



European  
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## 5GENESIS Newsletter

October-December 2019 - Issue 6

5GENESIS website: [www.5genesis.eu/](http://www.5genesis.eu/)

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### 5GENESIS Project Overview

The sixth issue of the 5GENESIS newsletter presents the project activities and achievements during the period October - December 2019. This issue focuses on the latest 5GENESIS dissemination and communication activities (presentations, publications in journals/workshops/conferences, workshops and more), the deliverables that have been published as well as the details of the sixth GA meeting, which took place at the Fraunhofer FOKUS premises in Berlin, Germany, in November 2019.

#### 5GENESIS activities in numbers:

- One Paper in Workshop
- Three Publications in Conferences
- Two Workshops
- Seven Presentations
- Three Trials/Tests/Demonstrations
- Two Panel Discussions - Invited Talks
- Nine Deliverables
- Two meetings



#### Communication Channels



<http://www.5genesis.eu>

[info@5genesis.eu](mailto:info@5genesis.eu)



## Dissemination and Communication Activities

Dissemination and Communication Activities of 5GENESIS during October - December 2019, cover a great number of initiatives such as publications, participation in conferences and workshops, presentations, demonstrations and panels.

### Papers in Workshops

#### ACM Mobicom 2019 (21/10/2019, Los Cabos Mexico)

A 5GENESIS paper entitled “Empirical Analysis of LoRaWAN Adaptive Data Rate for Mobile Internet of Things Applications” was presented at S3 Workshop at the ACM Mobicom 2019 in Los Cabos, Mexico in the 21st of October 2019. The link of the paper is available at 5GENESIS website: [https://5genesis.eu/wp-content/uploads/2019/09/LoRaWAN\\_SRL.pdf](https://5genesis.eu/wp-content/uploads/2019/09/LoRaWAN_SRL.pdf)



### Publications in Conferences

#### MobiWac '19 (25-29/11/2019, Miami)

A 5GENESIS Paper entitled “A Coordination Framework for Experimentation in 5G Testbeds: URLLC as Use Case” was presented at MobiWac'19, in 25-29/11/2019, in Miami. The link of the paper is available at 5GENESIS website:

<https://5genesis.eu/wp-content/uploads/2019/11/A-Coordination-Framework-for-Experimentation-in-5G-Testbeds.pdf>



*Delia Rico (UMA) at MobiWac'19.*

#### IEEE 5G World Forum (30.09-02.10/2019, Dresden, Germany)

Dr Valerio Frascolla (INT) presented the paper “Handover optimality in heterogeneous networks” at the 5G and IoT track of IEEE 5G World Forum in Dresden, on October 1st 2019.

The link of the paper is available at 5GENESIS website: <https://5genesis.eu/wp-content/uploads/2019/10/Handover-optimality-in-heterogeneous-networks.pdf>



*Dr. Valerio Frascolla (INT) at IEEE 5G World Forum, Dresden*

#### JITEL 2019, XIV Jornadas de Ingeniería Telemática (22-24/10/2019, Zaragoza)

A 5GENESIS Paper entitled “A Coordination Framework for Experimentation in 5G Testbeds: URLLC as Use Case” was presented at JITEL 2019, XIV Jornadas de Ingeniería Telemática in 22-24/10/2019, in Zaragoza.

The link of the paper is available at 5GENESIS website: <https://5genesis.eu/wp-content/uploads/2019/11/A-Coordination-Framework-for-Experimentation-in-5G-Testbeds.pdf>



*Bárbara Valera (UMA) at the JITEL 2019*

## Workshops and Special Sessions

### 5GPPP Technical Workshop, University of Malaga (10/10/2019)

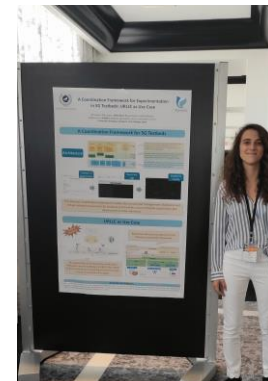
Professor Pedro Merino Gomez from UMA hosted the 5GPPP Technical Workshop on key enablers for 5G Experimentation, which chaired by Dr. Almudena Diaz (WP3 leader) and Dr. Dimitris Tsolkas (Deputy TM).



