



GNSS Market Trends: EU perspective

5th EU-Japan Roundtable

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A new EU Space Programme and new Agency



With the new regulation, **space data is at the heart of a technological revolution**



EU space activities under one umbrella:

Galileo

Global satellite navigation and positioning system (GNSS)

10% of the EU GDP enabled by satellite navigation



EGNOS

Makes navigation signals more accurate and reliable

Operational in **360+ airports & helipads in 23 countries**



Copernicus

Earth Observation (EO) and monitoring based on satellite and non-space data

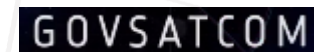
Nr.1 world provider of space data and information (>20TB/day)



GovSatCom

Secures satellite communications for EU governmental actors

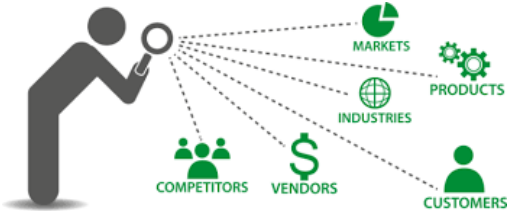
Delivering rapid support over crisis areas



SSA

Space Situational Awareness monitors and protects space assets.

All EU Space Program components are approached via a joint market development methodology



Market & User Knowledge

- Market and technology monitoring and forecasting
- User and industry consultations
- User satisfaction monitoring



Demand Support

- Definition of roadmaps with key stakeholders
- Cooperation with receivers and apps developers
- Technical support to EC to ensure EGNSS use in regulated applications









Offer Creation

- Creation of new “made in Europe” products and services
- Start-up support

A new integrated market segmentation

Market & User Knowledge



| | |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|  Agriculture |  Fisheries and Aquaculture |
|  Aviation and Drones |  Forestry |
|  Biodiversity, Ecosystems and Natural Capital |  Infrastructures |
|  Climate Services |  Insurance and Finance |
|  Consumer Solutions, Tourism and Health |  Maritime and Inland Waterways |
|  Emergency Management and Humanitarian Aid |  Rail |
|  Energy and Raw Materials |  Road and Automotive |
|  Environmental monitoring |  Space |
| |  Urban Development and Cultural Heritage |

The first EUSPA Market Report is coming soon addressing the new market segmentation

Market & User Knowledge



Stay tuned!

New EUSPA EU Space Market Report with focus on both GNSS and EO will be released in January 2022

Market report: a preview of key findings

Market & User Knowledge



“GNSS- and EO-enabled revenues reached more than € 200 billion in 2021, set to almost triple over the next decade”

“North America dominates the EO demand market for both data and service revenues, with Asia-Pacific and EU27 being numbers 2 and 3”



“By 2031, more than 10 billion GNSS devices will be in use across the world”








“The European EO industry is dominated by SMEs and start-ups”



The new market report will also include an Editor Special on eHealth



GNSS has shown an invaluable means to assist and support citizens following the COVID pandemic

| | | | |
|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>“Stay-at-Home” lifestyle</p> | <ul style="list-style-type: none"> • Contactless food and goods delivery enabled by GNSS |  <p>Mapping & Tagging</p> | <ul style="list-style-type: none"> • Mapping nearby points of interest such as pharmacies, hospitals, convenience stores, testing centres |
|  <p>Mobility</p> | <ul style="list-style-type: none"> • MaaS applications to avoid crowded transport options • Social distance monitoring • Traffic management e.g. Galileo Green Lane app enabling efficient transit of goods • Drone and robotics operations |  <p>Analytics</p> | <ul style="list-style-type: none"> • EO and GNSS data for monitoring of traffic flows, urban heat maps, greenhouse gases as well as air and water quality |
|  <p>Telemedicine</p> | <ul style="list-style-type: none"> • Online consultations doctor • Remote monitoring patient |  <p>Safety management</p> | <ul style="list-style-type: none"> • Mapping of high-risk areas • Monitoring disease spread e.g. COVID safe apps for health status verification |
| | |  <p>Track & trace</p> | <ul style="list-style-type: none"> • Contact tracing • Quarantine enforcement • More efficient management of disease outbreak |

