



# EU Space data for market downstream innovation

TAT ESA/NASA EO course 2022, Prague; 5<sup>th</sup> September 2022

Chiara Solimini, EUSPA



# A new EU Space Programme and new Agency

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



EUSPA 1st Anniversary



Happy Birthday EUSPA!

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

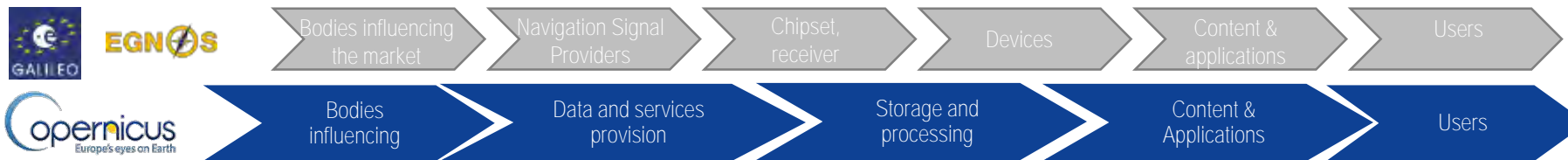
Delivering rapid support over crisis areas



## SSA

Space Situational Awareness monitors and protects space assets.

# All EU Space Program components with an integrated market/user driven approach



GOVSATCOM

## Market & User Knowledge



Extended **Market and technology** monitoring and forecasting

Extended and synergic **User Consultation Platform**

Better understanding the **MS needs** and adding Copernicus Other Users satisfaction survey

## Demand Support



A common **market segments** approach for all EU space downstream

Extended key account with **main players** of the value chain

## Offer Creation



Creation of new “made in Europe” products and services.

Large implementation of end-to-end solutions leveraging synergies.

Supporting entrepreneurship, SME and start-ups

New integrated segmentation





# Market & User Knowledge



# The first EUSPA Market Report addressing the new market segmentation has been released



- The **EO and GNSS Market Report** combines the market and application insights into a **single report** that provides global coverage of the EO and GNSS applications across multiple market segments



New EUSPA EU Space Market Report with focus on both GNSS and EO  
[https://www.euspa.europa.eu/sites/default/files/uploads/euspa\\_market\\_report\\_2022.pdf](https://www.euspa.europa.eu/sites/default/files/uploads/euspa_market_report_2022.pdf)

# Market segmentation

- In total **17 market segments** were derived, common for EO and GNSS domains, taking into account as much as possible the specificities of both





# User Consultation Platform 2022

The UCP is engaging with **other user communities**, industries, service providers and R&D, bringing together **expertise** and **insights** from different applications, sharing experiences, and strengthening an EU network of **innovators** by encouraging **cooperation** across broad disciplines

AVIATION AND DRONES



CONSUMER SOLUTIONS,  
TOURISM AND HEALTH



EMERGENCY MANAGEMENT  
AND HUMANITARIAN AID



ENERGY AND RAW MATERIALS



INFRASTRUCTURES INCLUDING  
5G OPTIMIZATION



INSURANCE AND FINANCE



MARITIME AND FISHERIES



**UCP 2022 – 3, 4 October**  
**Registration Open!**

<https://www.euspaceweek.eu/programme>

**Outcomes of the UCP** are used to compile and update a series of **Reports on User Needs and Requirements** per market segment and address priorities for future R&D programs

# Offer Creation





# New opportunities for space downstream 2021-2027



**Horizon Europe**



Igniting innovative space downstream applications

**Horizon Europe – Cluster 4 “Digital, Industry and Space” - applications**

**Call 2021** : opened on 28 Oct 2021, closed on 16 Feb 2022 - GRANTS

**Call 2022** : indicative opening on 27 Oct 2022, closing 16 Feb 2023

[Horizon Europe EUSPA calls](#)



Fundamental Elements

Development of EGNSS-enabled chipsets, receivers and antennas

**Fundamental Elements (Space Programme)**

GRANTS/ PROCUREMENTS

[Fundamental Elements](#)

**START-UP** SUPPORT  
**CASSINI**  
 **EU SPACE**

Supports innovative entrepreneurs, start-ups and SMEs in the space industry

**CASSINI**

Seed and growth funding facility, hackathons, prizes, business accelerator, matchmaking for space Start-ups and SMEs – VARIOUS INSTRUMENTS

[cassini.eu](https://cassini.eu)

