



Horizon 2020 European Union funding for Research & Innovation

> 5GENESIS Newsletter January - March 2020 - Issue 7

5GENESIS website: www.5genesis.eu/

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5GENESIS Project Overview

The seventh issue of the 5GENESIS newsletter presents the project activities and achievements during the period January - March 2020. This issue focuses on the latest 5GENESIS dissemination and communication activities (presentations, publications, articles, trials and more), the deliverables that have been published as well as the details of the seventh GA meeting, which was hosted by Telefonica and Atos in Madrid, Spain in February 2020.

5GENESIS activities in numbers:

- One Presentation
- One conference paper and one accepted paper
- Three online articles
- Two white papers
- One video
- Three upcoming events
- Two Trials
- 5GENESIS platforms (Release B) deliverables
- One GA meeting

Communication Channels







Dissemination and Communication Activities

Dissemination and Communication activities of 5GENESIS during January - March 2020, cover a great number of initiatives such as publications, participation in conferences and workshops, presentations, demonstrations and panels. Besides these activities, additional activities that took place at the end of 2019 are also presented.

Conference Papers- Presentations

5th Symposium on Signal Processing and Intelligent Recognition System (18-21/12/2019, Trivandrum, India)

Dr. Valerio Frascolla (INT) presented the paper "What are 3GPP 5G Phase 1 and 2 and What Comes After" at SIRS 2019, the 5th Symposium on Signal Processing and Intelligent Recognition System, Dec 2019, at Trivandrum, India. The paper is available here: <u>https://5genesis.eu/wp-content/uploads/2020/03/What-are-3GPP-5G-Phase-1-and-2-and-What-Comes-After.pdf</u>



Accepted Papers

The 5GENESIS Paper by Dr Tsolkas (FOGUS) entitled "A metaheuristic approach for minimizing service creation time in slice-enabled networks" was accepted in IEEE International Conference of Communications which will be held from 7 to 11/06/2020 in Dublin, Ireland. Read the paper online via this link: <u>https://5genesis.eu/wp-content/uploads/2020/03/ComSoc-A-natureinspired-meta-heuristic-approach-for-minimizing-service-creation-time-inslice-enabled-networks_.pdf</u> Read more on the conference here: https://icc2020.ieee-icc.org

Online Articles

5G FORUM (10/03/2020)

Malaga's experimental 5G Network will be presented at the 5G Forum 2020 in Malaga (6-7 May), where Prof. Pedro Merino will present the 5GENESIS Malaga platform status under the title "5GENESIS Malaga, a 5G platform open to innovation". As per the 5G Forum article, besides the University of Malaga, 5GENESIS partners Telefonica, Nemergent, Malaga Police and Municipality of Malaga will cooperate in the deployment and testing of the 5G network. More information for the 5GENESIS presence in the event is available at: https://www.5gforum.es/en/top-5g-tests-at-the-5gforum-in-malaga/

FUSECO Forum – 5GENESIS and National Centre for Scientific Research "Demokritos (15/11/2019)

An online article in regards to 5GENESIS and FUSECO Forum in Berlin on 15-11-2019 can be found at the Demokritos' website. Read more at: https://5genesis.eu/wp-content/uploads/2020/03/a1.pdf









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5GENESIS Berlin Platform - Fraunhofer Fokus (07/11/2019)

An article entitled "5G in practical test: Temporary network at the Festival of Lights" can be found at the Fraunhofer Fokus website. This article focuses on the field trial at the Festival of Lights 2019 in Berlin. Researchers from Fraunhofer FOKUS conducted a field trial as part of the EU project 5GENESIS with partners from IHP, Humboldt-Universität zu Berlin, Karlstad University, NetApp and Simula Research Laboratory. Read more at:

https://www.fokus.fraunhofer.de/en/fokus/news/BerlinFestivalofLight_2019-11

White Papers

5G-PPP ICT-17 projects brochure

The three research projects 5G-EVE, 5GENESIS and 5G-VINNI released a brochure with useful information about their activities. In this brochure you may find the key capabilities of the 5G trial platforms, the provided services, the corresponding locations per project and the timeline of the trials. You may also find information about the involved stakeholders (i.e., operators, vendors, vertical industries, universities and research institutes, SMEs and public stakeholders). Additionally, you will find information about which vertical related EU funded projects they also support. You may access it at the 5G-PPP website: https://5genesis.eu/wp-content/uploads/2020/03/Vertical-industries-in-the-5G-PPP.pdf

5G-PPP 5G Architecture White Paper (ver. 3)

The 5G-PPP 5G Architecture Working Group published a white paper (version 3) on the consolidated European view on 5G architecture. The work has continued from version 2 with the 5G PPP Phase II and Phase III projects with special focus on understanding the requirements from vertical industries involved in the projects and then driving the required enhancements of the 5GArchitecture able to meet their requirements. The results of the Working Group are now captured in this Version 3.0, which presents the consolidated European view on the architecture design. Additional information can be found at: <u>https://5g-ppp.eu/wpcontent/uploads/2020/02/5G-PPP-5G-Architecture-White-Paper_final.pdf</u>