*Pr. Pedro Merino Gomez (left) and Dr. Dimitris Tsolkas (right) at the 5GPPP Technical Workshop.*

### IEEE 5G World Forum (30/09 – 2/10/2019, Dresden, Germany)

5GENESIS Project co-organized together with the rest ICT-17 project coordinators (and not only) the 2nd workshop on 5G-Trials - From 5G Experiments to Business Validation adjunct with IEEE 5G World Forum (<http://sites.ieee.org/wf-5g>). Additional information can be found at: <http://sites.ieee.org/wf-5g/from-5g-experiments-to-business-validation/>



*Delia Rico (University of Malaga) at MSWIM'19*

## Presentations

### MSWIM '19 (25 - 29/11/2019, Miami)

A presentation and a poster session of the conference paper “A Coordination Framework for Experimentation in 5G Testbeds: URLLC as Use Case” was made by Delia Rico (UMA) at MSWIM 19, in Miami.

### INFOCOM (26/11/2019, Athens)

- Dr. Anastasios Kourtis (NCSR), presented the “5GENESIS: An Experimentation Platform to validate 5G KPIs for various 5G Use Cases and Vertical Industries” at the Session C: Modern Innovative Technologies and Broader 5G-related Aspects for Development and Growth with Emphasis set to Vertical Industries in INFOCOM.
- Cosmote partner presented 5GENESIS at INFOCOM WORLD CONFERENCE 2019 - "Economy 4.0: Connected Future" on Tuesday 26 November 2019 in Athens, Greece.



Additional information can be found at:  
<https://www.infocomworld.gr/210-infocom-world-2019/5g-epistimoniki-synantisi-aithoysa-makedonia/>



*COSMOTE presentation at INFOCOM.*



## Spanish Royal Academy of Engineering (12/11/2019, Madrid)

Prof. Pedro Merino Gómez, Universidad de Málaga, presented 5GENESIS on November 12, 2019 at the Spanish Royal Academy of Engineering in Madrid, Spain.

## Fraunhofer Fokus FUSECO Forum (7-8/11/2019, Berlin)

5GENESIS coordinator Dr. Harilaos Koumaras (NCSR Demokritos) presented 5GENESIS at the "European 5G Testbeds, Trials, and Best Practices" workshop of the Fraunhofer Fokus FUSECO Forum on Thursday 7 November 2019 in Berlin.

## IEEE 5G World Forum (30/09 – 2/10/2019, Dresden, Germany)

Dr Valerio Frascolla (INT) had a presentation entitled "What's after 5G Phase 1 and 2?" at the Workshop "From Evolution to Revolution" in IEEE 5G World Forum in Dresden, on October 1st 2019.

## Ericsson Ireland Tech Day 2019 (12/09/2019, Ireland)

LMI partner presented 5GENESIS at the Ericsson Ireland Tech Day 2019 on 12/09/2019. The presentation was focused on the context & goals of the project, as well as on the 5GENESIS architecture and plans for the coming year.

## Trials-Tests-Demonstrations

## Fraunhofer Fokus FUSECO Forum (7-8/11/2019, Berlin)

5GENESIS Berlin platform partners and 5GENESIS coordinator Dr. Harilaos Koumaras (NCSR) are present at the Fraunhofer Fokus FUSECO Forum in Berlin. 5GENESIS festival of lights field trial details and Open5GCore are demonstrated.

## ETSI MCX Plugtests (22-27/09/2019), Kuopio

Athonet and Nemergent interoperated their EPC, IMS and eMBMS core solutions with multiple MCX vendors and tested latest 3GPP MCX releases, which fit to the 5GENESIS Malaga use case.



*Prof. Pedro Merino Gómez at the Spanish Royal Academy of Engineering.*



*Dr. Harilaos Koumaras at the Fraunhofer Fokus FUSECO Forum.*



*Dr. Valerio Frascolla at IEEE 5G World Forum.*



*LMI at the Ericsson Ireland Tech Day 2019.*



*5GENESIS Partners at the Fraunhofer Fokus FUSECO Forum.*



*Athonet and Nemergent partners at the ETSI MCX.*

## MEC Congress (17-19 Sept. 2019), London

Athonet demonstrated the 5G and MEC solutions based on the latest 3GPP release in MEC Congress in London.



