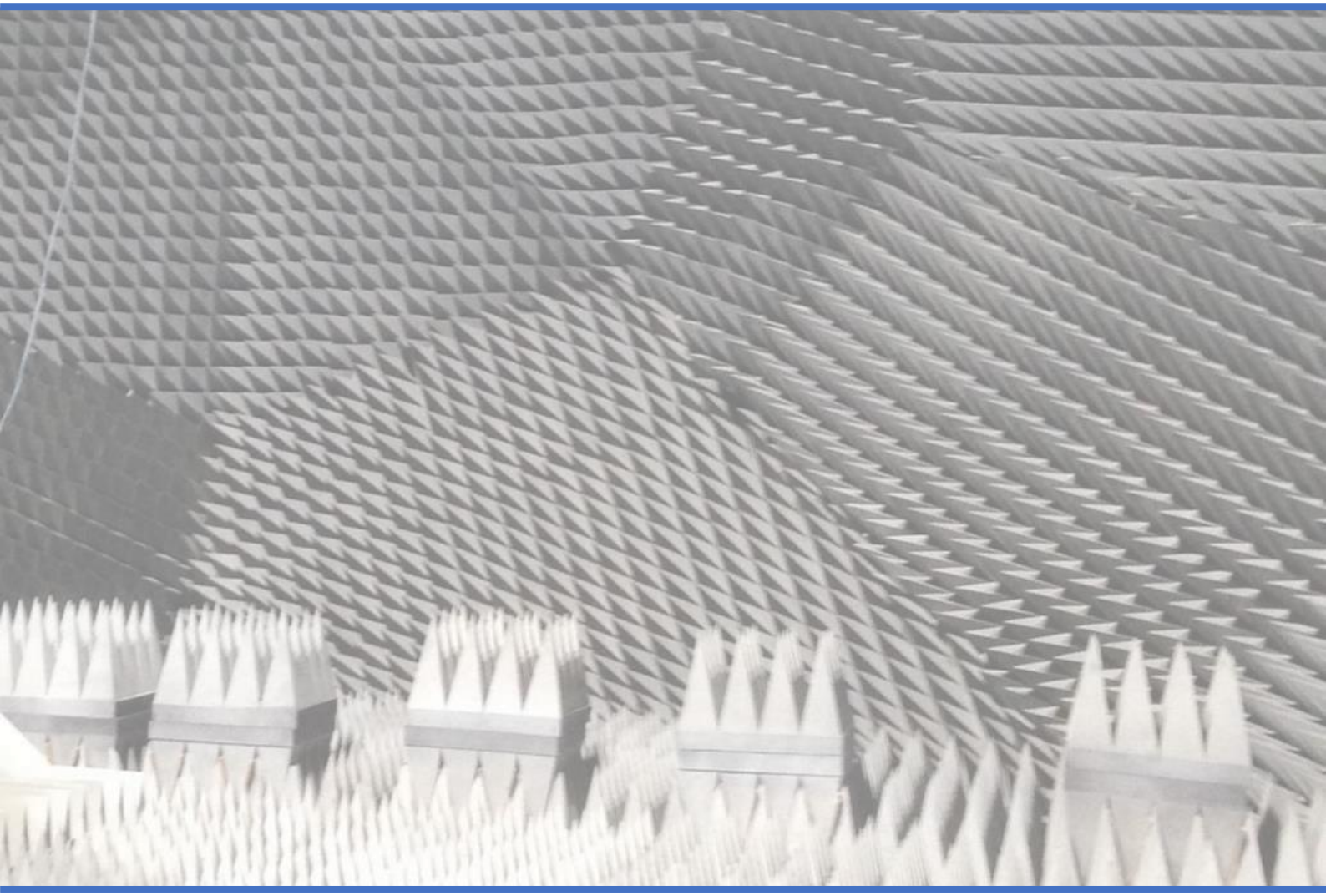
GAMMA

GAlileo-based
Multi-frequency
Multipurpose
Antenna

Newsletter #5

October 2022



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EUSPA European Union Agency for the Space Programme

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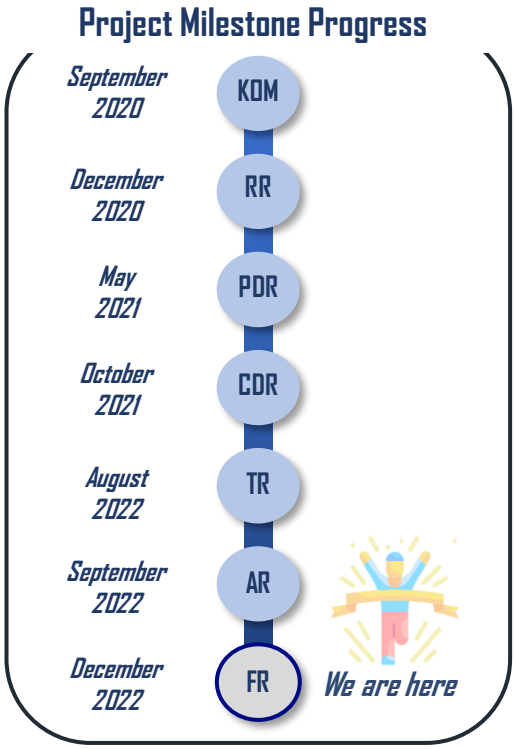
See you soon

Dear GAMMA readers,

After one year of intense both technical and related dissemination activities, driven by an uninterrupted enthusiasm, the GAMMA Project is back with the last Newsletter edition.
As shown in the Project Milestone roadmap, GAMMA Consortium has successfully achieved the Final Review close out on 2 December.
As for the previous editions, in this newsletter we give a glance of GAMMA Project achievements and will explore with you the themes related to the project topics.



