

BEIA - Opportunity for Connected & Automated Mobility

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# BEIA –Opportunity for Connected and Automated Mobility

## About us:

- National and EU R&D Projects SME
- Telecommunications, Telemetry & IT turn-key projects Text
- Strong expertise in analysis, data science and interactions, scientific computing and optimization, system and software engineering, and infrastructures and networks
- [www.beia.ro](http://www.beia.ro); [www.beia.eu](http://www.beia.eu) ; [www.beia-telemetry.ro](http://www.beia-telemetry.ro)

**BEIA** is a success story in Romanian landscape has a strategic deployment agenda:  
Connected and Automated Mobility ( CAM)  
Mobility as a Service (MaaS)





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We built solid partnership in several area:

- Urban and Clean Mobility
- Transport and Logistics
- Connected and Automated Driving
- Cyber Security



WELCOME TO THE 1<sup>ST</sup> FLEXI-cross NEWSLETTER!  
It's time to fill you in on the beginnings and latest updates of the FLEXI-cross project.

BEIA's current mobility projects:

VITAL5G                      FLEXI Cross  
FOR FREIGHT



SOLID-B5G                      MOBIWAY  
IMMINENCE  
SARWS  
USWA



EUROPEAN CONGRESS  
LISBON, PORTUGAL  
22-24 MAY 2023  
ITS: The Game Changer.



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A suite of tactical **BEIA's** project :

## Vertical Innovations in Transport And Logistics over 5G experimentation facilities **VITAL-5G**

- 16-member consortium (Belgium, Cyprus, Greece, Romania, Spain)
- The VITAL-5G proposal plans to showcase the added-value of 5G connectivity for the European T&L sector by adopting a multi-modal approach containing major logistics hubs for freight and passengers (seaport, river port-warehouse / logistics hubs, highways) as well as the respective stakeholders.
- V2X Use targeted locations in: Belgium, Greece, Romania





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## Flexible and Improved Border Crossing Experience **FLEXI- Cross**

- Project aims to increased security and reliability of EU border checks for people and goods, while enhancing and improving the border management capabilities, through the development, deployment and validation of a toolkit of innovative border-checking solutions, in real operational environments, addressing road, rail and port borders.



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## Flexible, multi-mOdal and Robust FREIGHT Transport **FOR FREIGHT**

The plans aims to maximize the utilization of multimodal freight transport capacity and reduce the average cost. It provides FOR-FREIGHT solutions the following functionalities will be delivered:

- Real-time door-to-door tracking and status monitoring & control of cargo,
- Decision Support Systems for the optimization of resource utilization based on Digital Twin concept,
- Increased resilience and security of information based on Blockchain technology.
- Increased sustainability through the implementation of a carbon footprint assessment framework and use of alternative modes of transportation (subway).



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## 5G Enabled Road Safety Services **5G-SAFE-PLUS**

- The project will support wide-scale implementation and usage of advanced road weather, road maintenance and road safety services with enhanced 5G networking capabilities and service enablers.



## A Massive MIMO Enabled IoT Platform with Networking Slicing for Beyond 5G IoV/V2X and Maritime Services **SOLID-B5G**

- The main goal of the SOLID-B5G project is to perform cutting-edge research and develop breakthrough beyond state-of-the-art solutions in orchestration, management and control (OMC) of resources, in the context of network slicing and edge computing based on massive internet of things.





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## Mobility Beyond Individualism: an Integrated Platform for Intelligent Transportation Systems of Tomorrow **MobiWay**

- Our goal is to provide a platform of ecosystems, which allows engaging communities in exploiting the shared value of mobility and collaborative cultures that can be leveraged beyond the classical views of social networks, respectively the current trends of service creation. The project sets out a new vision for using mobile computing capacities for provisioning and support of ubiquitous connectivity and real-time applications and services for smart cities' needs.





## Strategic Future Session – opportunities Why BEIA Austria/ Belgium/Romania?



- **geographic** socio-political security area
- **powerful** and sustainability cash-flow force
- **strong** capabilities, workforce resources: 30 engineers, 10 technicians, 30 R&D employees (10 Prof, 5 PhD, 2 PhD candidate, 5 senior researchers and 8 junior researchers), 10 management, 3 medical doctors, 6 marketing & sales.
- **multi-faced** experience in research combinatorial optimization such as routing, planning, telemetry
- **market** leader and agile continuous development in: Smart Sensors, Internet of Things, Cybersecurity, Data, Cloud, Edge Computing, TRANS4mers certified.

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**Thank you!**