

OCEAN AND ENVIRONMENTAL TECHNOLOGIES AND SERVICES

Part 1 : Ocean Focus

Wednesday 20 October
9:00 AM to 01:15 PM



Opportunities for development of solutions to support safety at sea with Space

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[EU Agency for the Space Programme \(EUSPA\)](#)



Synergies of EU SPACE components accelerate downstream innovation



ENABLING THE BLUE ECONOMY



Safer navigation at Sea and Inland waters

Sustainable mobility

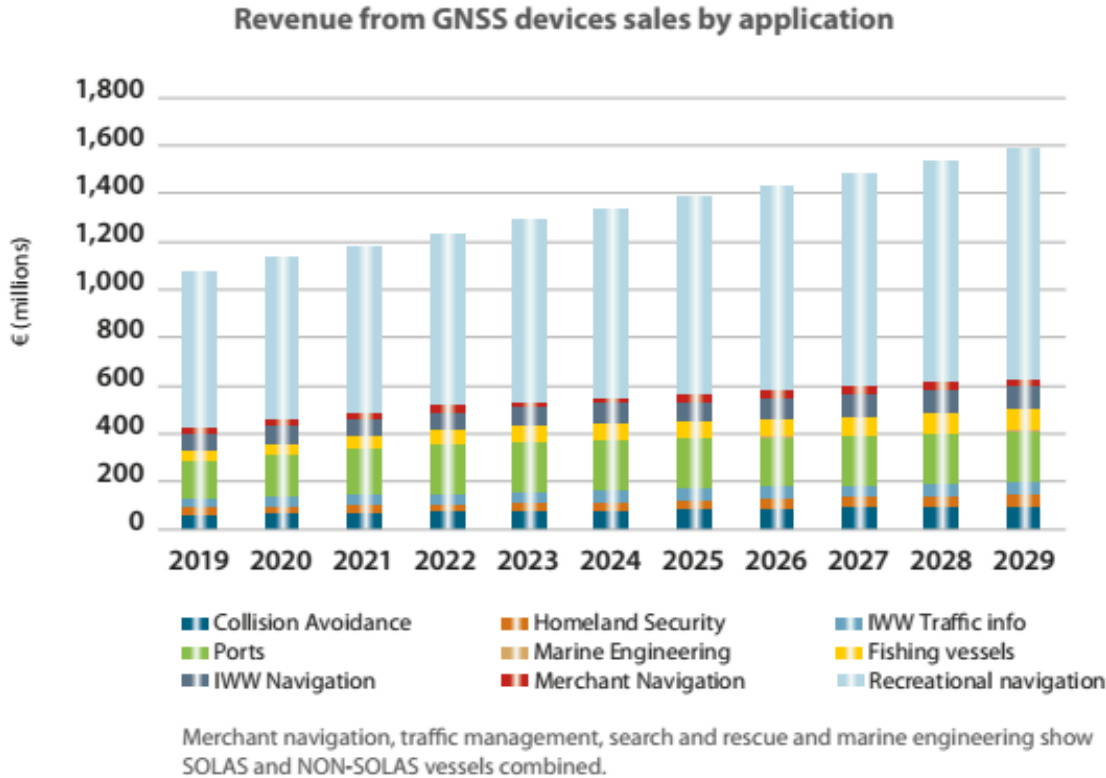
Towards autonomous mobility

More efficient search and rescue

Digitalisation of operations



Sustainable growth of the GNSS application market expected, opening opportunities for innovative maritime/fishing/marine operations



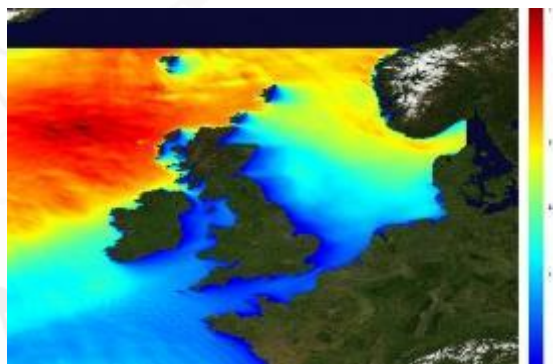
- ✓ The GNSS revenues will reach over **1,6 Bln €** by 2029
- ✓ The installed base of maritime applications will reach more than **16 mln units** by 2029 (66% vs today)

Space components and the EU services/data differentiators will enable the Ocean applications of the future



Green and safe operations

Robust and accurate navigation with Galileo and Copernicus to avoid collision and reduce emissions



Prepareships project

Autonomous vehicles

Robust operations with EGNSS location and Copernicus images of operation area



H2H and GAUSS projects

Digital transition

Trusted EGNSS position for safer and more efficient operations at ports and sea



Logimatic and HELIOS projects

Horizon Europe igniting innovative space downstream applications

Open for submissions
28 Oct 2021*

2021

Horizon Europe topics	Indicative budget (mln EUR)	Type of action
EGNSS and Copernicus applications fostering the European Green Deal	14	IA
EGNSS applications for Safety and Crisis management	9.3	IA
EGNSS applications for the Digital Age	9.3	IA

