU space sector**
 2. Enable advances in **space technologies**
 3. Increase **exploitation of space data**
 4. Enable participation in **international space partnerships**
- + relevant space applications under Societal Challenges**
- ✓ Transport, Climate, Security,.....



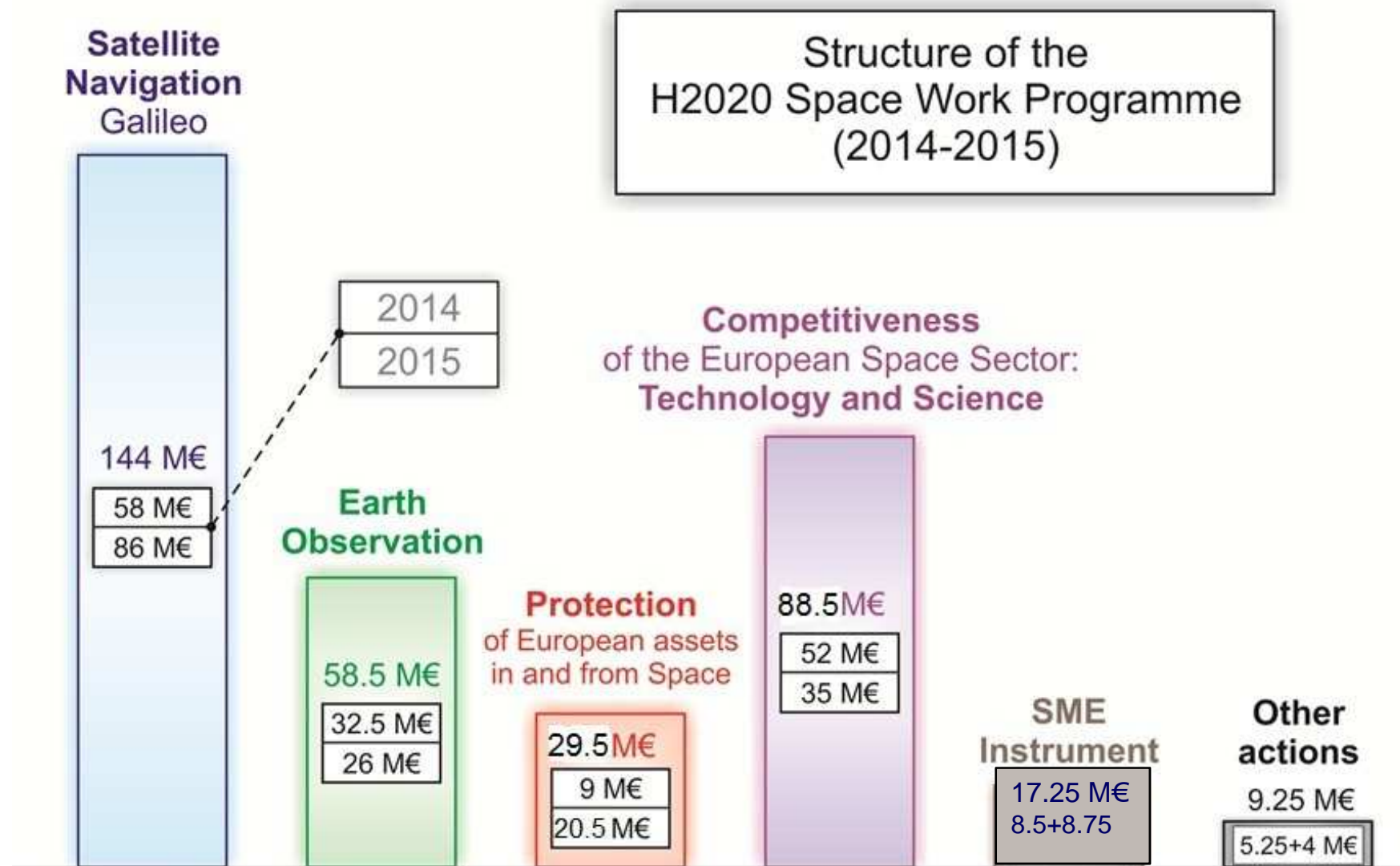
State of play of H2020 / Space

- Satellite navigation (Galileo)
- Earth Observation (Copernicus)
- SSA → Protection from Space-related threats (SST)

