



**HORIZON 2020**  
**ICT - Information and Communication Technologies**

**Deliverable D4.1**  
***Communication and Community Building Strategy and Plan***

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## Executive Summary

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.

The first phase of EMPOWER is definitely to reach out and incentivize the relevant communities of researchers and engineers involved in Future Wireless Platforms, from the need to the operation. Therefore, together with the PAWR office we started to contact the key persons, including our Advisory Board, and have already planned a substantial communication strategy.

On the other hand, we initiated the EMPOWER identity in terms of logo and more general visual, together with the definition of its branding and graphics' guidelines.

The Dissemination and Community building Strategy and Plan identifies the main target stakeholders, the activities that will be pursued to effectively reach them and the specific communication and dissemination measures, including a description of the communication and media tools, including the EMPOWER web portal and its envisaged functionalities, which can be summarized as:

- Presenting the overall EMPOWER concept and linking to the various communication channels, including social media.
- Gathering and organising information about other relevant projects and initiatives.
- Disseminating News relevant to EMPOWER community and target stakeholders.
- Promoting EMPOWER related workshops, conferences and events.
- Supporting the consolidation and growth of the EMPOWER community and fostering collaboration through a dedicated communication platform, to be embedded within the portal.

An important aspect EMPOWER consortium will continuously follow up is the development and maintenance of the portal.

The EMPOWER dissemination and communication activities are geared both at promoting outcomes and work of EMPOWER consortium itself, but also at supporting the advanced wireless platforms community building and the collaboration between EU-US. In doing so the main objectives are to increase:

- **Awareness:** Different stakeholders, initiatives, projects and partners become aware of the aims, actions and achievements of EMPOWER and more widely of the available resources and tools.
- **Engagement:** information about initiatives, online tools, applications, relevant events is key to attract key players and populate the efforts of the advanced wireless platforms ecosystem.
- **Action and participation:** through a better understanding of the advanced wireless platforms initiatives and related resources in a broader perspective.

We are confident, EMPOWER has a fast start and will become soon a key actor and reference in this domain.



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## Introduction

EMPOWER has the ambition to accelerate the joint development between the EU and the US of advanced wireless platforms targeting the new connectivity frontiers beyond 5G. EMPOWER targets the creation of a joint EU-US advanced wireless ecosystem for:

- (i) bridging the relevant EU-US Wireless communities and stakeholders, such as scientific researchers, platform engineers, standardization experts, regulators, and product incubators; and
- (ii) developing a strategic EU-US collaboration agenda and supporting its execution ahead of worldwide competition for beyond 5G connectivity standards.

EMPOWER foresees twinning with the best researchers and practitioners involved in projects funded by USA, especially with entities participating in the Platforms for Advanced Wireless Research - PAWR programme (<https://www.advancedwireless.org/>). EMPOWER aims to provide instruments such as mobility of researchers, Hackathons, workshops, etc for inducing collaboration between ongoing and forthcoming 5G and beyond initiatives targeting at wireless networks experimentation on both sides of the Atlantic. Through the EMPOWER instruments we aim to create an efficient means for stimulating the mobility of ideas and people between European and similar American experimental wireless platform initiatives. We also aim at encouraging stronger collaboration between fundamental and experimental wireless researchers by making access to platform tools and data exchange simpler. EMPOWER instruments will also provide a wealth of information for global and regional standards and regulatory organizations (e.g. ITU-R, ETSI) and industry fora (e.g. NGMN). An important output of EMPOWER will also be in the form of recommendations on technologies and experimentation methodologies for future wireless experimentation objectives. This will assist in providing coordination between (H2020 and Horizon Europe) and US (National Science Foundation - NSF) programmes for future individual and joint calls.

EMPOWER has a central role in all this as it operates in close collaboration with the EC and PAWR and all ongoing relevant projects and related initiatives to facilitate and empower efforts pursued by different stakeholders in Europe and US. With this ambitious vision in mind, the Dissemination and Communication activities that EMPOWER is promoting and coordinating all across the community are of crucial importance, especially to harmonise the message and give voice to the many players contributing to its vision.

EMPOWER acts as a catalyst for promoting EU-USA technology and test platforms in industry-driven events such as ONS, OPNFV Summit, TIP Summit, MWC as well as high profile IEEE and ACM conferences. Specifically, it will coordinate the preparation of selected demonstration targets for these events with the technical teams from its companion projects.



## 1. EMPOWER Dissemination and promotion goals

As anticipated in the previous Section, the main vision and ambition of EMPOWER is to assist and empower dissemination and communication efforts all across the advanced wireless platforms community in Europe and US and promote its message and vision in close coordination with relevant and related initiatives in Europe and the US.

We started by raising the main questions that the community and stakeholders should address, namely:

- 1) What are the key wireless challenges for the future?
- 2) Regarding these challenges, where could a test platform better support the discovery process?
- 3) How can we best balance very advanced test platforms for core wireless technologies and more integrated verticals (service driven) platforms?
- 4) Data management and security plan, how to get started?
- 5) Reproducibility and Repeatability of research. Is it a must?
- 6) Sustainability of the platforms?

These questions will be addressed during the course of EMPOWER Mobilizing the individuals, organizations, actors in the range of relevant areas, from spectrum management, to standardization and projects, to platforms and experiments.

