



5GASP: 5G Application & Services experimentation and certification Platform

From the 27th to the 29th of January 2021, members of project **5GASP** held an online project kick-off event, where initial plans were drawn.

5GASP is a research project funded by Horizon2020 EU's Research and Innovation Programme. With a duration of 36 months (the 1st of January 2021 – the 31st of December 2023) and a total budget of 6,8 Million Euros, the project brings together leading European research/academic institutions, industries and 8 innovative and highly skilled SMEs. The **5GASP** consortium of 13 members has been carefully selected to cover all the required research areas in a well-balanced way, utilising their expertise, previous collaborations, and state-of-the-art technical background to overall meet the project's objectives.

The main technical objective of **5GASP** is to build and operate an Open and Inter-Domain 5G NFV-based Reference (Open5G-NFV) ecosystem of Experimental Facilities. This ecosystem will not only integrate existing facilities already proven in previous ICT projects but will also lay down the foundations for instantiating fully softwarised architectures of vertical industries. Furthermore, it will provide facilities to test and validate Network Applications taking into consideration vertical-specific requirements. **5GASP** will demonstrate its Open5G-NFV ecosystem for two verticals deployed across state-of-the-art 5G infrastructures: Automotive and Public Protection and Disaster Relief (PPDR); however, it will also be as generic as possible to deploy, validate and certify Network Applications stemming from other verticals.

5GASP strives to leap forward via:

- Acceleration of the development, testing and certification of Network Applications, through the creation of a common platform, DevOps tools and a certification roadmap for Network Applications.
- Its Open5G-NFV ecosystem consisting of state-of-the-art testbeds where Network Applications for different verticals can be tested and validated in a time- and cost-effective way.
- Technical innovations addressing DevOps, inter-domain use-cases, security and trust aspects associated with Network Applications' deployment and operation.



5GASP focuses (i) on the Automotive vertical because of its strict network requirements that require vertical-specific hardware and (ii) on the PPDR vertical because the latter caters for interesting multi-domain use-cases. In the scope of the project, specific Automotive, PPDR as well as cross-vertical use cases will be developed, resulting from the different Network Applications that shall be deployed over **5GASP**'s Open and Inter-Domain 5G NFV-based Reference ecosystem. The Network Applications, enablers of the **5GASP**'s use-cases, are the following:

- Virtual On-Board Unit (vOBU).
- Virtual RoadSide Unit (vRSU).
- ITS station.
- Efficient MEC handover.
- Multi-domain Migration.
- Vehicle-to-Cloud (V2C) Real-Time Communication.
- Remote Human Driving - Teleoperation for assisting vehicles in complex situations.
- Privacy Analysis of UEs' data streams.
- 5G Isolated Operation for Public Safety.
- Vehicle Route Optimizer.
- Fire detection and ground assistance using drones.

Selected use cases will be showcased in public events to reinforce **5GASP**'s project mission and statement: How the **5GASP** platform and its associated tools and services make it easy for a developer to deploy a Network Applications with Zero-Touch Orchestration.

Find out more details regarding the milestones of the project, its timeline and the members involved at: <https://5gasp.eu/>.



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<https://www.linkedin.com/company/5gasp-5g-application-services-experimentation-and-certification-platform/?viewAsMember=true>



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