

EUROPEAN SPACE WEEK

#EUSpaceWeek

ONLINE EDITION

Mass Market Segment Panel Discussions Results Summary

User Consultation Platform 2020

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Organised by:



European
Global Navigation
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Under the auspices of:



EU Space Programme:



Copernicus

EGNOS



Agenda

- Highlights of Main Trends in the Market
- Recommended Refinements of User Requirements
- User Requirements for New/Emerging Applications
- Testing Campaigns
- Discussion on EGNSS Services
- Research and Innovation Priorities
- Synergies with Copernicus

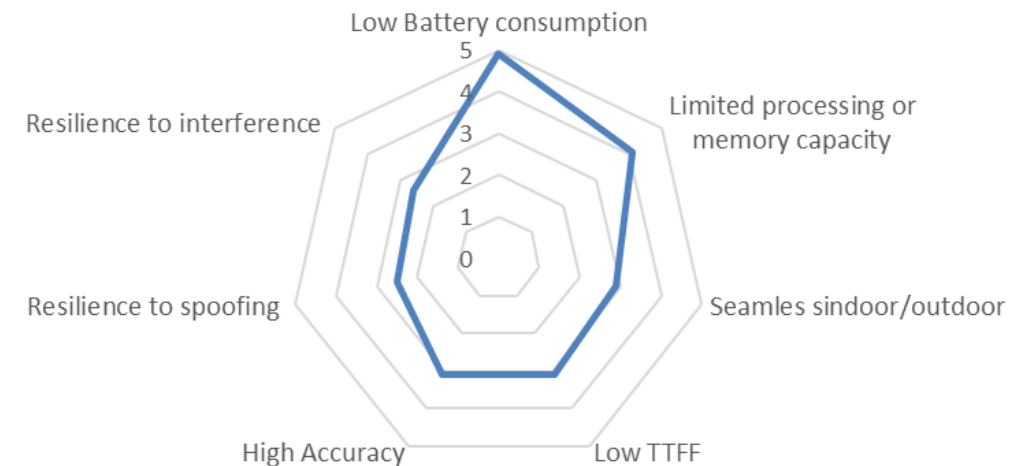
Highlights of Main Trends in the Market

- Galileo and dual-frequency
- Low cost, high autonomy, low size, low weight
 - i.e. chipset hardware specific design; trade offs on fix rates, memory, battery/power consumption, processing, specific algos
- Hybridisation (e.g. smartphone sensors, cell ID, LPWAN)
- IoT market potential is emerging and tremendous
- Assisted techno, Cloud based approaches
- Nanosat connectivity soon (e.g. with Kineis)

Recommended Refinements of User Requirements

- Wide variety of applications with very different requirements
- Low battery consumption is a crucial feature for IoT
- Need a signal allowing fast acquisition and easier to track
- Authentication is not necessary for all applications, but can be crucial for many, and would be a strong differentiator for them
- Many applications can deal today with a metric accuracy, but a majority of the audience considered High Accuracy as an important feature, which could open the door to new applications

Importance of the feature for IoT applications
1 : null - 5 : crucial



User Requirements for New/Emerging Applications

- Need of a High Accuracy service in some emerging uses cases
- Implementation of OSNMA is a market enabler for specific uses cases (e.g. high value asset tracking)
- Faster signal acquisition and easier tracking would make the application more attractive (fast fix) and would contribute to power consumption optimisation

Testing Campaigns

Live testing campaigns on smartphones/wearables performed by Airbus (GSA contract) – JRC support (Lab tests)

- Objectives:
 - Comparison of dual-freq/single freq smartphones accuracy
 - Evaluation of the Galileo standalone performance
- Results:
 - Dual freq smartphones take advantage of the L5/E5a signals to get better positioning solution
 - Smartphones RX are able to provide a PVT with Galileo signals only
 - Most of the smartwatches are able to use Galileo signals
 - No clear superiority in GNSS receiver configuration
 - Consideration of Galileo in RX implementations is improving



Discussion on EGNSS Services

- Presentation of Copernicus and mobile apps potential towards synergetic apps
- Galileo signal optimisation/evolution towards acquisition /tracking improvements and lower consumption would be welcomed - Must be competitive wrt GPS
- Authentication and High Accuracy do not concern all applications (Nonetheless it might be essential for application concerned)

Research and Innovation Priorities

What are the emerging EGNSS applications that are using synergies with Copernicus?

- *Fast observation of pollution/risk/accident to support citizen health*
Empower the citizens to contribute to green technology development

Research and Innovation Priorities

What financing tools could be used to support further market uptake of applications in your market segment? (e.g. Grants, Innovation procurement, acceleration)

- *All financing tools are important, what is crucial is to have tools supporting each phase of the development of a product from R&D, up to and without forgetting tools to support the industrialization phase and procurement. Wrt Procurement, actions could target directly procurement agency, e.g. organise some communication and coordination among procurement agencies of all EU MS*
- *A start-up coaching for access to funding.
Support educational activities (MOOC and other) to facilitate access to Galileo funding for more people*

Research and Innovation Priorities

What large implementation projects are emerging in your market segment

- *Big projects on Galileo HAS and Authentication services, supporting all steps from research and development of user Galileo devices and services, integration into professional systems and platforms, including up to operational testing with several user communities (involving many of their procurement agencies)*
- *lot for container trackers*

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