In addition, the main objectives of the dissemination, communication and community building activities are established to support our objectives:

- Create core messaging around EMPOWER and the importance of the collaboration on advanced wireless platforms between EU and USA, comprising buy-in and pay-off for the diverse target groups in different formats, in addition to the websites and communication tools of strategic alliances. Core messaging will be underpinned by original content provision for the channel, spanning discussion forums, multimedia content, focused reports, white papers, glossaries, user-friendly guides, testimonials and webinars.
- Expand and strengthen the target community by mobilizing the best researchers and engineers in the field, building on its current 5G-PPP, PAWR, and other relevant community networks.
- Connect and catalyze the target community through regular communications, EMPOWER international events, Community Outreach Seminars and policy events, mobility of researchers and students, considered to be a key communication and outreach tool supporting knowledge exchange and for communicating project goals and outcomes. EMPOWER will also leverage partner events.
- Promote the value, benefit and usage of Advanced Wireless Platforms to accelerate the discovery process and support a robust and efficient design.
- Propose both on-line and face-to-face tutorials to train people able to evangelize both the industry and the research audience about the developments.
- Create effective, value-add synergies with media organizations and pertinent initiatives and projects across Europe and USA and beyond identified in the strategy.
- Convey the policy framework through interaction with EU and US policy bodies and key initiatives, including insight into governance models.
- Identify and classify pertinent conferences and workshops across Europe and USA based on a predetermined set of criteria to increase EMPOWER visibility, effectively communicate and validate key advances through quality publications and reports.

EMPOWER as a single entity: the consortium will use key social media channels such as Twitter (EUEmpower), LinkedIn (Empower EU-US), YouTube, Slideshare, Vimeo, and the EMPOWER Portal to automatically collate and disseminate.



## 2. EMPOWER Dissemination and Community building in action

Already at the very beginning of EMPOWER, the whole consortium has been fully dedicated to ensure effective follow-up and building on the recurrent dialogue between the EU and the US regarding collaboration for Advanced Wireless Platforms as presented in the “Report from the EU/US Future Networks Workshop”, dated November 11, 2017<sup>1</sup>

EMPOWER serves the dissemination and communication activities for the whole advanced wireless platforms community and their collaboration in Europe and US.

As described in the remaining of this section, in order to ensure increased awareness around collaboration between EU and US in the specific field, EMPOWER coordinates efforts and engage an increasing number of players in different activities:

- Identifying our target stakeholders – TO WHOM (section 3.1).
- Defining tools and measures to effectively reach and engage the target stakeholders – THE HOW (section 4).

### 2.1 EMPOWER targeted audience

EMPOWER disseminates targeted outputs ensuring the widest possible impact of the community efforts, acting as an “accelerator” for on-going and upcoming projects and major initiatives. In this respect, EMPOWER aims at facilitating communication, fostering knowledge transfer and coordinating efforts as appropriate to maximize synergies among all more traditional and new players in the scene.

The main target stakeholders identified EMPOWER preparation time are listed hereby.

- **Related research wireless communities, stakeholders and initiatives**, with the objective to involve the best researchers and engineers who can have a leading role and a transformative effect. Addressing frameworks such as H2020 5G-PPP, ICT-17- 5G-end-to-end facilities, H2020 Beyond 5G, H2020 BigData-PPP, NSF, US PAWR, FIRE+ and other related advanced wireless platforms research communities, to whom EMPOWER will provide content, tools, actions and services helping them to capitalize on their investments and efforts and achieve a greater impact. Stakeholders may include scientific researchers, platform engineers, standardization experts, regulators, and product incubators, etc.
- **Application domains communities**, including Communities for Smart Cities, eHealth, Transport, Energy, Factories of the Future, Big Data, Cloud, High-Performance Computing etc., since they are potential users.
- **Relevant initiatives** in Europe and USA aiming at mutual exchange and communication, best practices and promotion of potential collaboration opportunities on research on advance wireless platforms, such as OSA, Linux Foundation, and O-RAN.
- **Standardisation bodies**, such as International standardisation bodies in ICT, like ITU-R, ETSI, 3GPP, IEEE, as well as any other relevant standardization bodies.
- **Policy makers**, at any level like the EC, PAWR office, NSF, Ministries, Governments, Regulatory agencies for the definition of the future research and innovation directions based on EMPOWER’s acquired knowledge.

<sup>1</sup> S. Fdida, I. Seskar, P. Steenkiste, B. Vermeulen, “Report from the EU/US Future Networks Workshop”, Report acknowledged by the National Science Foundation (NSF) / European Commission (EC), Brussels, November 11th, 2017

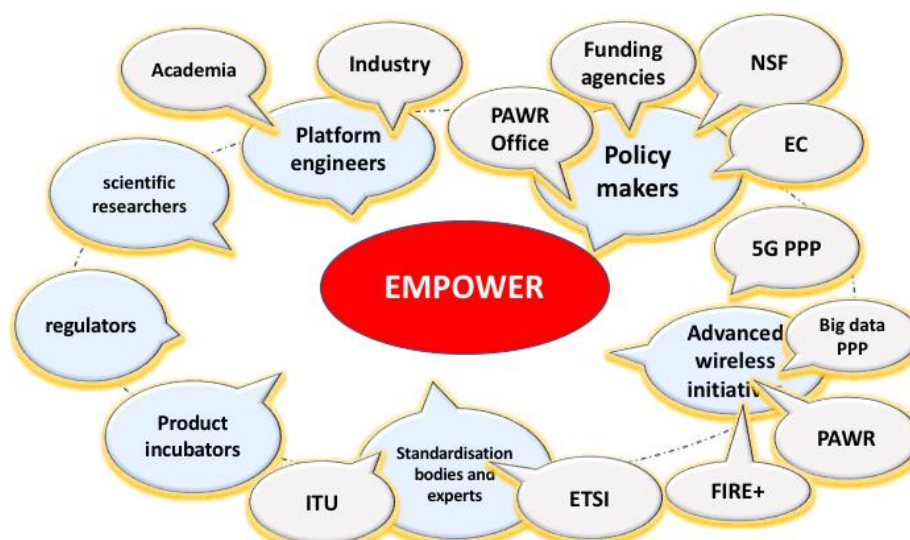


Figure 1: EMPOWER targeted stakeholders

EMPOWER aims to foster a collaborative transatlantic community between Europe and United States. To develop the collaboration between both regions EMPOWER analyses the relevant actors in the European Union and the US through their participation in different programs and initiatives projects aiming to identify European and US research and organizations which allow to foster transnational collaborations based on excellence research. EMPOWER analyses all the relevant European initiatives working for the improvement of 5G technology research in different fields.

