EMPOWER NEWSLETTER

Launch in November 2018, EMPOWER is a Horizon 2020 project funded by the European Commission / DG CONNECT aiming to foster the collaboration between Europe and the USA in the field of Advanced Wireless Platforms in 5G and beyond 5G. The overarching aim of EMPOWER is to reinforce this cooperation with the purpose to establish a collaborative transatlantic community on the new connectivity frontiers beyond 5G. Built on a long-term dialogue between the EU and the US in the field of Advanced Wireless Platforms, EMPOWER's ambition is to accelerate the joint development of the associated advanced wireless platforms between EU and NSF-funded projects, through the PAWR office*.

Empower
in a nutshell

EMPOWER targets the creation of a joint EU-US advanced wireless ecosystem for:

> bridging the relevant EU-US Wireless communities and stakeholders, such as scientific researchers, platform engineers, standardization experts, regulators, and product incubators

developing a strategic EU-US collaboration agenda and supporting its execution ahead of worldwide competition for beyond 5G connectivity standards, based on common EU-US roadmaps spanning advances in scientific knowledge, platforms andtestbeds, standards and regulations.

Don't miss to follow us on

and join our Community

Save the date: 7 th and 8 th of November in Coimbra

EMPOWER co-organises with PAWR the Global Experimentation for Future Internet (GEFI) 2019 Workshop, Coimbra, Portugal November 7-8, 2019, in conjunction with IEEE CloudNet 2019

PAWR

EMPOWER's first results

Do you want to learn more about the first results of EMPOWER?

You can download now the project deliverables on the *project website!*

EMPOWER Deliverable on Trends, Status and Plans for Advanced wireless

EMPOWER since its launch in November 2018, has been following closely all developments around 5G and its evolution in the short, medium and long terms. This is with the aim to develop a comprehensive advanced wireless technology roadmap synthesizing all the views from all the stakeholder R&D communities. This first WP2 public deliverable D2.1 of the EMPOWER project comes herefore to capture in brief the emerging wireless technology trends, which will constitute the basis of the first EMPOWER B5G technology roadmap release due in D2.2 in October 2019.

EMPOWER Strategy document and Collaboration Roadmap

This document presents the initial version of the EMPOWER Strategy Document and Collaboration Roadmap. This initial version is the result of the discussion on the first six months of the Project and includes the initial strategy for collaboration and the planned roadmap/agenda of activities and collaboration opportunities for the short term. This document focuses on the definition of the key challenges to overcome for a fruitful collaboration and a deep analysis of the different actors involved in the research on advance wireless communication platforms.

EMPOWER Communication and Community Building Strategy and Plan

This document describes the dissemination and community building strategy and plans and reports the activities since the commencement of EMPOWER. It includes also inputs about what have been the most effective communication tools and channels in terms of community reach, and report on activities pursued to grow the EMPOWER community and engagement of stakeholders.

STAY TUNED!

EMPOWER's upcoming activities

List of upcoming events.

- Site visits
- Hachathons
- Researchers' mobility

More activities such as researchers mobility, hackathons, workshops to be announced

empower

Empower Community

EMPOWER's events

EMPOWER-PAWR workshop @EUCNC, 18/6/2019

Empowering Transatlantic Platforms for Advance Wireless Research; a look at Pan-European end-to-end site facilities and vertical trials for 5G and their collaboration with NSF PAWR platforms.

Organised together with the PAWR office, the workshop's objectives was to put in contact key stakeholders from Europe and the USA to start a track record of collaborations and to discuss possible joint activities and evolution of the wireless platforms at both sides of the Atlantic towards beyond 5G technologies. In addition, the ongoing work of the three ICT-17-2018 projects and their NSF PAWR counterparts has been presented, with a special focus on the services provided by their projects, the infrastructure available at this stage and their roadmap. The newly selected ICT-19 projects focused on the development of vertical applications to tested over the ICT-17 platforms, have been also presented.

EMPOWER-PAWR Joint meeting 29/4/2019, Paris

A joint meeting between EMPOWER consortium and the US-based PAWR office was organised in Paris on 29th April 2019, in parallel with IEEE International Conference on Computer Communications (IEEE INFOCOM). The main objective of the joint meeting was to liaise key European and US actors of the community to share information and start discussing possible joint activities related to advanced wireless platforms at both sides of the Atlantic towards 5G and beyond 5G technologies.

EMPOWER-PAWR booth @EUCNC 2019, Valencia

EMPOWER-PAWR had a booth (booth #29) at the EUCNC 2019 in Valencia.
In parallel to the above mentioned workshop, a booth demonstrated the relevant US activities currently implemented by PAWR nodes as well as the EMPOWER's ones which aim to foster cooperation on Advanced Wireless platforms. The booth disseminated the results of the different activities and liaises key EU and US stakeholders. The demos showcase an end-to-end fully programmable open source 5G system running in a large scale outdoor test platform in USA, demonstrating:
• Experiment lifecycle on PAWR platforms: POWDER & COSMOS.
• X2 handover using emulated UE, OAI eNodeB with O-RAN API extensions, controlled by a RAN controller running in a containerized EPC instance.
• Instantiate an ONAP instance for configuring policy decisions in an intercontinental slice between US & EU platforms.

It is important to mention that the presented PAWR projects were:
• COSMOS is partnering with New York City, Silicon Harlem, City College of New York, University of Arizona and IBM, to bring advanced wireless testbed to life in New York City.
• POWER, which is a Platform for Open Wireless Data-driven Experimental Research. It is a testbed in Salt Lake City to enable mobile and wireless research in a "living lab" environment, enabling academia and industry to do research
• RENEW, which enables fundamental advances in wireless technologies by building an at scale massive MIMO research testbed and provides plug-n-play end-to-end experimentation observability and measurability, it is fully programmable open source design.
• POWDER integration will bring RENEW to others. POWDER-RENEW is the collaboration with municipal and state leadership from Salt Lake City and Utah, creates an advanced wireless research platform.
5G-PPP phase 3 projects (ICT-17 platforms) were presented (likely precise information is found on their web sites):
• 5G-EVE facility, which will enable experiments with heterogeneous access. 5G-EVE aims at creating synergies between a significant number of facilities that will ensure sustainability and impact in terms of exploitation.
• 5G-VINNI aims to design an advanced and accessible 5G end to end facility.
• 5G-GENESIS, which aims to validate 5G KPIs for various 5G use cases, in both controlled setups and largescale events in order to realize an integrated End-to-end 5G Facility.

EMPOWER-PAWR joint panel @INFOCOM, 1st of May, 2019, Paris

Experimentation Meets Platforms:
A Survey of macro trends in mobile communication research and its impact on future testbed development
The panelists represented a global view of efforts underway to implement platforms for experimenting on 5G and beyond technologies across radio, network and compute to be built on top of convergent RF/network/IT infrastructure to provide well defined abstractions and modularity to end users.

Empower Community

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