

5G Safety - Phase 1 Industrial Research, Sub-phase IR.1

Innovation Management

Result IR.2, Task T.1.2 Innovation Management

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1. Abstract

The summary is prepared based on document IR.2: Innovation Management, which is the result of activity T.1.2.

The innovation activity is identified as the core technical contribution of the project and one of the identified key objectives, which we, the consortium partners, have formulated in the application form, and which reads as follows: To cater for improved innovation and research capacities in 5G and public safety sectors in Slovenia and Europe.

In the 5GSecurity project, we have carried out technology-intensive research and innovation to develop a new generation of 5G-ready products and services tailored to the needs of the PPDR sector, whose market potential is based on the application of the latest breakthrough technologies, in line with identified key cross-cutting technologies, and on unique offerings for specific 5G-ready niche markets with significant strategic, societal and economic relevance. The 5GSecurity project has placed great emphasis on managing innovation potential and ensuring contributions to technological progress (beyond state-of-the-art) in a number of research areas, the most important of which are:

- Dispatcher as a Service (DSaaS): an innovative concept for providing dispatching functions in the form of virtualised, network-independent cloud services.
- Resilience and interoperability of hybrid public networks on 5G: A new architectural concept at network and service level to support experimentation and piloting in the area of public safety communications in the migration process from narrowband to broadband services in the transition phase towards (4.5G/5G).
- Novel interaction modalities: Enriched visual information presentations using VR/AR in the context of Public Protection and Disaster Relief (PPDR); use of tactile and auditory modes of information delivery.
- Operational communications for disaster scenarios: A new concept of ultra-reliable lifeline services with guaranteed service continuity.
- Security and integrity aspects through DLT technologies: Optimised use of Blockchain technology to implement identity verification and management capabilities.

In activity T.1.2 Innovation Management, the following tasks were carried out:

- Developed an innovation management and IPR plan in the area of PPDR, aiming at defining a methodology for managing innovation processes. As the innovation process is a living thing, it is expected that the document itself and the methodology will change during the course of the project. At the end of the assignment, this document will be one of the deliverables of the project, on the basis of which the final report for assignment T.1.2 Innovation Management will be prepared,
- Defined the orientation and management of the innovation programme, which in the first phase was mainly a process of idea hunting, definition and development,
- Set the framework for the innovation programme, which was helpful to the Innovation Committee and other stakeholders in the project,
- Evaluated all inventions and subsequent innovations and national patents, as well as new technological, process, organisational solutions.

In the 5GSafety project, added value was created by implementing innovation-intensive research and prototyping, the results of which will be integrated into highly specialised and technologically advanced products and services. This will help to increase the competitiveness of the 5GSafety consortium as a whole and of the partners individually.

We have demonstrated our innovation capacity based on:

- Innovation and patent related to products and services,
- New technological, process, organisational solutions,
- Unique methodological approaches and by the activities carried out in relation to the validation of key performance indicators, among which we mention the innovation campaigns as the most important,

- The methods used to develop and test ideas,
- Catalysing a new market ecosystem for the development of new 5G PPDR services and applications.

The unique value of the 5GSafety project, which is a strong partnership between internationally renowned research partners, leading technology providers and highly innovative SMEs well established in the wider ecosystem of international 5G and public safety research, innovation and business, has been demonstrated once again in the innovation process and procedures.

The work of the Innovation Committee, a body specialised in IPR, innovation and data governance issues, has been of utmost importance. As an innovation activity, innovation management and knowledge transfer required an understanding of both the commercial and technical aspects, with the aim of successfully developing products and services with global market potential.