It should be noted that EMPOWER deliverable D1.1 - EMPOWER Strategy Document and Collaboration Roadmap v0, due on M6 provides a detailed list of the different initiative in EU and US and the relevant stakeholders and involved organizations.

At the time of writing this report, we can confirm that, EMPOWER:

- Created a strong liaison with the PAWR office. Several events happening in International venues have been jointly scheduled.
- Contacted key researchers in Europe and US in order to inform them about EMPOWER and the role that they can play with us.
- Started a discussion with the main EU H2020 relevant projects.
- Mobilized our Advisory Board, which first physical meeting will be co-located with the IEEE Infocom conference, April 29-May 2 2019, in Paris.
- made public our baseline communication tools.





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## 3. The dissemination and communication tools

Besides deploying the various communication tools and channels, including the EMPOWER Portal and the various social media networks, EMPOWER:

- 1) sets in place new community building/communication tools,
- 2) stimulates all ongoing initiatives in Europe and USA to properly echo and exploit their dedicated channels,
- 3) amplifies the reach through each partner's communication channels and contacts, and
- 4) ensures proper promotion also through existing EC media services, channels and tools, such as the Digital Single Market web pages and Twitter profiles.

### 3.1 Introduction to the EMPOWER communication tools

EMPOWER through its communication activities and tools, supports the community engagement and the capacity building considering the needs and priorities of the various stakeholders. It fosters the liaisons and synergies between relevant stakeholders, and it will build on the strong existing networks of the EMPOWER partners. This will be achieved by pursuing the following concrete activities as a support to the other WPs, roadmaps and strategic agenda.

### 3.2 Primary Dissemination and Promotion Channels

**EMPOWER's website (for more details, see section 6): – a live EMPOWER's window over the advanced wireless platforms world.**

It will correspond to the EMPOWER portal and will be the central entry point to create mutual and public awareness about EMPOWER, as well as to provide information about the project's objectives, methods and achievements. The website shall serve EMPOWER community and become an easy-to-use and access portal. The website is the main platform connecting EMPOWER and its stakeholders, sustain the dialogue between different stakeholders, researchers, universities, scientists, policy makers and citizens at large. It will showcase the results and the different activities of EMPOWER.

#### **Social Networking:**

Social media channels will be used to empower dissemination efforts and reach a wide audience so as to facilitate an interactive dialogue with relevant stakeholders. EMPOWER establishes a presence in a number of public social networking sites, e.g., Project webpage, LinkedIn, Twitter and other social media. Targeted efforts will be made to attract their attention and promote the project's major activities and achievements, but also to learn about relevant initiatives.

#### **Newsletters production:**

EMPOWER will create a bi-annual e-newsletter, describing the evolution of EMPOWER framework, and announcing interesting news and initiatives.

#### **Report publishing:**

All public deliverables will be published on the project's website.



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**Promotional material:**

EMPOWER will produce promotional materials including, flyers, posters, presentations, infographics, videos, White Paper, and their diffusion will be guaranteed via several communication channels, including social media like Twitter, LinkedIn, presence / contribution to selected blogs, the project web site, and related portals to advertise work and results. Flyers and presentations will be made available to the projects attending events.

## 4. Community building tools

One of the most important activities connected to the Community Building is related to the organization of hackathons, workshops, events and mobility of researchers. Community building communication activities are held in parallel with the general communication activities of EMPOWER; they are complementary since their target and goals is a bit different.

### 4.1 Workshops and events

EMPOWER takes care of organising dedicated events, as well as coordinating participation to major ones in close collaboration with the EC and all ongoing relevant initiatives, which will contribute to increase the visibility and the impact, while attracting more newcomers. In doing so, participatory and co-creative techniques will be deployed as means to be offered to the events' participants to learn, share and co-generate knowledge by transforming audiences into active participants. Besides supporting the organisation of the annual edition of a conference, this task will organise community targeted engagement events, such as:

- 1-day Networking, Engagement and Policy Workshops (2 in total) on selected research topics, experiments and platform tools, as will be resulted from the needs of the previous WPs. Hands-on and highly interactive methods will be deployed to engage the participants and stimulate productive brainstorming. The outcomes of these events will inject into the different WPs (road map, policy recommendations, white paper).
- Three webinars will be organised by EMPOWER based on the results of WP2 and WP3 aiming to present their results and to further discuss and organise the input to the Technology Roadmap.
- Support the physical and remote meetings of the Advisory Board as defined in WP1.
- Dedicated sessions for presentation of selected outcomes/initiatives at specific scientific events – meet the community where the community meets, going to events not only EC-centered. This also includes presentations at EC and NSF/PAWR venues.

At the moment EMPOWER already started the planning of the organization of different events. The table below depicts the events/workshops of EMPOWER interest.

