5GINFIRE

Newsletter No-1 2018



Latest 5GINFIRE News

5GINFIRE infrastructure ready for experimentation and extension

During its first project year, the 5GINFIRE consortium defined the architecture of its framework and moved forward on implementation of its components, so that the 5GINFIRE infrastructure is ready now to accommodate external experimenters. To proof the 5GINFIRE concept and test its components, two initial project use cases (automotive and smart city) have been designed and implemented. To extend its portfolio of experimental facilities, the 5GINFIRE is ready to adopt further infrastructures and testbeds.

5GINFIRE Open Calls

The first open call of the 5GinFIRE project closed on 28 February 2018, with an overwhelming number of submitted proposals that proves 5GinFIRE addresses the right topics at the right time and has an appealing offer to the industry and academic community in Europe and beyond. The **next** 5GINFIRE **Open Call** will be announced in June 2018 with the **submission deadline on 19 September 2018** (page 2).

5GINFIRE at EUCNC 2018

The main objective is to showcase the capacity of the 5GINFIRE testbed with the ability to deploy a complex Network Service (NS) with Open Source MANO. For this demonstration, the NS is the Unifier Gateway, a VNF developed by b<>com, which provides a multi-access IP connectivity with various radio access technologies (LTE, WiFi, LoRa).



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5GINFIRE Competitive Open Calls

Initial experiments and additional functionalities and infrastructures for experimentation

Results of the 1st Open Call, phase 1

The first phase of the 5GINFIRE Open Call closed on 28 February 2018, with in total 43 eligible proposals were received, requesting more than 3.4 million €, competing for a total available funding of 0.75 million €.

A total of 25 proposals for experiments were received, requesting almost 1.8 million €. Remarkably 12 proposals were received from SMEs, representing almost 50% of the proposers. Two proposals were received from industry, seven from academia and four from research institutes. Five experiment proposals have been granted.

Furthermore, a total of 18 proposals for new infrastructures and functionalities were received, requesting more than 1.6 million €. Also in this category SMEs were very active with six proposals. Seven proposals were received from research institutes and six from academia. Two proposals for new infrastructures have been granted.

1st Open Call, phase 2, announcement – submission deadline on 19 September 2018

Call identifier: 5ginfire-1-2

The main technical objective of 5GinFIRE is to build and operate an open and extensible 5G NFV-based reference (Open5G-NFV) ecosystem of experimental facilities that not only integrates existing FIRE facilities with new vertical-specific ones, but also lays down the foundations for instantiating fully softwarized architectures of vertical industries and experimenting with them. In alignment with the overall project objectives 5GINFIRE is organizing a competitive open call targeting external organizations, industry including SMEs, research institutions, and academia, interested to perform **experiments** on the top of the infrastructure provided by 5GinFIRE. In order to further improve the 5GinFIRE ecosystem and add **new** needed **functionalities** for experimenters, the open call mechanism is also used to involve third parties, which are able to provide the needed **additional infrastructures** and functionalities.

Available budget for this open call:

- 375,000€ for experiment proposals (maximum funding per accepted proposal: 75,000€)
- 180,000€ for proposals on new functionalities (maximum funding per accepted proposal: 60,000€)
- 250,000€ for additional infrastructures proposals (maximum funding per accepted proposal: 125,000€)

Important dates:

- Mandatory feasibility check deadline: 12 September 2018 at 17:00 Brussels local time
- Submission deadline: 19 September 2018 at 17:00 Brussels local time

Proposals will only be accepted from a single party eligible for participation in EC H2020-projects.

More information about this and further open calls can be found on the project website www.5ginfire.eu.



News from 5GINFIRE Testbeds

Smart City Safety

Intelligent Technology for Improving Citizen Safety in Smart Cities - 5G for improving people's safety Immersive and 360-degree video monitoring

Given the critical importance of security in wireless cities. innovative advances communication systems are increasingly improving the safety of city inhabitants. New services such as audio and video monitoring of public areas and automated municipality rule infraction detection allow a quicker response to threats. Based on this context, the Smart Internet Lab at the University of Bristol has been deploying a Smart city safety use case as a proof of concept. This is designed to identify



suspicious activities in the city. The Smart City Safety team, Dr. Aloizio Pereira Da Silva & Mr. Monchai Bunyakitanon

Many of today's municipalities are becoming test beds for Smart city experimentation where technological capabilities are addressing daily needs. The services can include parking, water treatment and city security. The University of Bristol is working to provide the 5GinFIRE platform, a Smart city safety use case, through utilizing open-source frameworks (i.e. OpenStack, OpenDayLight, etc).

Automotive

Context-aware Solutions for Assisted Driving – Video-based Car Overtaking

Driver assistance systems can be used to improve road and car safety, reduce driving fatigue and provide a more efficient driving experience. One example of such a service can be the video-based car overtaking where the idea is to transmit real-time video



images so that a vehicle can make a decision of overtaking when the visibility of the road is not sufficient to take a clear decision. In this context, using the automotive testbed deployed by Instituto de Telecomunicações, Aveiro, and to validate the functionalities of the 5GinFIRE platform, we were able to stream a live video from the front vehicle to the RSU through IEEE 802.11p/WAVE, being transcoded by a VNF video transcoding located at the edge of the infrastructure and deployed using the NFV MANO stack, and then being transmitted again to the rear vehicle using the same communication technology.



5GINFIRE at ETSI in May 2018

During the ISG NFV #22 meeting held in the ETSI headquarter on 17th May 2018 in Sophia-Antipolis, the 5GinFIRE project was introduced in front of the TST (Testing) WG (Working Group) with a clear intention of supporting the standardization activities in the ISG, including contributing the NFV standard test case definition and development, as well as hosting an NFV PLUGTEST in the near future on one of the 5GinFIRE partners' premises. The TST WG recognized and accepted the proposed contribution to the ISG and opened the discussion for more details.

From meeting with experimenters and new infrastructures



The winners from the 1st Open Call, Phase I were invited to join the consortium face-to-face meeting held in Nice on 15th May 2018. 5 selected experiments and 3 infrastructures in total were present. Both the 5GinFIRE consortium and the Open Call winners took the opportunity to present the platform and the proposed projects, as well as the technical details on specific aspects. With the technical requirements, restrictions and expected outcome clarified, the implementation of the Open Call experiments and infrastructures has started actively.

5G Summit, Brasilia, 22 May 2018

An IEEE International 5G Summit took place on 22 May 2018 in Brasilia, as part of the Painel Telebrasil 2018 event. The IEEE 5G Brazil Summit was co-organized by Algar Holding, Algar Telecom, the Federal University of Uberlândia (UFU), the Institute of Telecommunications, the Ministry of Science, Technology, Innovation and Communication and Nokia.

5GINFIRE project partners Prof. Flávio de Oliveira Silva (Univ. Federal de Uberlândia), Prof. Rui Aguiar (Instituto de Telecomunicações de Aveiro) and Anastasius Gavras (Eurescom GmbH) reported on highlights of very successful EU-Brazil collaborations that are not limited to 5GINFIRE only, but extend to projects like FUTBOL, 5G-RANGE and others as noted by Carlos Oliveira from the delegation of the European Union to Brazil.

http://paineltelebrasil.org.br/programacao-st/ & http://www.5gsummit.org/brasilia/



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