## Panel Discussions – Invited Talks

### IMOC 2019 (10-14/11/2019, Aveiro, Portugal)

Dr. Valerio Frascolla (INT) was invited and hosted to give the talk “mmWave communications and 5G networks” at the International Microwave and Optoelectronics Conference (IMOC 2019) conference in Aveiro, Portugal, thus disseminating the 5GENESIS EU-funded project research on dynamic spectrum management. Valerio also participated to the industrial panel discussing the importance of open facilities for the broader research landscape. IMOC was held for the first time in Europe, with the aim of establishing itself as a fruitful opportunity for nurturing collaboration activities between the Latin America, especially Brazil, and the European research community. More info at <https://imoc2019.com/>



*Prof. Brambilla (left) chairing the session and Dr. Frascolla (right) giving the invited talk at IMOC2019*

### IEEE 5G World Forum (30/09 – 2/10/2019, Dresden, Germany)

Dr. Valerio Frascolla (INT) participated at the panel “Evolution and revolution of networking and technology beyond 5G” at IEEE 5G World Forum in Dresden.



## Upcoming Events

### MWC 2020 (24-27/02/2020, Barcelona)

5GENESIS Project will be present with a booth at the MWC 2020 which will be held in Barcelona in February. At the same booth the rest two ICT-17 projects 5G-EVE and 5G-VINNI will be also present. Several demonstrations and presentations will take place.



24-27 February 2020

## Deliverables (period October 2019 – January 2020)

**D1.3** Legal aspects and data management (Release B): This deliverable identifies all the ethics and legal framework (rules, legislations etc.) which apply to the project execution and its results. This will be carried out both at national and international level, particularly focusing on data protection (e.g. GDPR) and handling aspects during the experiments.

**D4.2** The Athens Platform (Release B): This deliverable provides a summary of each of the components/sites that will form the Athens Platform.

**D4.5** The Malaga Platform (Release B): This deliverable provides a summary of each of the components/sites that will form the Malaga Platform.

**D4.8** The Limassol Platform (Release B): This deliverable provides a summary of each of the components/sites that will form the Limassol Platform.

**D4.11** The Surrey Platform (Release B): This deliverable provides a summary of each of the components/sites that will form the Surrey Platform.

**D4.14** The Berlin Platform (Release B): This deliverable provides a summary of each of the components/sites that will form the Berlin Platform.

**D4.17** Portable 5G Demonstrator (Release B): In this deliverable, a summary of each of the components/sites that will form the portable demonstrator of the 5GENESIS is provided.

**D5.1** System-level tests and verification (Release A): Midterm and final report with detailed documentation and analysis of the results from the system-level tests and the verification trials

**D7.9** Innovation and exploitation activities (Release B): Report of the first two quarters of activities of the innovation program run within the consortium. A plan of the activities till project end will be created.

## Upcoming 5GENESIS deliverables

**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.

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



Deliverables

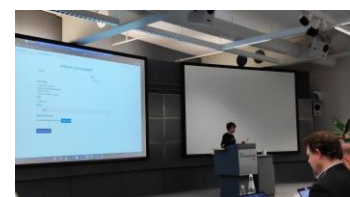
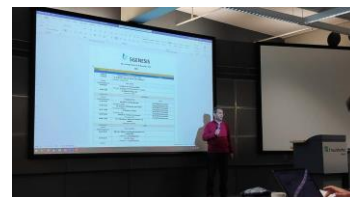




## Meetings

### 5GPPP Technical Meeting, University of Malaga (10/10/2019)

Prof. Pedro Merino Gomez from UMA (TM) hosted the Technology Board meeting on key enablers for 5G Experimentation, which chaired by Dr. Almudena Diaz (WP3 leader) and Dr. Dimitris Tsolkas (Deputy TM).



### 5GENESIS 6th GA Meeting

The 5GENESIS 6th GA meeting took place at the Fraunhofer FOKUS premises in Berlin, Germany from the 26th to the 28th of November 2019. 5GENESIS partners worked together in order to evaluate the project's progress as well as plan the upcoming activities. The meeting's schedule followed a set of presentations, demos, discussions and various activities. Moreover, three ICT-19 Projects (5G!Drones, 5G-VICTORI, 5G-HEART) were introduced and presented to 5GENESIS partners with focus on the use cases that will use the 5GENESIS facilities.



6<sup>th</sup> 5GENESIS meeting in Berlin

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#### Communication Channels



<http://www.5genesis.eu>

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#### Platforms Contact Information

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