Table 1 - List of targeted events

Event name	Relation to EMPOWER	Dates	Place	URL of the event
IRACON Cost Action meeting	Per Hi Lehne, Telenor Research presented EMPOWER	16-18/1/2019	Dublin	<a href="http://www.iracon.org">http://www.iracon.org</a>
MWC19 Barcelona	Alain Muran InterDigital organized events where EMPOWER presented	25-28/2/2019	Fira Gran Vía, Barcelona	<a href="https://www.mwcbarcelona.com">https://www.mwcbarcelona.com</a>
IEEE – 5G Summit	InterDigital organized event where EMPOWER will be presented	24-26/3/2019	Lapland, Finland	<a href="http://www.6gsummit.com/program/ieee-5g-summit/">http://www.6gsummit.com/program/ieee-5g-summit/</a>



Metro-XHaul @IFIP/IEEE (IM2019)		8-12/4/2019	Washington DC	<a href="https://im2019.ieee-im.org">https://im2019.ieee-im.org</a>
INFOCOM 2019	Joint panel with PAWR	29/4-2/5/2019	Paris	<a href="http://infocom2019.ieee-infocom.org">http://infocom2019.ieee-infocom.org</a>
INFOCOM 2019	EMPOWER workshop jointly organized with PAWR	29/4-2/5/2019	Paris	<a href="http://infocom2019.ieee-infocom.org">http://infocom2019.ieee-infocom.org</a>
Wireless World Research Forum Meeting 42	Alain Murad, InterDigital will present EMPOWER	15-16/5/2019	Tokyo, Japan	<a href="https://www.wwrf42.ch">https://www.wwrf42.ch</a>
IEEE-ICC	Joint panel with PAWR	20-24/5/2019	Shanghai	<a href="http://icc2019.ieee-icc.org">http://icc2019.ieee-icc.org</a>
ACM SIGCOMM 2019		19-24/8/2019	Beijing	<a href="http://conferences.sigcomm.org/sigcomm/2019/">http://conferences.sigcomm.org/sigcomm/2019/</a>
WoWMoM		9-12/6/2019	Washington	<a href="http://cs.ucf.edu/wowmom2019/">http://cs.ucf.edu/wowmom2019/</a>
MOBIHOC		2-5/7/2019	Catania	<a href="https://www.sigmobile.org/mobihoc/2019/">https://www.sigmobile.org/mobihoc/2019/</a>
WiOpt		3-7/6/2019	Avignon	<a href="http://www.wi-opt.org">http://www.wi-opt.org</a>
EUCNC	Joint workshop with PAWR prepared and submitted	18-21/6/2019	Valencia	<a href="https://www.eucnc.eu">https://www.eucnc.eu</a>

It should be mentioned that as per today EMPOWER organises the following events, as depicted and advertised through the EMPOWER portal and social media. Details included in the following paragraphs.

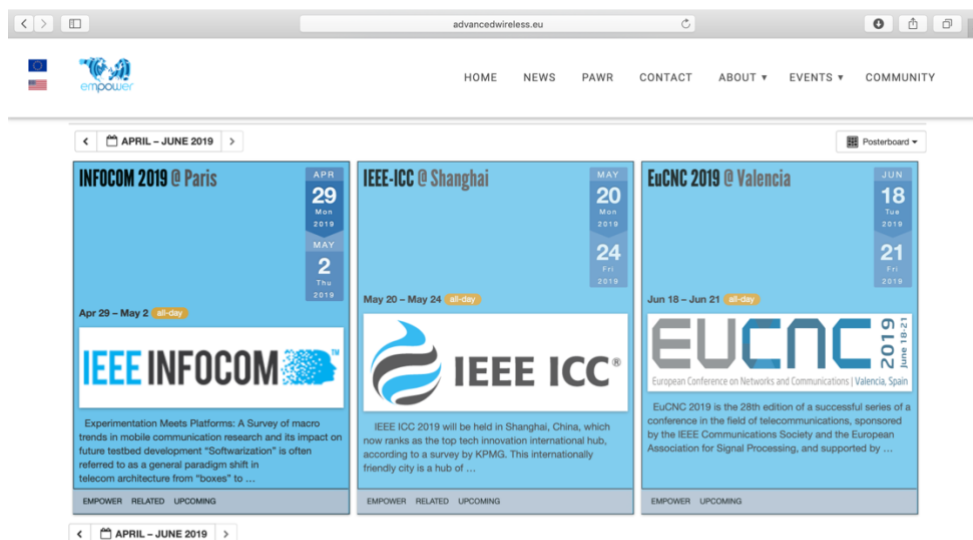


Figure 2: EMPOWER events



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#### 4.1.1 **IEEE Infocom 2019 panel** (scheduled Tuesday April 30) – Joint Panel EMPOWER – PAWR

##### **Experimentation Meets Platforms: A Survey of macro trends in mobile communication research and its impact on future testbed development**

"Softwarization" is often referred to as a general paradigm shift in telecom architecture from "boxes" to "functions", and from "protocols" to "APIs". This has profound impact on research testbed platform architecture and its components. The panel begins with exploration of such fundamental advances at all layers and by delving into investigations of the research infrastructures suitable for hosting at-scale experimentation in future mobile architectures, services, and applications, and use of such infrastructures for experimental research using practical examples. The distillation of the lessons learned above are laid out as requirements for future at-scale platforms.

The panelists represent 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 (eg. researchers, developers and testers).

##### Questions to Explore

1. What are the key wireless challenges for the future
2. Regarding these challenges, where could a test platform better support the discovery process
3. How can we best balance very advanced test platforms for core wireless technologies and more integrated verticals (service driven) platforms
4. Data management and security plan, how to get started?
5. Reproducibility and Repeatability of research. Is it a must?
6. Discussion of Sustainability of the platforms

##### Moderator(s)

- Abhimanyu Gosain, Northeastern University
- Serge Fdida, Sorbonne University

##### Panelists

- Ivan Seskar, Rutgers University, USA
- Edward Knightly, Rice University, USA
- David Schruig, University of Utah, USA
- Raymond Knopp, Eurecom, France
- Alain Mourad, InterDigital, UK
- Orange Labs, France

#### 4.1.2 **EMPOWER/PAWR Workshop** (scheduled Monday April 29)

It is a workshop jointly organized by EMPOWER and PAWR and is by invitation only to specific members of the community.