# Horizon Europe 2022 (2<sup>nd</sup> call)

Type of Action	Topic	Indicative budget (EUR mln)	Funding rate
IA	EGNSS applications for Smart mobility	9.5	70% (except for non-profit legal entities, where a rate of 100% applies)
PCP	Public sector as Galileo and/or Copernicus user	5.2	100 %
IA	Copernicus downstream applications and the European Data Economy	9.6	70% (except for non-profit legal entities, where a rate of 100% applies)
RIA	Large-scale Copernicus data uptake with AI and HPC	9.6	100%
RIA	Designing space-based downstream applications with international partners	5,1	100%
RIA	GOVSATCOM Service developments and demonstrations	9,1	100%
TOTAL budget:		<b>48,1</b>	

**Opening: 27 October 2022**  
**Deadline: 16 February 2023**  
(indicative)

# EUSPA Horizon Europe proposals shall...

EUSW dedicated sessions on  
5-6 October  
Registration Open!  
<https://www.euspaceweek.eu/programme>



- Exploit the **EU Space programme components**, including EGNSS and Copernicus data and services.
- Exploit **EGNSS differentiators** such as HAS, OS-NMA, Galileo Signal Authentication Service and SAR for the development of new innovative applications.
- Deliver new innovative applications, with commercial impact and a **clear market uptake**.
- A **Business Plan and evidence of user engagement** shall be compulsory and shall be provided as part of the proposal, to demonstrate the user need and sustainability of the project (for Innovation Actions).
- Proposals addressing PRS (Public Regulated Service) related applications not in scope of action.
- Proposals under this topic should **exploit synergies** and be complementary to national activities and activities funded by ESA.
- Participation of industry, in particular **SMEs and midcaps**, is encouraged;
- Participation of, or outreach to, entities based in countries without a space tradition is encouraged;
- Involvement of **post-graduate researchers** (engineers, scientists, and others) is also encouraged, for example through professional work experience or through fellowships/ scholarships when applicable;



# CASSINI Space Entrepreneurship Initiative



CASSINI is the European Commission's initiative to boost space entrepreneurship, tailored to the needs of Europe's New Space industry

# CASSINI supports entrepreneurship during the entire innovation cycle



## IDEAS / INNOVATION

Incentivising new ideas

**CASSINI Hackathons**  
**CASSINI Prizes**

## TECHNOLOGIES

Developing disruptive  
technologies

**Horizon Europe**  
**European Innovation**  
**Council**

## EXPANSION AND GROWTH

Increasing number of  
Venture Capital funds  
with focus on space

**CASSINI Seed and**  
**Growth Funding Facility**

Connecting with VC  
funds and commercial  
partners

**CASSINI Matchmaking**

# Discover the CASSINI Hackathons

6 Hackathons (2021-2023)

60 Local Organisers

10 per edition

Hybrid

Local

European

Global Themes

## Why the CASSINI Hackathons?



Contributing toward solving important problems for society & industry



Fostering the next generation of entrepreneurs & problem solvers



Creating a truly a pan-European experience



Connecting industry with the EU Space ecosystem

<https://hackathons.cassini.eu/>

**4th CASSINI Hackathon on 3-5 November 2022!**

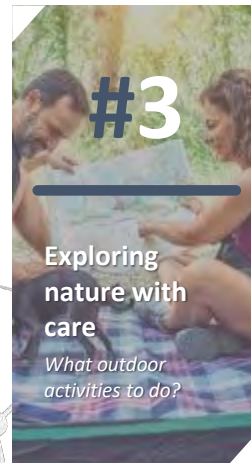
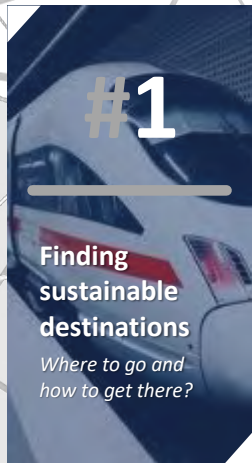




# #3 Cassini Hackathon in May 2022

The 3<sup>rd</sup> Hackathon has challenged hackers to uplift the **tourism sector** with **resilience**, **sustainability** and **digitalization** using **EU Space data**

*three tourism-themed challenges:*



**3<sup>rd</sup> CASSINI Hackathon on 12-14 May**  
**4<sup>th</sup> CASSINI Hackathon on 3-5 November**



Choose your location



Register as a participant from  
14 March



Join the Big Ideas Campaign  
25-28 April



Form a team



Hack your way to success

Norway  
Netherlands  
Denmark  
Poland  
France

Austria  
Hungary  
Italy  
Portugal  
Greece

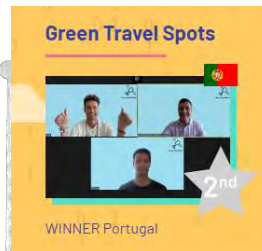
Winners get cash prize +  
**100h of mentoring**  
over a period of 6 months

<https://hackathons.cassini.eu/>

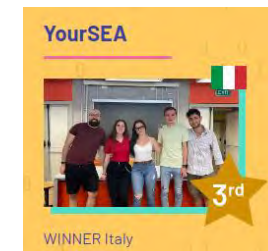
# Cassini Hackathons selected great winners out of national champions



An application that uses cutting edge AI and EU Space data to identify uncharted hiking trails, providing information about climate and user location.



