



5G-IANA is an EU funded project running from June 2021 to November 2024. The project aims at providing an open and enhanced experimentation platform that will provide access to 5G network resources, on top of which third party experimenters (i.e., SMEs) in the Automotive-related 5G-PPP vertical will have the opportunity to develop, deploy and test their services.

Taking a decisive step beyond technological challenges, and exploiting input from the demonstration activities, 5G-IANA will engage in an extensive, multi-stakeholder cost-benefit analysis that will identify and validate market conditions for innovative, yet sustainable business models supporting a long-term roadmap towards the pan-European deployment of 5G as key advanced Automotive services enabler.

Use cases

5G-IANA will be demonstrated through seven automotive-related use cases in two 5G testbeds.

- USE CASE 1:
REMOTE DRIVING



- USE CASE 2:
MANOEUVRES COORDINATION FOR AUTONOMOUS DRIVING



- USE CASE 3:
VIRTUAL BUS TOUR



- USE CASE 4:
AR CONTENT DELIVERY FOR VEHICULAR NETWORKS



- USE CASE 5:
PARKING CIRCULATION & HIGH-RISK DRIVING HOTSPOT DETECTION



- USE CASE 6:
NETWORK STATUS MONITORING



- USE CASE 7:
SITUATIONAL AWARENESS IN CROSS BORDER ROAD TUNNEL ACCIDENTS



Testbeds

5G-IANA will utilize two different 5G SA test networks:

-  **ULM (operated by NOKIA):**

- On-air LTE/5G NSA and 5G SA multi-site mobile test network used for product testing and research purposes.
- All Use Cases will be demonstrated.

-  **LJUBLJANA (operated by Telekom Slovenije):**

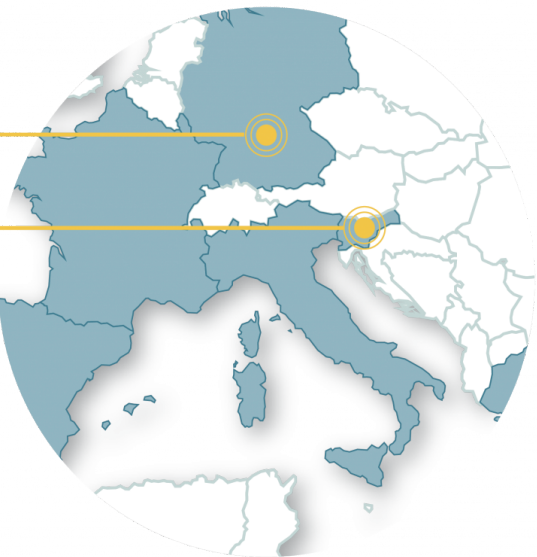
- Dedicated 5G infrastructure, provides 5G NSA and SA connectivity, including LTE, cloud virtualization environment and mobile edge.
- Use Case 7 will be demonstrated.

NOKIA

Ulm, Germany

TELEKOM SLOVENIJE

Ljubljana, Slovenia



Expected BENEFITS:

SAFETY

5G-IANA aims to increase road safety

How:

By reducing road risks through real-time notifications about emergency cases on the road and kinematic information when overtaking.

ENVIRONMENT

5G-IANA aims to reduce carbon emissions

How:

By improving traffic flow and road utilization through real-time traffic data that enable drivers to use alternative paths and shorten time-to-destination.

ECONOMY

5G-IANA will create new business opportunities

How:

By increasing the uptake of 5G services in the Automotive sector and exploring novel business models with new market actor landscapes.

TRAVEL EXPERIENCE

5G-IANA will promote an enhanced travel experience

How:

By leveraging VR and AR technologies and exploring diverse possibilities for a better travel experience.

A Horizon 2020 project that will provide an open 5G experimentation platform to enable the development, deployment and testing of Automotive related 5G applications.

Main objectives



To create new business opportunities and boost market for start-ups and SMEs with Automotive NetApps;



To increase road safety and reduce automobile carbon footprint by leveraging Connected and Automated Mobility using enhanced network performances;



To implement and trial Connected and Automated Driving relevant Use Cases to validate and assess the Automotive Open Experimental Platform (AOEP) suitability and functional improvements;



To provide accurate localization and low latency mission-critical applications;

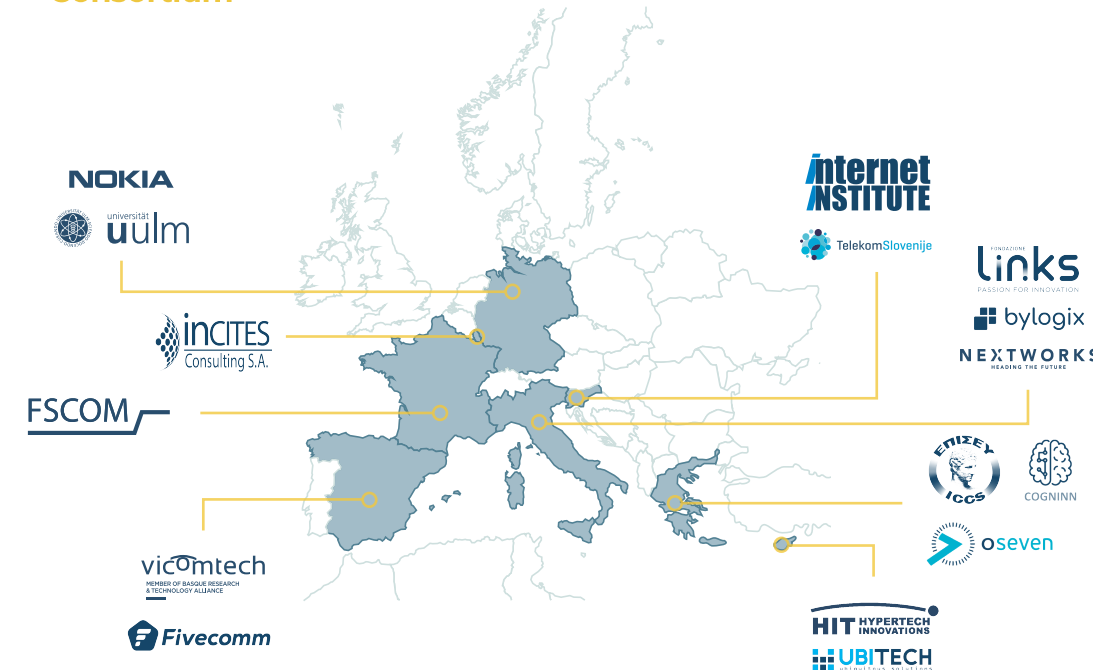


To specify and provide the 5G-IANA AOEP;

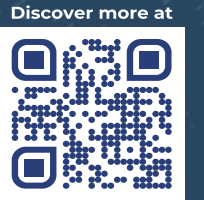


To specify and implement a repository environment for NetApps and VNFs to ease the design and chaining of new automotive-related services;

Consortium



5G-IANA Consortium comprises 16 partners within 8 EU Member States. The consortium counts on major research organisations actively involved in national and EU projects, as well as Telecom and IT manufacturers, and highly expertized SMEs.



5G INTELLIGENT AUTOMOTIVE NETWORK APPLICATIONS

www.5g-iana.eu

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€ 7.649.795

EU contribution
€ 5.999.969



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Coordinated by:



ICCS (Greece)

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5G-IANA

IANA_5G



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