#### 4.1.3 **EUCNC joint workshop EMPOWER – PAWR** prepared and submitted to the EUCNC Conference 2018.

##### **Title of the workshop proposal: Empowering Transatlantic Platforms for Advance Wireless Research**

This workshop objective is to put in contact key persons on Europe and 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. The workshop will be mainly driven by ICT-17 and NSF PAWR representatives, although projects planning to use the wireless platforms, such as ICT-19 winning consortiums and projects with already established experience on collaboration with USA such as 5GinFire, will also be invited. The workshop will follow a full day structure, with the idea of being complementary to the half day workshop



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that ICT-17 projects are defining together. The complementarity of the workshops comes from the fact that the EMPOWER workshop will focus on the longer term research. The workshop will be focused on discussing the challenges to foster collaboration between USA and EU, ICT-17 project presentations will focus on the possible need or value for collaboration opportunities with US / NSF PAWR projects.

This workshop continues the work started in the INFOCOM 2019 Workshop on **Experimentation Meets Platforms: A Survey of macro trends in mobile communication research and its impact on future testbed development.**

The Workshop programme is structured for a full day with Talks/Panels in the workshop session, complemented with NSF demonstrations in a separated booth and is organised around the key questions to explore for the collaboration between NSF and EC, in separated sessions.

Key people of the proposed workshop

- Serge Fdida (SU)
- Abhimanyu Gosain (PPO)
- Frédéric Vaissade (SU)
- Arturo Azcorra (UC3M)
- Carlos Jesús Bernardos Cano(UC3M)
- Antonio de la Oliva(UC3M)
- Thanasis Korakis (UTH)
- Stavroula Maglavera (UTH)
- Raymond KNOPP (EURECOM)
- Navid NIKAEIN (EURECOM)
- Alain Mourad (IDCC)
- Didier Bourse (NOKIA)
- Luc Dartois (NOKIA)
- Håkon Lønsethagen (TELENOR)
- Ole Grøndalen (TELENOR)
- Per Hjalmar Lehne (TELENOR)

## 4.2 Mobility of researchers

The aim of the EMPOWER research mobility scheme is to enhance the community building in both sides of the Atlantic and to enhance networking and coordination of the efforts of the European and American academic and industrial research and innovation communities from advanced Wireless Platforms towards developing a roadmap for long term research and collaboration.

Research mobility is particularly important in promoting knowledge flows and ensuring a diverse and highly skilled workforce that has the capacity to respond to opportunities and challenges in EU-USA in wireless research. The goal of this integration activity is to increase ties to transnational research in advanced wireless platforms and to promote the knowledge flows and collaboration between institutions promoting new interdisciplinary academic – industrial networks.

This activity is targeted both to members of the EMPOWER consortium, as well as researchers not affiliated with any of the consortium partners. This mobility initiative aims the transfer of skills and expertise between EU-USA and between academia and industry in order to contribute to the development and the improvement of a regional understanding of advanced wireless platforms and to foster cooperation between stakeholders from EU and USA. The researcher mobility will be organized in collaboration with the all partners and in collaboration with the other planned EMPOWER activities and according to the needs identified.

It is expected that the mobility of researchers will increase synergies and collaboration between the relevant research and innovation stakeholders in Europe and USA in the field of advanced wireless platforms as well as with major initiatives that already exist or are under preparation.



### 4.3 Hackathons

EMPOWER supports the organization of a Hackathon on Advanced Wireless platforms.

A hackathon (also known as Hack Day or Hackfest) is an event that gathers several informatics and telecommunication experts: developers, web designers, data scientists, marketing experts. Its main aim is to combine different ideas, make people collaborate and, finally, develop, in a short time span (usually between 24 and 48 hours) a new feature around a given theme or following given rules. Developers team up in teams of 5-6 people and all participants work on a project related to the same assignment. Teams are free to choose their own development environment and are only constrained by the assignment itself and by time, which adds the pressure of a deadline and encourages creativity.

The most important results of a hackathon are not the concepts that have been developed, rather the cooperation within a region and the cooperation among different disciplines. They lead to new contacts, partnerships and cooperation well after the hackathon is over, and that means future for the project results.

The exact research topics will be further decided based on the exact needs and the results of the planned EMPOWER activities and tasks and specifically task 3.1 and will include joint proposals for demonstration on innovative technologies emanating from EU and NSF projects. It will be organized jointly with European and US teams after the 1<sup>st</sup> year of EMPOWER. An independent panel of evaluators will be responsible for the evaluation of the ideas proposed by the competing teams. The evaluation criteria will be: Relevance, Methodological soundness, Communication, Innovative approach, Replicability.

Awards are foreseen for the winning teams.

