H2020 SPACE OPPORTUNITIES

H2020 Information Sharing Session
15 NOVEMBER 2018

science & technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

H2020 SPACE

- **Focus Area:** Industrial Leaderships (*aims to speed up development of the technologies and innovations that will underpin tomorrow's businesses and help innovative European SMEs to grow into world-leading companies*.)

Objective: Leadership in enabling and industrial technologies

- Provide dedicated support for research, development and demonstration and, where appropriate, for standardisation and certification, on information and communications technology (ICT), nanotechnology, advanced materials, biotechnology, advanced manufacturing and processing **and space**.

Space Research

- Main objective and challenge:
  - to foster a cost-effective competitive and innovative space industry (including SMEs) and research community to develop and exploit space infrastructure to meet future Union policy and societal needs,

- The Commission proposal for Horizon 2020 sets the following motto for EU Space R&D for 2014 to 2020 **‘*Prepare for the increasing role of space in the future and reap the benefits of space now*’.**

NSS Vision and Mission

- For South Africa to be among the leading nations in contributing to and advancing the innovative utilisation of space science and technology that enhances economic growth and sustainable development in order to improve the quality of life for all;

- To address and inform national imperatives and policies through stimulating a sustainable space science and technology capability, growing human capital and applying scientific knowledge.

Space Calls

Open Targeted Calls

Deadline - 12/03/2019

Topic identifier	Topic title	Call sub area	Type of action
DT-SPACE-01-EO-2018-2020	Copernicus market uptake	Earth observation	IA
DT-SPACE-06-EO-2019	International Cooperation Copernicus – Designing EO downstream applications with international partners	Earth observation	RIA
DT-SPACE-09-BIZ-2019	Space hubs (support to start-ups)	Space business, entrepreneurship, outreach and education	CSA
LC-SPACE-04-EO-2019-2020	Copernicus evolution – Research activities in support of cross-cutting applications between Copernicus services	Earth observation	RIA
LC-SPACE-05-EO-2019	Copernicus evolution –a gap analysis to prepare future activities for Copernicus data and information validation and quality enhancement	Earth observation	CSA
LC-SPACE-14-TEC-2018-2019	Earth observation technologies	Space technologies, science and exploration	RIA
SPACE-10-TEC-2018-2020	Technologies for European non-dependence and competitiveness	Space technologies, science and exploration	RIA
SPACE-13-TEC-2019	SRC – In-Space electrical propulsion and station keeping	Space technologies, science and exploration	RIA
SPACE-17-TEC-2019	Access to space	Space technologies, science and exploration	RIA
SPACE-18-TEC-2019-2020	In-orbit validation/demonstration – Mission design, integration and implementation	Space technologies, science and exploration	RIA
SU-SPACE-22-SEC-2019	Space Weather	Secure and safe space environment	RIA
SU-SPACE-23-SEC-2019	Advanced research in Near Earth Objects (NEOs) and new payload technologies for planetary defence	Secure and safe space environment	RIA
SU-SPACE-31-SEC-2019	Research and innovation network of governmental users of secure satellite communications	Secure and safe space environment	CSA

Earth Observation

- DT-SPACE-06-EO-2019 : International Cooperation Copernicus
  - **Designing EO downstream applications with international partners**

  Scope: Proposals shall address a wide variety of applications stemming from the use of Earth observation and their smart integration with other related technologies. Copernicus should be considered as part of the solution which may include other space or non-space inputs.
  - *Participation of partners from countries that have signed a Copernicus Cooperation Arrangement is required*
  - *Participation of industry, in particular SMEs, is encouraged*
  - *Participation of partners involved in international GEO initiatives is encouraged*

Prospective Applicants : Science Councils, SANSA , local EO Industry and SANSA's relations with other space agencies should also play an important role in responding to the call topic.

Space Technologies, Science & Exploration

LC-SPACE-14-TEC-2018-2019: Earth observation technologies

- Very high resolution optical EO for LEO and/or high resolution optical EO for GEO/HEO instrument technologies
- Competitive remote sensing instruments and space systems
- Disruptive technologies for remote sensing
- On-board data processing
- Advanced SAR/Radar technologies

Scope: The aim of this topic is to demonstrate, relevant environment, technologies, systems and sub-systems for EO. Proposals should demonstrate significant improvements in such areas as miniaturisation, power reduction, efficiency, versatility, and/or increased functionality

Prospective Applicants: The local industry, academia, and the CSIR have been targeted to respond to this call topic.

Secure And Safe Space Environment

- SU-SPACE-22-SEC-2019: Space Weather
  - Forecasting horizons for space weather
  - Improved modelling capabilities
  - Delivery of prototype services
  - New observation Infrastructure
  - Joint analysis of interdisciplinary data

Scope: Proposals shall address the development of modelling capabilities and/or the delivery of prototype services able to interpret a broad range of observations of the Sun's corona and magnetic field, of the Sun-Earth interplanetary space and of the Earth magnetosphere/ionosphere coupling relying on existing observation capacities.

Prospective Applicant :SANSA Space Science is targeted to respond to this call topic.

Cross cutting areas

- Health
- Food security
- Transport
- Environment
- Biotechnology

Research and Innovation Actions

Funding for research projects tackling clearly defined challenges, which can lead to the development of new knowledge or a new technology.

Who?
Consortia of partners from different countries, industry and academia.

Funding rate: 100% of eligible costs

Innovation Actions

Funding is more focused on closer-to-the-market activities. For example, prototyping, testing, demonstrating, piloting, scaling-up etc. if they aim at producing new or improved products or services.

Who?
Consortia of partners from different countries, industry and academia.

Funding rate: 70% of eligible costs (except for non-profit legal entities, where a rate of 100% applies)

Coordination & Support Actions

Funding covers the coordination and networking of research and innovation projects, programmes and policies. Funding for research and innovation per se is covered elsewhere.

Who?
Single entities or consortia of partners from different countries, industry and academia.

Funding rate: 100% of eligible costs

Budget

	Budget line(s)	2018 Budget (EUR million)	2019 Budget (EUR million)	2020 Budget (EUR million)
Calls				
H2020-SPACE-2018-2020		104.00	83.00	39.00
	from 02.040201	*104.00*	*83.00*	*39.00*
H2020-SPACE-EGNSS-2019-2020			20.00	20.00
	from 02.040201		*20.00*	*20.00*

NCP Support

- Call Identification & Analysis
- Matchmaking opportunities for consortia
- Info on proposal writing

DST SUPPORT INSTRUMENTS

- DST provides mobility/ seed funding for South African researchers in H2020
  - To finalise agreements etc
  - For more information visit www.esastap.org.za

THANK YOU!!!

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