An API-based service that provides quality measurements and reports about water and air quality for any location in the world



A quality index (Q-SEA) that describes the water condition of the Italian seaside and offers the opportunity to make a comparison between areas.

# CASSINI Maritime Prize



Application deadline  
May 2023



- Prize for the best **data-driven marine** or **maritime digital application**
- Solutions for the **detection, monitoring** and the **removal of microplastics**, plastic litter as well as of larger items in **rivers, shores** and **coastal zones**, in order to support the prevention of ocean pollution
- Use of **Copernicus and/or Galileo data** in combination with other data sources. Use of Artificial intelligence, high performing computing, big data processing and management is also encouraged
- First **3 winners** will receive **EUR 950.000** cash prize each

The CASSINI Prize will open for submissions at the [EC's Funding & Tenders portal](#)



# Other CASSINI Prizes: myEUspace prize contest



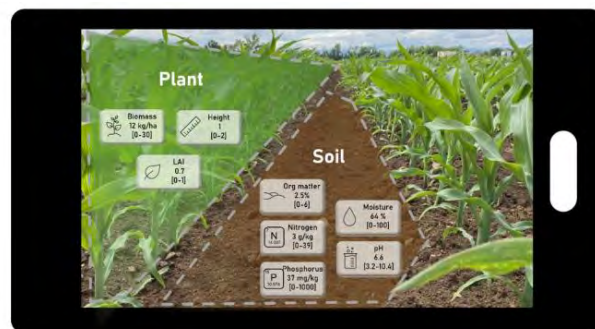
mobile app & panic button for safety of women



Smart glasses for improving mobility of people with low vision



mobile robot to replace human in Dirty-Dull-Dangerous jobs



mobile app for sustainable precision farming

- Objective: stimulate innovation in Europe with the development of **commercial solutions** like mobile apps, wearables, robotics using **EU space data** and their synergies
- **New edition of competition for space data solutions with a prize pool of € 1.000.000 will be open for applications in September 2022!**

[Last year edition: myeuspacecompetition](#)

## MATCHMAKING

CASSINI Matchmaking with Investors  
CASSINI Industrial Partnering

# CASSINI Matchmaking

EUSW dedicated sessions on 5  
October

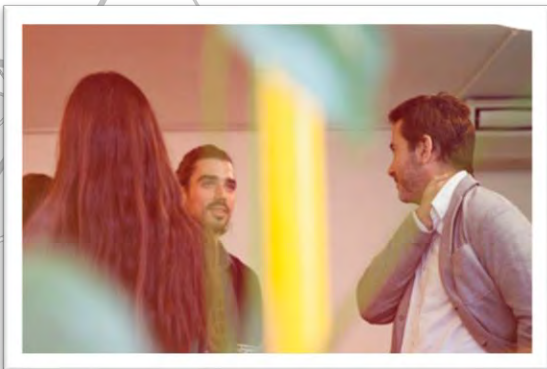
Registration Open!

<https://www.euspaceweek.eu/programme>

**Objective:** Step-by-step support to start-up, scale-up companies and SMEs to **improve their ability to attract venture capital funding and form industrial partnerships**

CASSINI Matchmaking will feature two tracks:

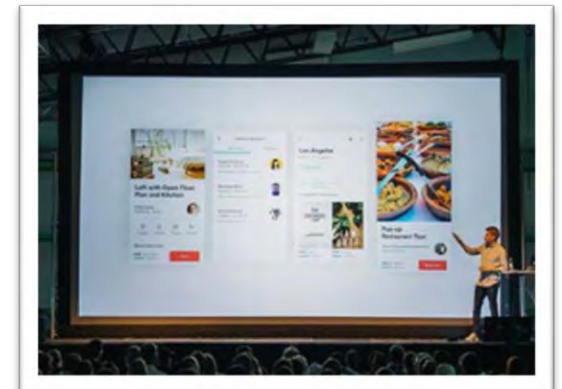
- **Investor matchmaking:** links between startups and VC funds
- **Industrial partnering:** links between startups and large corporations



- ✓ Startups, scaleups or SMEs can benefit from direct access to investors



- ✓ Investors can get in touch with steady, high-performing companies with a great business solution