Table 2 - EMPOWER Hackathon Organization Step-by-Step

Phase	Timing	Action	Description
INITIATION	3 months before hackathon	Internal Kick off: goals of the hackathon identification, initial overall planning, initial budget plan	<ul style="list-style-type: none"> <li>Start logging hours to keep overview of the time invested</li> <li>Plan internal kick off</li> <li>Make overall draft budget</li> <li>Determine funding needed</li> <li>Approval of overall budget within internal kick off meeting</li> </ul>
LOBBY	2,5 months before hackathon	Dissemination/promotion of the hackathon to reach the right audience; identification of stakeholders, approach to potential sponsors	<ul style="list-style-type: none"> <li>Identify stakeholders and create third parties shortlist (stakeholders mapping according to the power of influence they might have on EMPOWER and on their interests)</li> <li>Create third party proposal and eventually create a third party contract</li> <li>Contact third parties</li> <li>Make communication plan</li> <li>External presentation for sponsors</li> </ul>
COUNTDOWN	2 months before hackathon	Preparation- concrete logistical organization	<ul style="list-style-type: none"> <li>look for location</li> <li>order catering</li> <li>gather participants</li> </ul>

			<ul style="list-style-type: none"> <li>• draft participant contract</li> <li>• gather volunteers</li> <li>• determine a list of experts</li> <li>• invite experts for getting to know each other</li> </ul>
PREPARATION	1 month before hackathon	Actual launch of the Hackathon	<ul style="list-style-type: none"> <li>• search for potential media partners</li> <li>• promote the hackathon</li> <li>• track its visibility</li> <li>• send out “save the date” for judges</li> <li>• prepare script for hackathon</li> <li>• brief team+ volunteers</li> <li>• evaluate the state of budget</li> <li>• invite press for hackathon</li> <li>• send out theme information to participants</li> </ul>
LAUNCH		Execution	<ul style="list-style-type: none"> <li>• prepare rooms for participants</li> <li>• prepare kick off presentation</li> <li>• prepare on site marketing (posters, rool –up banners)</li> <li>• open registration desk</li> <li>• form teams</li> <li>• give kick off presentation</li> <li>• let experts explain theme and assignment</li> <li>• let teams start working</li> <li>• make final list of participants</li> <li>• Social media update</li> <li>• Check up with teams</li> <li>• Update sponsors and client</li> <li>• Guide press and visitors</li> <li>• Let domain experts visit teams</li> <li>• Prepare press release</li> <li>• Guide press and visitors</li> <li>• Let teams prepare final demonstration</li> <li>• Brief the judges</li> <li>• Let audience and judges see the demos</li> <li>• Let participants fill out evaluation form</li> <li>• Awards show</li> <li>• Clean-up</li> </ul>
EVALUATION	1 week after Hackathon	Evaluate	<ul style="list-style-type: none"> <li>• Send out press release</li> <li>• Be available for press contact</li> <li>• Finish track press visibility document</li> </ul>





			<ul style="list-style-type: none"> <li>• Finish self-assessment</li> <li>• Make final cost overview</li> <li>• Evaluate hackathon with partners, sponsors and participants</li> <li>• Finish time log</li> </ul>
TRANSFER	After Hackathon	Transfer hackathon	<ul style="list-style-type: none"> <li>• Transfer to developing</li> <li>• Transfer directly to market</li> <li>• Enriching the project development</li> </ul>

## 5. The EMPOWER web-portal

The EMPOWER web portal aims to be the entry door to the Advanced Wireless Platforms initiative for its players, for the general public and for the broad Internet community, including all relevant stakeholders active in this domain in Europe and the US.

### 5.1 Overall Technical Platform

Web design experts within EMPOWER conceived its design and structure to promote the outcomes to the relevant target groups, by following up on a number of discussions within the consortium.

As by the timeline defined (see figure 4), a first release of the web portal has been already made publicly accessible since the beginning of the third month of EMPOWER at: <http://www.advancedwireless.eu>.