The **GAlileo-based Multi-frequency Multi** purpose **Antenna** will significantly improve the performance of the receivers connected to the antenna and the whole system ensuring continuity, availability, robustness and integrity to GNSS signal.

Thanks to EUSPA, which, with Fundamental Elements, allows to bring innovation on products, and special thanks to Joaquín Reyes for managing the project that concluded successfully in 24 months without delays or extensions.

Stay tuned for future project improvements, all achievements will continue to be shared on our social channels and please take in mind that the project will not end here!

At last, a drill-down about Anti-Jammer Global Market in 2022.

[1] as highlighted in the EUSPA Market Report 2022

GAMMA Achievements

GAMMA Final Review

After 24 months of intense activities GAMMA Project has successfully achieved the Final Review close out on 2 December

Social Media

The Consortium has always kept update the social accounts by following the dissemination plan. Innovative methods to disseminate project results riding the wave of a digital approach and thus, boost the project acknowledge have always been applied

Publications & Events

The GAMMA Consortium has attended the **EU Space Week 2022** from 3 to 6 October in Prague, Czech Republic.





News from the world

Increasing allotment of higher military & defense budgets by most governments are the significant factor driving the growth of the anti-jamming market. The governments of different countries are allotting more money to the military and defense to enhance the nation's security and establish technically advanced military bases with innovative machinery and defense systems.

Anti-Jamming Global Market Analysis Report 2022

The global anti-jamming market is expected to grow from $3.88 billion in 2021 to $4.24 billion in 2022 at a compound annual growth rate (CAGR) of 9.27%. The anti-jamming market is expected to grow to $6.40 billion in 2026 at a compound annual growth rate (CAGR) of 10.83%.

The anti-jamming market consists of the sale of anti-jamming products and services by entities (organizations, partnerships, and sole proprietors) that refers to a device or system used to prevent jamming in communications or electronic devices. Anti-jamming systems or devices protect electronic receivers from interference and intentional jamming. These products protect weak positions in modern infrastructure systems including battlefield systems, ensuring continuous operations of GPS systems in high-frequency jamming areas. The different technologies used in anti-jamming systems include nulling, beam steering, and civilian techniques. These systems are widely used in flight control, surveillance & reconnaissance, position, navigation & timing, targeting, casualty evacuation, and other are applications.

Asia Pacific was the largest region in the anti-jamming market in 2021 and is expected to be the fastest-growing region in the forecast period.

This higher allocation of defense budgets is expected to boost demand for anti-jamming products, as it is one of the significant ways to enhance the nation's security in sensitive environments. In the United States, defense spending makes up $754 billion of the $7.2 trillion annual budget for 2022, which is approximately 10.5% of the US budget.

Similarly, in India, for the 2022-2023 budget, the government increased the Ministry of Defense's (MoD) budget allocations by 9.8% to approximately $70.6 billion (INR 5.25 trillion). These increasing military and defense budgets are expected to increase demand for anti-jamming products during the forecast period.

Technological advancement is a key trend gaining popularity in the anti-jamming market. The key players in the anti-jamming sector are focusing on bringing advanced anti-jamming systems to meet end-customer demands and strengthen their position in the market.



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Events Roadmap

This page presents **main GNSS/non-GNSS related events and workshops** targeted for the participation of GAMMA Consortium.*

JNC 2021
24–27 August 2021
Greater Cincinnati, Ohio

ATTENDED

Navigation 2021
15–18 November 2021
Virtual

GEO Business 2021
24–25 November 2021
London, UK

NAVITEC 2022
4–8 April 2022
Noordwijk, Netherlands

ATTENDED

EUREF 2022 Symposium
May/June 2022
Zagreb, Croatia

*the list is subject to continuous update

Events Roadmap

This page presents **main GNSS/non-GNSS related events and workshops** targeted for the participation of GAMMA Consortium.*

JNC 2022
6–9 June 2022
San Diego, California

ATTENDED

ICL GNSS 2022
7–9 June 2022
Tampere, Finland

European Microwave Week
25–30 September 2022
Milan, IT

ATTENDED

ION GNSS+ 2022
19–23 September 2022
Denver, Colorado

EU Space Week 2022
3-6 October 2022
Prague, Czech Republic

ATTENDED

*the list is subject to continuous update

Consortium Members

Prime Contractor

KE ELEKTRONIK
an Amphenol company

KE Elektronik is a high performing and innovative company, with more than 3.000 employees worldwide. KE Elektronik is part of Amphenol Corporation - which is one of the world's largest interconnect manufacturers with more than 80.000 employees

Consortium Partner

ThalesAlenia Space
a Thales / Leonardo company

Thales Alenia Space experience in Navigation covers a wide spectrum of skills, including complete system development, system and sub-system design, ground segment, navigation payloads, navigation receivers and user terminals, navigation tools for environment assessment, and applications

Consortium Partner

spaceXe

Electronics designer and System integrator with distinctive capabilities in GNSS and a proprietary network of reference stations that will support the testing

Consortium Partner

bip.

BIP is a global level business consulting partner with more than 4.600 employees over 13 countries, with an extensive track record in thorough economic evaluations in the global Aviation, ATM and Space domains, thus able to build sound business plans and viable dissemination activities

Contacts

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www.projectgamma.eu/