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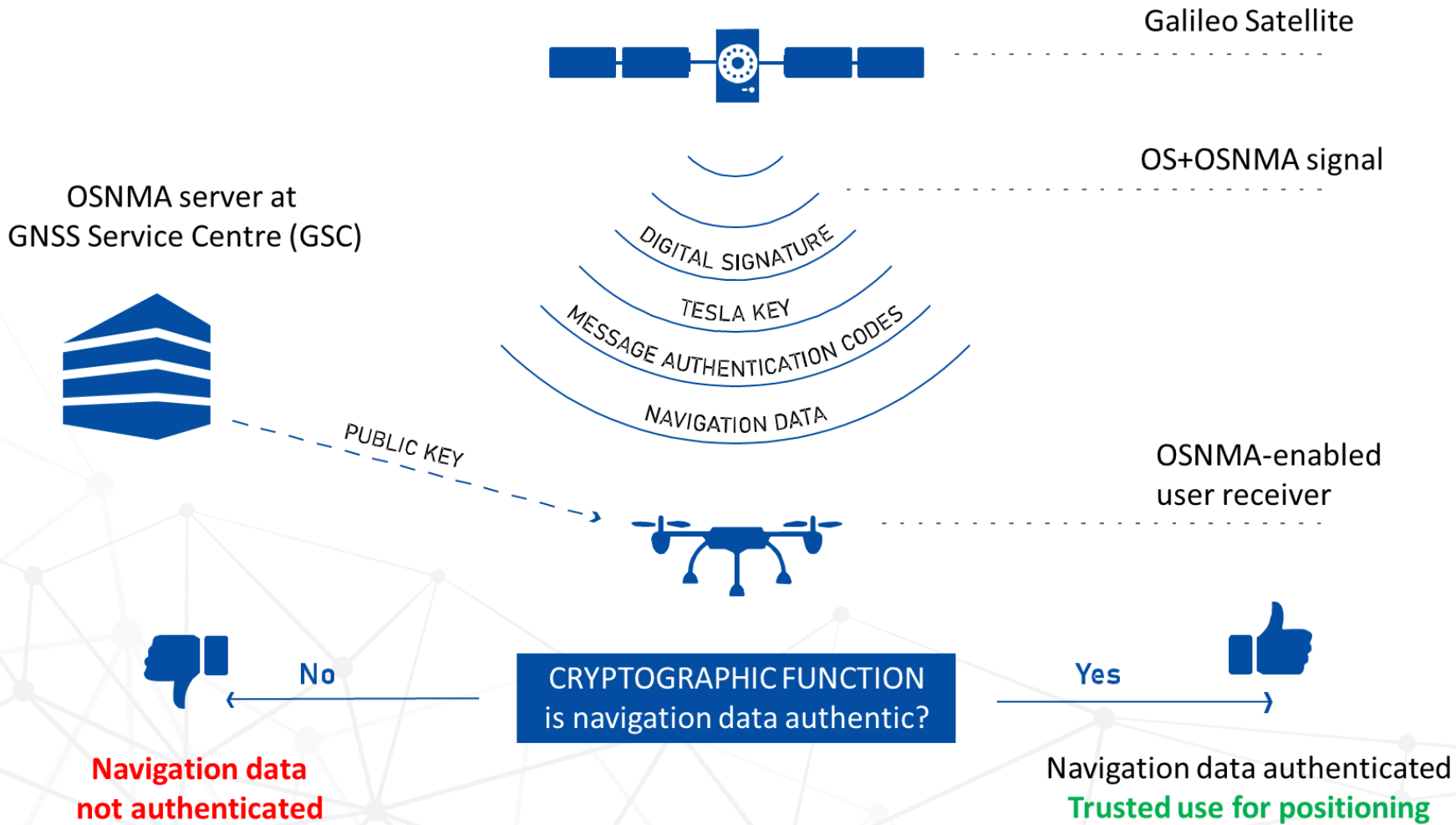
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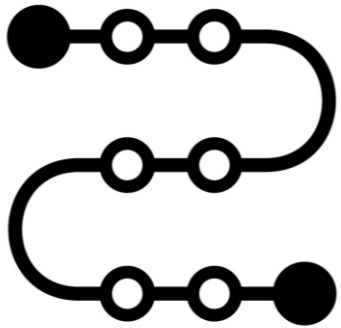
Galileo OSNMA: Getting ready to provide increased robustness of the user navigation solution