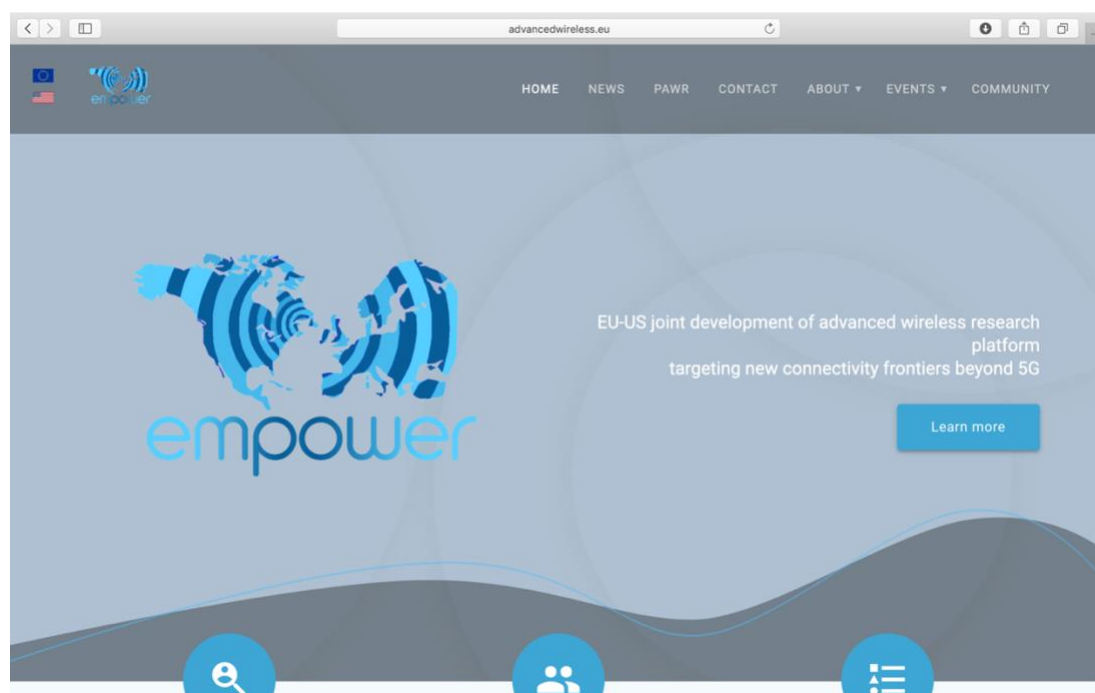


Figure 3: EMPOWER web portal

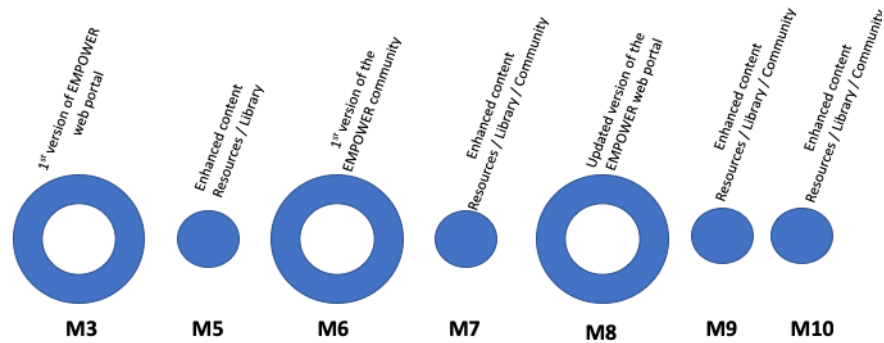


Figure 4: The timeline

**Basic facts:** The EMPOWER web portal is available at <http://www.advancedwireless.eu>. UTH created the web portal and will technically maintain it throughout the whole duration of EMPOWER, with active collaboration from all project’s partners. The web portal is based on WordPress (<http://wordpress.org/>), one of the most popular Open Source Web Content Management System (CMS) together with the social community plugin BuddyPress to build the EMPOWER community. The web portal is integrated into the powerful stats engine provided by Google analytics.

**Technical aspects:** As mentioned the web portal is based on WordPress which uses PHP to generate HTML code, pages are styled with CSS3 and stored into a MySQL database. The entire code of the website adheres to the standards of accessibility defined by the World Wide Web Consortium (<https://www.w3.org/>).

**Design aspects:** The design of the web portal is strongly brand-oriented to grow and consolidate the image of the EMPOWER identity. All the dissemination material produced within EMPOWER and for the interaction with social networks will use the portal as term of reference, in order to have a consistent communication and an easy-to-recognise image/brand. To support multimodal access of the web portal, it adopts responsive design principles aimed at providing an optimal viewing experience: the interface adapts the layout to the viewing environment by using fluid, proportion-based grids.



Figure 5: EMPOWER web portal on smartphone (Responsive design)

## 5.2 Structure and organization of the EMPOWER web portal

This section describes in detail the structure of the EMPOWER web portal, its content and main offered functionalities.

- **Homepage:** Entry point of the portal. The homepage is user oriented to support visitors in quickly and easily understanding what the Advanced Wireless Platforms community and the initiative to link activities between Europe and US is and what is offered in the portal. It is extremely flexible giving the possibility to adapt the main entry point of the website to different situations highlighting events or relevant information.
- **About:** Informative page about the EMPOWER initiative and the main objectives of the overall programme and its major activities.
- **Events - Calendar:** This is a dedicated area for the promotion and dissemination of relevant upcoming events related to EMPOWER and more in general to Advanced Wireless Platforms initiatives. A special emphasis will be given to the events organized by EMPOWER and PAWR initiatives. Each individual

event page gives the opportunity to quickly share the content through the most important social networks and also via e-mail.

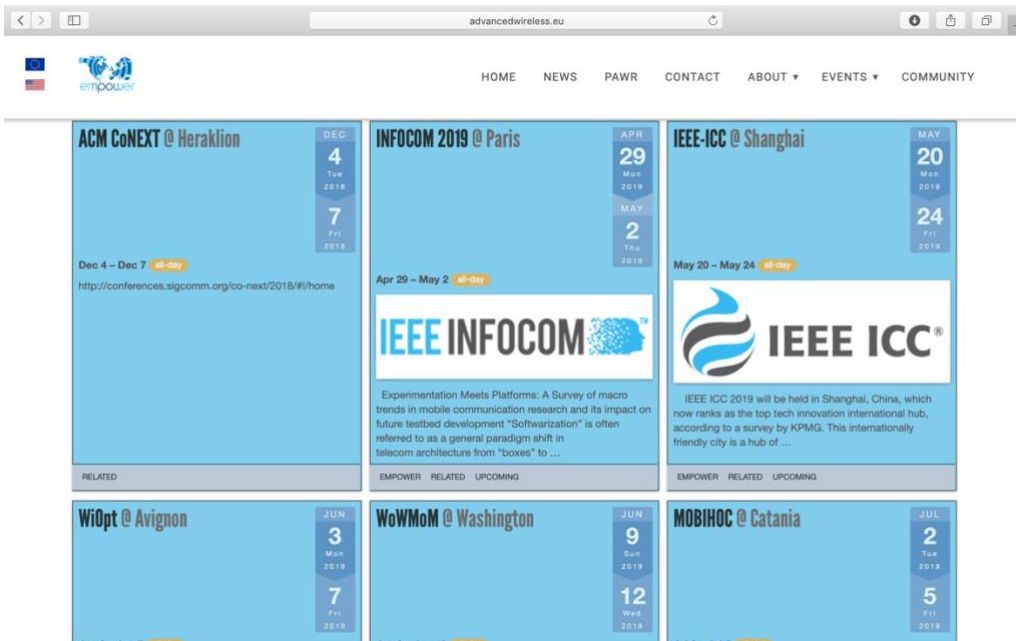


Figure 6: List of events related to Advanced Wireless Platforms

- **News:** Blog section to promote the latest breaking news related to EMPOWER and more in general Advanced Wireless Platforms. Each individual article gives the opportunity to quickly share the content through the most important social networks and also via e-mail. All articles are carefully tagged with a selection of categories, this optimize the research and also the “related articles” module at the bottom of each article.