<u>Video</u>

5GENESIS MWC 2020 Video - 5G Equipment

5GENESIS released a video in regards to its participation at MWC 2020 referring to the 5G equipment of 5GENESIS experimental platforms. Since MWC 2020 was cancelled due to Coronavirus outbreak, the video was made available throught the 5GENESIS YouTube channel. You can watch the video following this link: https://www.youtube.com/watch?v=gJPeaDj9NrU&t=29s









Upcoming Events

5G FORUM (6-7/05/2020) – Virtual with 5G

5GENESIS Partners will participate in the 5G Forum which will take place in Malaga from 6th to 7th May 2020. The event, due to the coronavirus outbreak, will be completely Virtual with #5G, with the speakers and attendees intervening and participating from their usual places of work via the Internet. More info available at: https://www.5gforum.es/en/5gforum-of-malaga-will-be-totally-virtual-and-with-5g/?fbclid=lwAR3GCRpb-PjulSn1ijWxz0x8FsXshzP1D0mbDv8vvyxfFAlRfzFnGnKICmE

EuCNC 2020 Goes Virtual! (Dubrovnik, Croatia, 15-18/06/2020)

Due to the world COVID-19 pandemic, the Steering Committee of EuCNC 2020 has decided to change the format of the conference to an on-line virtual one, instead of the usual face-to-face physical one in Dubrovnik. Read all the details at https://www.eucnc.eu/2020/04/06/eucnc-2020-goes-virtual/

1st Workshop on 5G Verticals and Experimentation (5GVertEx) (Ghent, Belgium at 29/06 – 3/07/2020)

5GENESIS co-organizes the 1st Workshop on 5G Verticals and Experimentation (5GVertEx) which will be held in conjunction with the IEEE NetSoft 2020 at Ghent, Belgium at 29/06 - 3/07/2020. Call for papers deadline was on 14/02/2020.

Read more in regards to the workshop at: https://medianetlab.gr/events/workshops/5g-vertex/









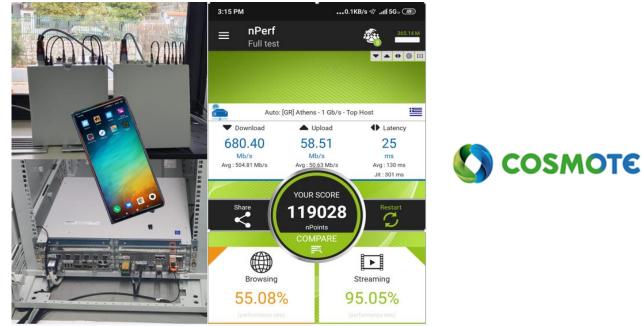




5G Trials

COSMOTE Pilot tests

5GENESIS partner COSMOTE has successfully tested its Pilot 5G NSA network, consisting of 5G Nokia Airscale BTS attached to Athonet vEPC Core. COSMOTE R&D Airscale System initial configuration uses 2×2 MIMO radio units and 100MHz bandwidth.



COSMOTE Pilot network test images

5GENESIS Berlin platform - Field Trial at the Festival of Lights 2019 in Berlin

Whether disaster relief, sports event or festival:5G can be used to set up a temporary network to connect many devices and provide a high bandwidth for multimedia services. In order to test such a setup, researchers from Fraunhofer FOKUS conducted a field trial as part of the EU project 5GENESIS with partners from HP, Humboldt-Universität zu Berlin, Karlstad University, NetApp and Simula Research Laboratory at Festival of Lights 2019 in Berlin. The components of a portable 5G network and their interaction are explained in the following video.

https://www.youtube.com/watch?v=DBSs96DgWf0

More information: <u>https://5genesis.eu/berlin-platform/</u> <u>https://www.open5gcore.org</u> <u>https://www.fokus.fraunhofer.de/en/fokus/news/BerlinFestivalofLight_2019-11</u>



Deliverables

All public 5GENESIS platform deliverables (Release B) that were released at the beginning of 2020 are available for downloading at our website.

Upcoming 5GENESIS deliverables

D5.3 Documentation and supporting material for 5G stakeholders: Midterm report on a complete guide for the provided facility in a multi-perspective approach including technical description and user's manual.

D6.2 Trials and experimentation (cycle 2): This deliverable will include the trials and experimentation results on the 5GENESIS platform that has resulted from the second integration cycle, emphasizing on the 5G KPI validation through the described use cases.

D7.3 Dissemination, communication and ecosystem engagement activities: This deliverable is based on dissemination, communication and ecosystem engagement activities, including 5G PPP contributions and synergies with other research projects.

D7.6 Standardisation and regulation: This deliverable will elaborate on the achieved results w.r.t standards and regulatory bodies engagements, and it will be released in an annual basis.

If you wish to learn more about 5GENESIS deliverables you may visit 5GENESIS website on the corresponding Deliverables page http://www.5genesis.eu/deliverables/





Meetings

5GENESIS 7th GA Meeting

The 5GENESIS 7th GA meeting was hosted by Telefonica and Atos partners in Madrid, Spain from the 18th to the 20th of February 2020. 5GENESIS partners worked together in order to evaluate the project's progress as well as to plan the upcoming activities and trials. The meeting's agenda followed a set of presentations in regards to all WPs activities, parallel technical sessions, discussions and demos.



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