Demand Support

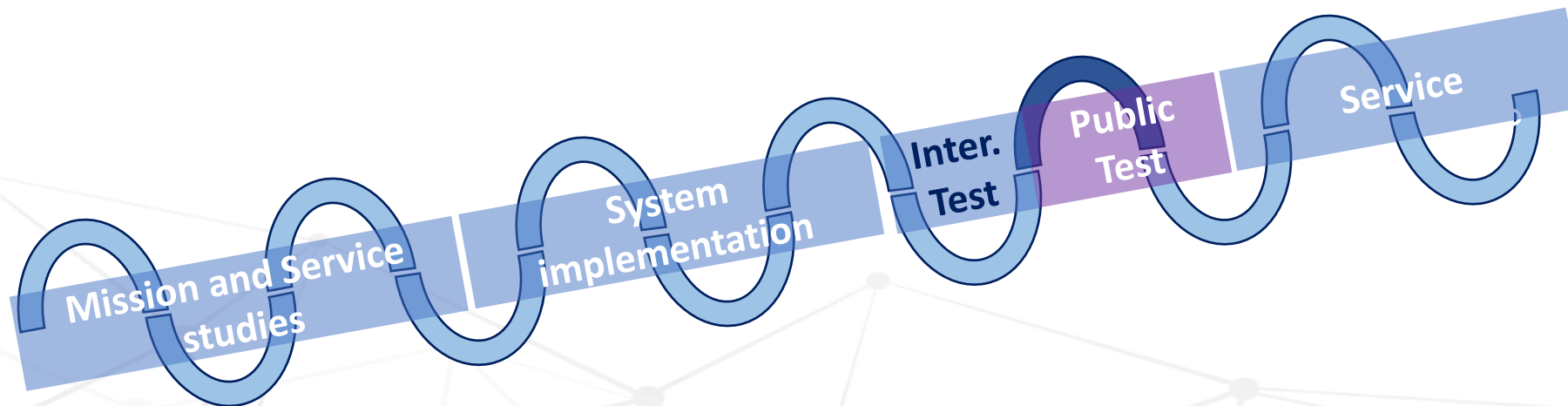


Galileo OSNMA testing campaign: the last step before service declaration has started