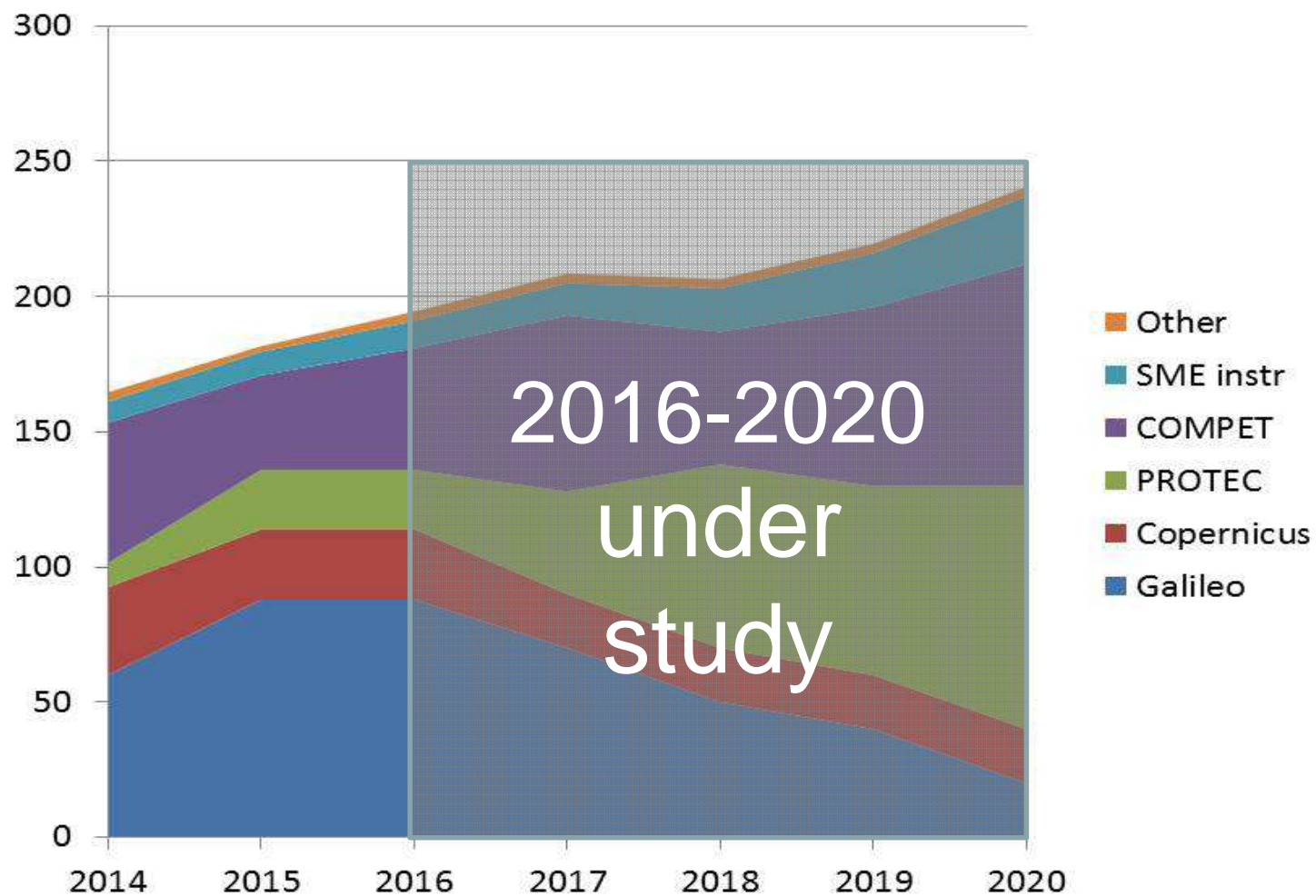




LEIT → SPACE → Leadership In Enabling & Industrial Technologies



Budget Indicative Evolution 2020

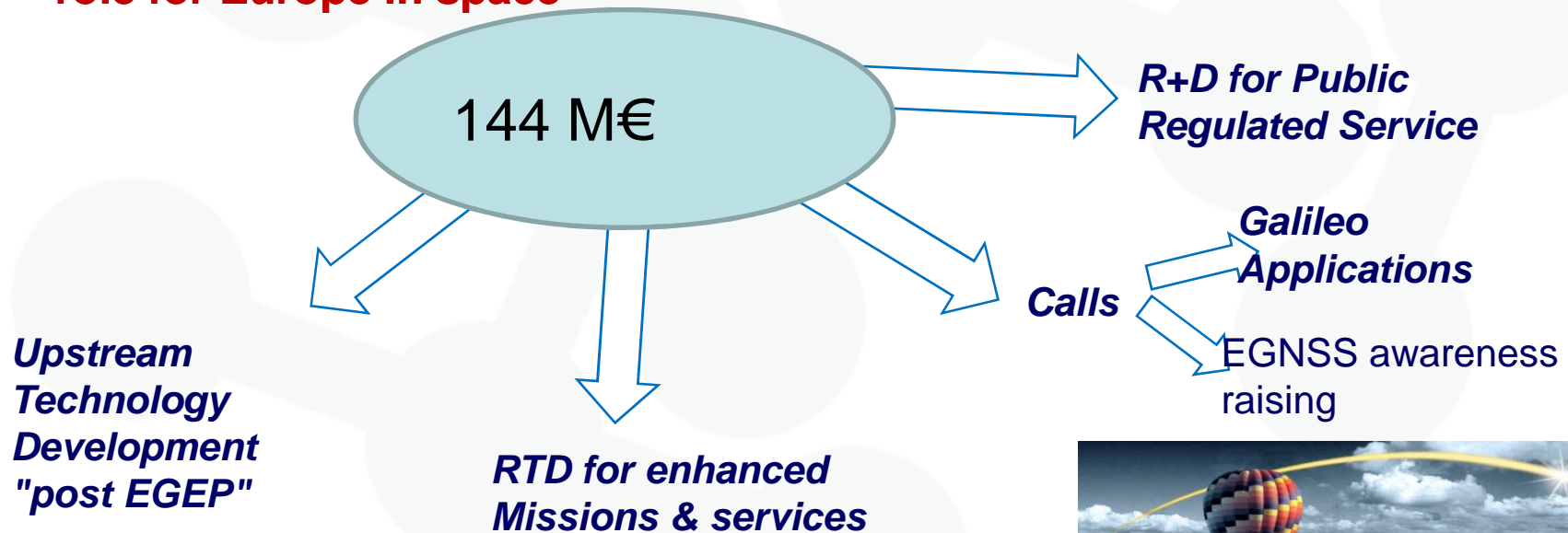




European Global Navigation Satellite System

Horizon 2020 Framework Regulation:

Union level action and investment in space research are required in accordance with Article 189 (TFEU), in order to maintain the competitive edge, to safeguard Union space infrastructures and programmes such as Copernicus and Galileo and to sustain a future role for Europe in space





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Galileo applications 2014

15-20 M€

Galileo 1 - EGNSS applications

„The topic addresses application development in all market segments, such as: transport (road, rail, maritime, aviation), high precision surveying, location based services (LBS), agriculture, emergency services etc responding to user requirements”.

5-10 M€

Galileo 2 - SME based EGNSS applications

