



FUTEBOL: Federated Union of Telecommunications Research Facilities for an EU-Brazil Open Laboratory

Newsletter #6, February 2019

Welcome Back to FUTEBOL!

The EU-BR FUTEBOL project is establishing research facilities (testbeds) in both Europe and Brazil to advance research and innovation on the convergence of wireless-optical telecommunication networks. This will lead to enhancements to commercial products and services, telecommunications business models, and education, thus generating a positive impact on society.

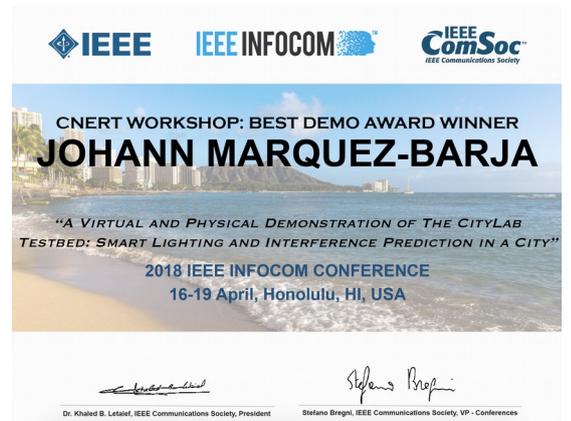
The FUTEBOL project is already on its end. Now is the time to evaluate the work that has been done during the last three years. This newsletter highlights the last dissemination activities, namely, the consortium efforts to reach the outside community by interacting with SMEs, regulators, standardization, and other projects.



Awards

October 2018

In October 2018, FUTEBOL has received the Best Experiment Award at the 4th Fed4FIRE and Engineering Conference with the work "Citylab Testbed: Truly experimenting the city" led by Dr. Johann Marquez-Barja. This is already the 4th award received by the FUTEBOL consortium.



ANATEL at FUTEBOL Meeting

October 2018

Apart from the meetings that UFC had with the Brazilian regulator ANATEL (local branch and nationwide), MSc. Alex Azevedo (ANATEL representative) attended the FUTEBOL's plenary meeting in Fortaleza, in October 2018. Therein, it was possible to understand the vision of ANATEL for the 5G and the regulatory and coexistence challenges that need to be overcome in Brazil, namely with the TV satellite receivers.



FUTEBOL at Ofcom

December 2018

In December 2018, FUTEBOL was presented by Dr. Valerio Frascolla to four people from Ofcom (UK), steered by Dr. Federico Boccardi.

Ofcom has shown much interested in the project use cases, but especially to the testbed in Finland, and to the situation in Brazil, namely related with spectrum usage and 5G deployment.

FUTEBOL at ETSI RRS

January 2019

In January 2019, FUTEBOL contributed to the work of the ETSI RRS#45 standards group in Biel/Bienne, Switzerland. Dr. Valerio Frascolla introduced the project charter and uses cases, then focused on the ongoing SAS trials at the VTT testbed in Oulu, Finland, and on the coexistence challenge between LTE and TV satellite receivers for the 3.5GHz band in Brazil.

Also, personnel from the Swiss regulator Ofcom (CH) were present and some interesting questions were posed on the FUTEBOL project and on its testbeds.

More information on the VTT testbed can be found in the FUTEBOL website.





Visit to ArcelorMittal Global R&D Brazil Center

January 2019

Continuing our effort to improve the engagement with industry, in January 2019 the UFES team had a meeting with the R&D facility of ArcelorMittal in Brazil.

This visit was about arrangements for using the UFES FUTEBOL's testbed for prototyping a pilot system they are planning for automating a steel production process in their plants around the world.



Other Industry-related Initiatives

Several SMEs showed interest in the FUTEBOL's testbeds and access to experimental resources. They are: WINGS ICT Solutions (wings-ict-solutions.eu), Incelligent (www.incelligent.net), MOTIUS (www.motius.de), ALLBESMART LDA (www.allbesmart.pt), E-AWARE Technologies (www.eaware.com.br), Altman Systems (www.atmansystems.com), and Vixsystem (www.vixsystem.com.br). Four of them are European and three are Brazilian. More information can be found in the project's website. Next, we randomly choose two examples to show the degree of interaction between the SMEs and FUTEBOL partners:

- ALLBESMART LDA is a Portuguese SME specialized in wireless connectivity and IoT. They are working in collaboration with VTT and UFC to measure the QoE in different conditions.

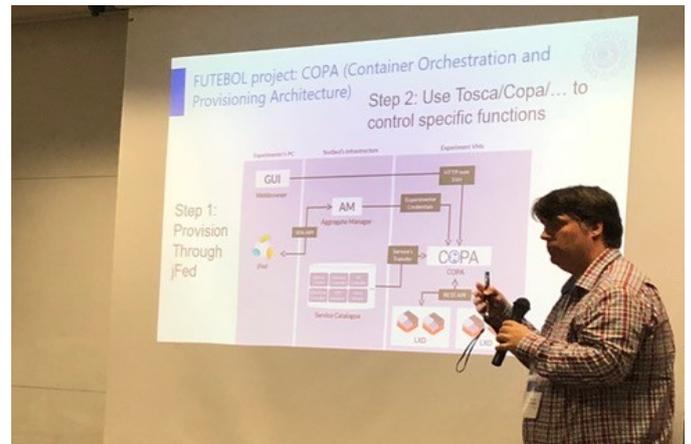
- Vixsystem is a Brazilian SME interested in the combination of cloud-computing and computer vision available in the testbed at UFES. Along with the UFES team, they can test their prototypes for indoor localization for Lysa, a robotic guide dog for blind and visual impaired people.



Links with other Projects

To effectively impact the wireless-optical ecosystems, the FUTEBOL consortium keeps the interaction and collaboration with similar ongoing research projects, e.g., FIBRE, Fed4FIRE/Fed4FIRE+, 5GinFIRE, NECOS, NosFVaTO, and NERDS (see FUTEBOL's website for more information).

Recently, the control framework of FUTEBOL was presented with its "add-ons and features" at GEFI 2018 in Tokyo by Dr. Brecht Vermeulen (the technical coordinator of Fed4FIRE+) as complementary solution to orchestrate the resources that Fed4FIRE provision. This shows that our solutions are well accepted by the experimentation and testbed-based research community.



Final Review

The next plenary meeting and year three review will be in Porto Alegre in May 2019. This will be the last meeting and the final review of the project. Hopefully all KPIs were achieved, impacting the scientific community, industry, regulators, and the society in general.

Consortium



Acknowledgment



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