Demand Support

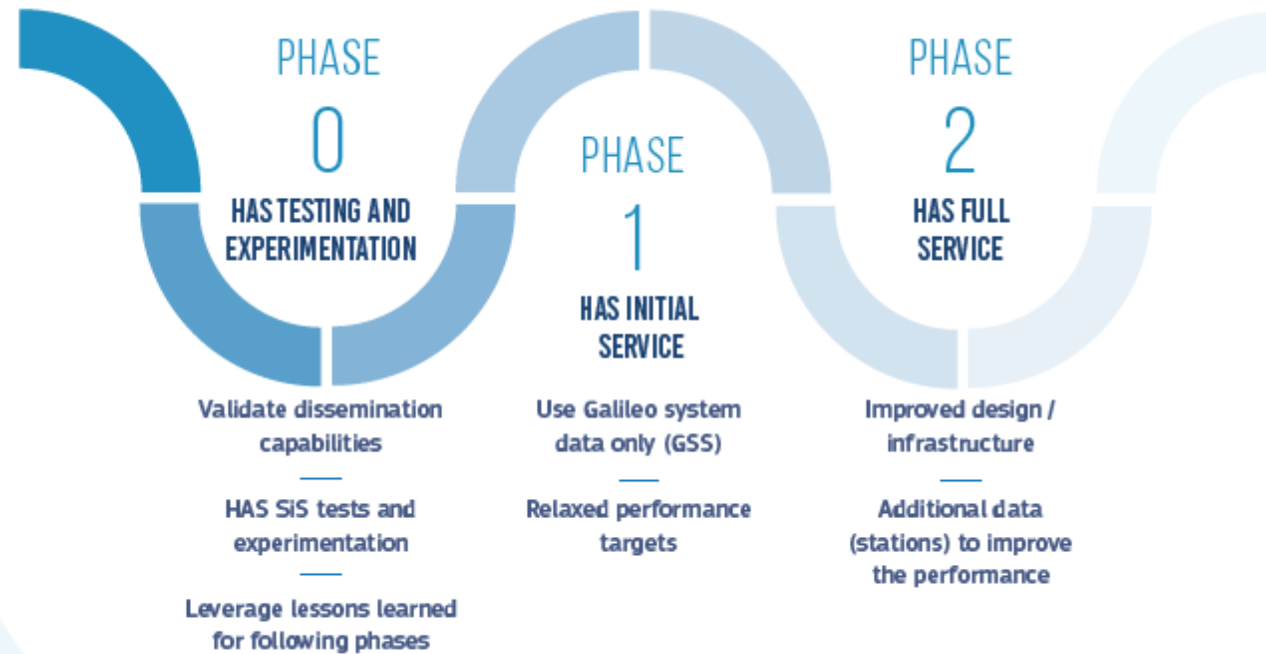


- February 8th, 2017 – Commission implementing decision (EU) 2017/224
- November 18th, 2020 – First broadcast of OSNMA data. First OS PVT with authenticated data
- November 15th, 2021 – Start of the OSNMA public Observation Test Phase



Galileo High Accuracy Service (HAS) expected to provide free of charge high accuracy Precise Point Positioning (PPP) corrections from 2022

Demand Support



The Galileo HAS testing campaign is ongoing with the participation of key stakeholders

Demand Support



• Status of HAS Testing activities:

- 1ST broadcast of HAS signal (19/05/21): Promising early results (position accuracy at decimeter level).

Key stakeholders through a EUSPA's Call for Interest:

<https://www.euspa.europa.eu/call-expression-interest-high-accuracy-service-testing>

- 15 companies + 4 EUSPA co-funded projects involved from multiple EU Member States
- Additional testing foreseen
- HAS SiS ICD publication: after the tests completion

• High Accuracy Reference Algorithm:

- Under development
- Foreseen to be available to any interested user when the Service is declared available.

OBJECTIVES



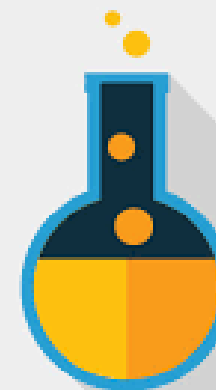
- Validation of critical HAS service elements (ICD).
- Independent assessment of performance*



- Engage stakeholders
- Build a strong relationships with future HAS users
- Foster HAS adoption



- Gather lessons learned and recommendations towards HAS Full Service



The HAS testing campaign is supported by a demonstrator which is not fully representative of the future operational service infrastructure, under no circumstances the tests performed and results obtained represent the performance of the final service.

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EU Space extended Research & Innovation as integrated strategic tool for market uptake



Horizon 2020 & Horizon Europe

User Technology

Adoption Grants

Entrepreneurship initiative



The first Horizon Europe Call for the development of innovative space downstream applications is now open for submissions

Offer Creation



The call is structured in the following 3 topics:

- EGNSS and Copernicus applications in support of the European Green Deal
- EGNSS applications for safety and crisis management
- EGNSS applications for the digital age

Overall
budget of
32.6
million
EUR

Submission
deadline
16/02/22

HORIZON EUROPE



EUSPA supporting the European Commission Cassini initiative for 2021-2027

Offer Creation



THE ROAD TO NEW SPACE

- Clear vision for European space businesses and markets
- New industry setup
- New entrants
- New private investment
- New markets
- New solutions

PROMOTION
CASSINI Hackathons
& Mentoring

**INNOVATION
COMPETITIONS**
CASSINI Prizes

BUSINESS GROWTH
CASSINI Business Accelerator

INVESTMENT
CASSINI Seed and Growth Funding
Facility (InvestEU)

MATCHMAKING
CASSINI Matchmaking with Investors
CASSINI Industrial Partnering

IOD/IOV
CASSINI In-Orbit
Demonstration and
Validation

myEUSpace competition for startups innovating around the use of EU space data from Galileo and/or Copernicus

Offer Creation



Details about the competition:

- ✓ 6 Independent Application Areas
- ✓ 2 Tracks per Area:
 - Track 1 - From Idea to Prototype/ Customer validation
 - Track 2 - From Prototype to Product/ Market entry
- ✓ 50+ Awards
- ✓ € 1 Million Prize Pool

New Submission
deadline: 3rd
December 2021

More info at:

<https://www.euspa.europa.eu/myeuspacecompetition>



Linking space to user needs

Get in touch with us

www.euspa.europa.eu



The European Union Agency for the Space Programme is hiring!

Apply today and help shape the future of #EUSpace!