„ This topic will explore new applications in niche market sectors and business models in any application domain”.

5-8 M€

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

EGNSS offers various possibilities for the development of new space enabled applications base 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.

Type of action: Innovation Actions





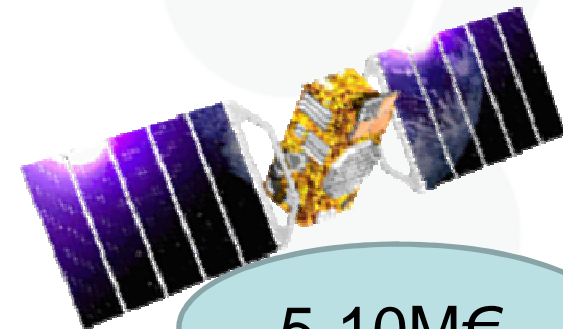
Galileo 4 - 2014

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

Type of action: Coordination and support actions

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€

Copernicus 2014-2015

Call “Earth Observation” - Copernicus

- New ideas for Earth-relevant space applications
- Bringing EO applications to the market
- Transition towards Copernicus (Marine & Atmosphere)
- Climate-change relevant space-based data reprocessing...
- Observation capacity mapping for climate-change
- Stimulating wider user of Copernicus Sentinel data
- Technology developments for commercial imaging