Open for submissions
Oct 2022*

2022

Horizon Europe topics	Indicative budget (mln EUR)	Type of action
Public sector as Galileo and/or Copernicus user	5.2	PCP
EGNSS applications for Smart mobility	9.5	IA
Copernicus downstream applications and the European Data Economy	9.6	IA
Large-scale Copernicus data uptake with AI and HPC	9.6	RIA
Service developments and demonstrations	9.1	RIA
Designing space-based downstream applications with international partners	5.1	RIA



* All dates are tentative and subject to change

More details on the topics along with the Horizon Europe Work Programme 2021-2022 can be found on the [EUSPA website](#)

EGNSS and Copernicus applications fostering the European Green Deal

HORIZON-EUSPA-2021-SPACE-02-51

14 mln
EUR



Proposals should focus on the development of innovative EGNSS and Copernicus applications that support the Green Deal objectives and its related policies, increasing the EU's climate ambition for 2030 and 2050

Proposals may be submitted in any of the following areas:

- **A zero-pollution ambition for a toxic-free environment**
- **Mitigation of natural hazards**
- **Supplying clean, affordable and secure energy**
- **Accelerating the shift to sustainable and smart mobility**
- **Building and renovating in an energy and resource efficient way**
- **From “Farm to Fork”: a fair, healthy and environmentally friendly food system**
- **Preserving and restoring ecosystems and biodiversity**

Indicative project size:
EUR 2-3 mln

Expected TRL 7-9

Compulsory Business Plan

synergies with other EU
Green Deal actions under
Cluster 5 and Cluster 6



EGNSS applications for safety and crisis management

HORIZON-EUSPA-2021-SPACE-02-52

9.3 mln
EUR



Proposals should focus on the development of innovative EGNSS-based solutions addressing safety concerns, improved disaster risk management, better security and resilience of infrastructure and vital societal functions, cybersecurity and crisis management

Proposals may be submitted in any of the following areas:

- **Improved emergency disaster risk management and societal resilience**
 - solutions for critical services related to detection, preparedness, response, recovery and mitigation of emergencies and disasters;
 - drone and robot operations for disaster response;
 - GNSS/Copernicus-based earthquake early warning system etc.
- **Timing and synchronisation applications focusing on emerging network synchronisation needs of critical infrastructures (electricity, telecommunications etc.)**
 - increasing receiver resilience to interference;
 - tighter and more accurate time/phase requirements;
 - timing precise synchronisation between financial platforms, Critical Assets Monitoring and Data Centre resistance against spoofing data.

Indicative project size:
EUR 2-3 mln

Expected TRL 7-9

Compulsory Business Plan

synergies with other
security specific actions
under Cluster 3 and
Cluster 5



EGNSS applications for the digital age

HORIZON-EUSPA-2021-SPACE-02-53

9.3 mln
EUR



Proposals should focus on the development of innovative EGNSS applications that will address major societal challenges in focus areas such as health, citizen safety and security, mobility and the sharing economy

Proposals may be submitted in any of the following areas:

- Internet of Things
- Mobile solutions
- mHealth - solutions for silver economy, robotics
- Artificial intelligence - Big Data, Geo-tagging, optimisation for multiple sensors
- Cybersecurity - solutions that are stimulating privacy, security of location data, exploiting synergies with quantum
- Sharing economy - solutions for logistics, mobility services, goods and food
- Sports and fitness - smart wearables

Indicative project size:
EUR 2-3 mln

Expected TRL 7-9

Compulsory Business Plan

synergies with other
security actions under
Cluster 1, Cluster 4 and
Cluster 5



Join us to learn more about upcoming opportunities!



**SPACE DOWNSTREAM
INNOVATION DAYS**

- 8 - 9 NOVEMBER 2021
- PRAGUE - ONLINE

The EUSPA logo is located at the bottom center of the poster. It consists of the acronym 'EUSPA' in blue, with a small blue square containing the European Union flag to its right. A yellow arc is above the 'E' and 'U'.

Register here: <https://www.euspa.europa.eu/space-downstream-innovation-days#registration>

myEUspace competition ongoing!



6 innovation areas



Track 1:

Idea to Prototype
Customer validation
Projects expected to reach at least TRL 4

Track 2:

Prototype to Product
Market entry
Projects expected to reach at least TRL 9



timeline

1 September 2021

Announcement of contest

20 September 2021

1st webinar

19 October 2021

2nd webinar

15 November

Proposals' submission deadline

Dec 2021-Feb 2022

Development phase

April 2022

Contest finals

Thank you!

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