- ✓ Corporations can fuel innovation and make their organisations fitter for the future

# Capacity building workshops

Session	Theme	Venue + online	Date
<b><u>Episode 1</u></b>	<b>Infrastructure lifecycle support</b>	EUSPA, Prague	28.03.22
<b><u>Episode 2</u></b>	<b>Security and defence</b>	COM, Brussels	02.05.22
<b><u>Episode 3</u></b>	<b>Consumer solutions: well-being, education and entertainment</b>	EUSPA, Prague	23.05.22
<b><u>Episode 4</u></b>	<b>Access to space</b>	ESA, Paris	13.06.22
<b><u>Episode 5</u></b>	<b>Fund setup, investment strategy, investment team, exit strategy</b>	EIF, Luxembourg	27.06.22

Past

**Batch 1:** March-July 2022

**Batch 2:** Sep-Dec 2022

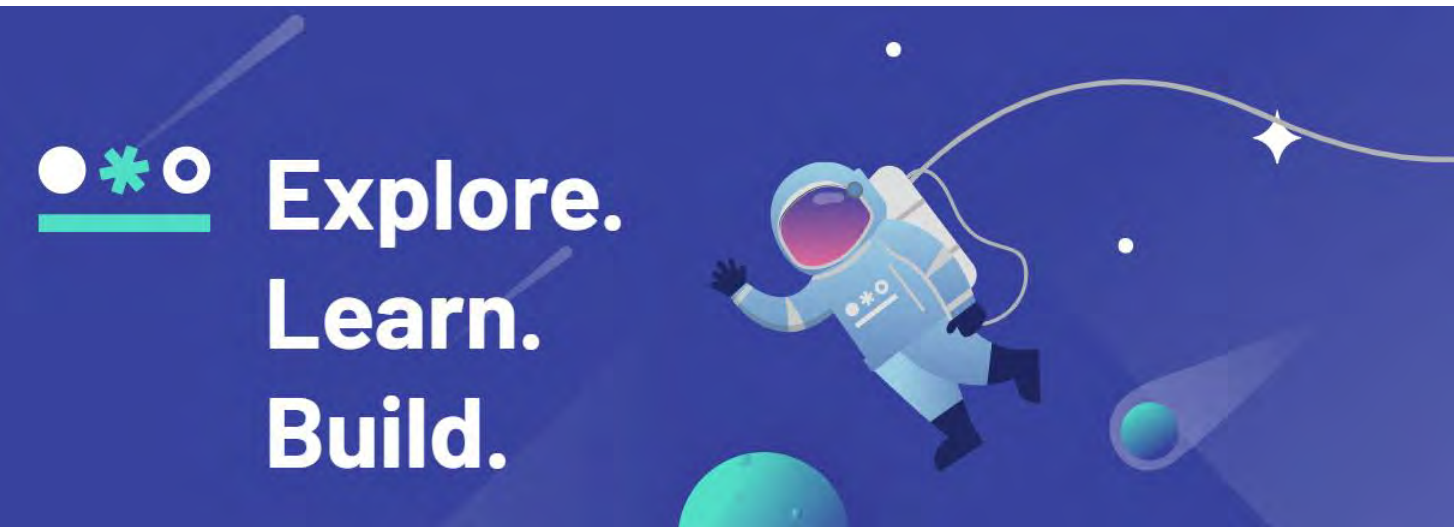
**Batch 3:** March-July 2023

**Batch 4:** Sep-Dec 2023

Upcoming



# EUSPA Space Academy: Lift off to a successful space business



**Trainings**



**Workshops**



**1-to-1 mentoring**



**Office Hours**



EU space  
data and signals



Team &  
resources



Customer  
& sales



Legal



Product



Business



Finance



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

# EUSpace4Ukraine roadmap

## Launch



**Open call** for interest for **other technological solutions** as well as **NGOs/helpers**

**Online platform launch**

12-April

## Matchmaking



**Connecting NGOs/helpers & innovators/app developers** working on EU-Space based projects

17-May

## Hackathon



**#EUSpace4Ukraine Hackathon to develop new solutions**

29-Jun to 01-Jul

## UCP 2022



User Consultation Platform 2022: **Humanitarian Aid session**

Oct-2022

# Watch this Space



# WATCH THIS SPACE



your weekly #EUSpace update

**Subscribe to our newsletter and stay up to date with the Space News!**

<https://www.euspa.europa.eu/subscribe-our-newsletter>





Linking space to user needs

Get in touch with us

[www.euspa.europa.eu](http://www.euspa.europa.eu)



The European Union Agency for the Space Programme is hiring!

Apply today and help shape the future of #EUSpace!