58,5 M€



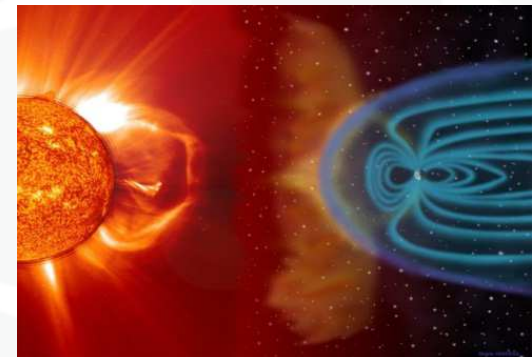


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Protection of European assets in and from Space 2014 – 2015

Space Weather, NEO, SST, Debris

- Space Weather
- NEO: access technologies and characterisation
- Space Surveillance and Tracking
- Passive means to reduce the impact of space debris



29,5 M€

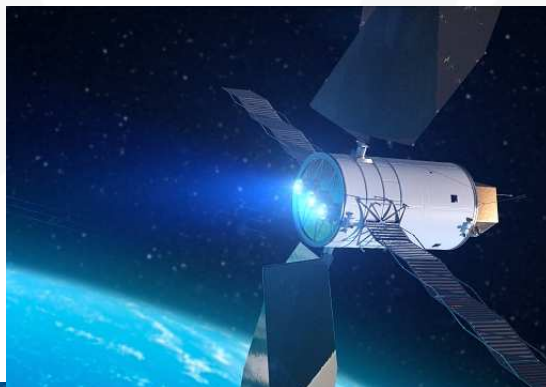


Competitiveness of the European Space sector 2014-2015 (1)

Technology development

- 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

56 M€





Competitiveness of the European Space sector 2014-2015 (2)

Space exploration and science

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

28,5 M€



Outreach and Communication 2014

Outreach through Education

Trying to stimulate the interest of children and young adults in space careers and achieve a good impact on media for reverberation purposes.

Very open topic: classroom activities or outside the classroom

4 M€

Transnational and international cooperation among NCPs

Reinforcing the network of National Contact Points (NCP) for Horizon 2020, building upon work done in FP7.

Focus on:

- ✓ helping less experienced NCPs rapidly acquire the know-how accumulated already in other countries
- ✓ promote the SMEs' participation
- ✓ promote 3rd countries' participation





Space Research implementation

☐ Research Executive Agency (REA):

EO, PROTEC and COMPET calls

- ✓ Call handling, receipt of proposals, evaluation process, negotiation, grant agreements signature, receipt of reporting, reviews, payments, audits
- ✓ New Mandate for Horizon 2020 and continued implementation of FP7 Space projects

☐ European GNSS Agency (GSA): GALILEO calls

☐ Executive Agency for SMEs (EASME)*: SME calls

* building on existing Executive Agency for Competitiveness and Innovation (EACI)

☐ European Commission DG ENTR:

EU Space policy and Horizon 2020 Space Research



LEIT-Space Schedule

Opening Calls 2014

Closure Calls 2014

17:00:00 Brussels time

Galileo:
EO, COMPET, PROTEC:
SME:

11 December 2013

3 April 2014
26 March 2014
several cut-off dates per year
early April 2014

Admissibility/eligibility checks and
allocation of experts to proposals

Remote evaluation

Central evaluation

Information to coordinators

First projects starting

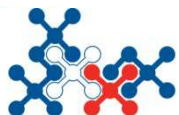
end April – end May 2014
end May – end June 2014
July 2014
early 2015

Closure Calls 2015

17:00:00 Brussels time
(indicative)

Galileo:
EO, COMPET, PROTEC:
SME:

4 February 2015
28* November 2014
several cut-off dates per
year* likely to change
27 November 2014



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Dodatkowe informacje

EU Space research websites:

<http://ec.europa.eu/enterprise/policies/space/>

http://ec.europa.eu/embrace_space

<http://www.copernicus.eu/>

ESA web-site

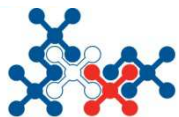
<http://www.esa.int/esaLP/LPgmes.html>

COSMOS - FP7 SPACE NCPs - service

<http://www.fp7-space.eu/>

Krajowy Punkt Kontaktowy:

www.kpk.gov.pl



Dziękuję za uwagę ***Pytania?***

Osoby do kontaktu:

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