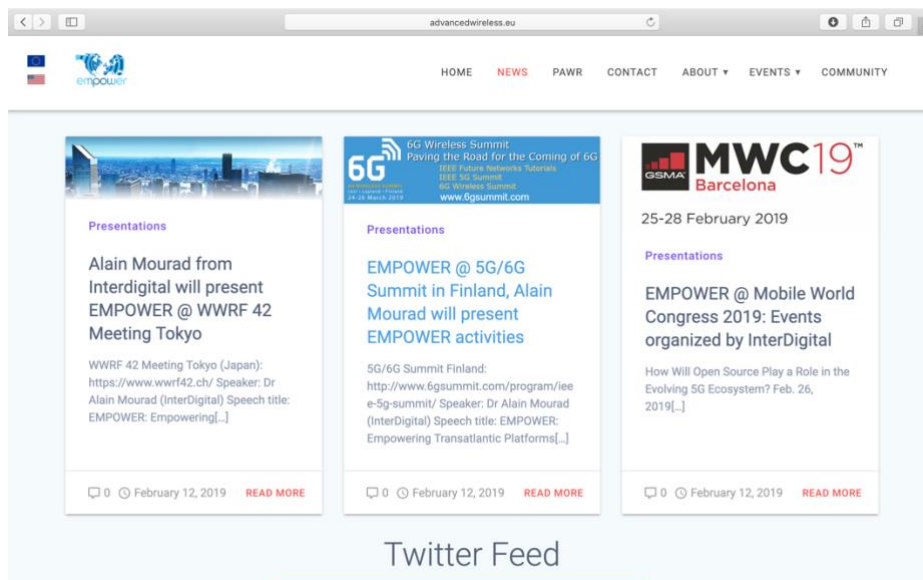


Figure 7: EMPOWER News



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- **Library (to come):** Repository of documents related to Advanced Wireless Platforms and EMPOWER. This section will be closely connected to the community in order to enlarge the scope of relevant resources and documents.
  - **EMPOWER community (to come):** An area dedicated to facilitating communication, interaction and information exchange for the whole EMPOWER and Advanced Wireless Platforms community. The online Advanced Wireless Platforms community platform will be a central element of the web portal and one of the key success factors for the consolidation and growth of the whole initiative.

### 5.3 Strategy and promotion

The web portal aims to be the entry point for all information about the Advanced Wireless Platforms ecosystem in Europe and the US. All relevant information about projects, outcomes, events, milestones, developments, etc., must be well exposed and accessible via the dedicated areas the portal has been structured around.

EMPOWER consortium will be constantly searching, gathering and elaborating information to be posted, especially in relation to the planned activities of the various work packages. Moreover, EMPOWER partners will regularly poll for information and motivate the community to use the EMPOWER portal and offered tools. The vision is to create a community of active players that embraces efforts beyond EMPOWER and that provides an entry point, where information, resources, tools and ideas related to digital social innovation can be found, discussed and promoted.

A key success factor for the promotion of the web portal will be use of the various active EMPOWER social networks. Twitter, LinkedIn will regularly echo what is happening in the web portal. This will be crucial to attract new visitors and target stakeholders.

As explained at the beginning of this document, a first version of the web portal is already online but a development timeline has been defined, also in relation to other planned activities EMPOWER partners are following up on, in order to assure that specific functionalities will be made available at key stages of the advanced wireless platforms community growth. The timeline we identified for the next 6 months is presented in figure 4.

### 5.4 Supporting the community

As explained in the executive summary of this document, one of the main objectives of EMPOWER is to support the advanced wireless platforms community. In order to achieve this ambitious goal, the EMPOWER web portal is conceived to be accessible, simple and easy to find and use, acting as a main entry door to relevant efforts and initiatives.

In particular, the EMPOWER web portal will offer the capability to build, animate and moderate an online community that is central to all stakeholders' engagement activities run by EMPOWER and other ongoing projects.

### 5.5 The functionalities

A set of interesting functionalities has been foreseen for the EMPOWER community. They are primarily oriented to empower the interaction between the members and facilitate the exchange of ideas and documents. The EMPOWER community platform will be very flexible to adapt functionalities and services to the request from the members. A registration will be needed to become member of the community and have access to the content. There will be the possibility to create public and private groups, for instance with different focus, so as to facilitate discussions and information exchange.



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The basic functionalities of what registered members of the EMPOWER community platform could do is described hereby:

- Set their profiles with a picture and preferences.
- Create groups of discussions, ideas, new proposals, etc.
- Become friends (or Follow) groups or members.
- Participate to the discussions inside the groups, the suggestion box and the library corner.
- Invite other people to join the community.
- Set notifications/alerts for the activity in groups.
- Private messaging within the community.
- Share files within a group. This will bring the opportunity to create thematic repositories inside each of the groups.

The strategy for administration and engagement of the community to the EMPOWER web-portal is key for the success of the online EMPOWER community portal:

- **Consistency/Content:** The strategy will be oriented to create and guide the content of the groups to consistent subjects. To start with, EMPOWER consortium will create specific groups and initial threads to foster the interaction.
- **Designed to share:** A key element for the interaction within EMPOWER community is the availability to easily share files. Moreover, not only share but also quickly find the elements that have been shared inside the groups. To this purpose thematic repositories will be created.
- **The place to be:** EMPOWER will create the need for the target groups and stakeholder to register to the community because it is the place to stay tuned for everything it happens around the advanced wireless platforms and the collaboration between EU and US.
- **Feeding into the portal:** Through the community platform it will be possible to collect news items and events information that will feed the web portal and social media as appropriate.

## 6. Conclusions and next steps

This document describes the dissemination and community building strategy and plans and reports the activities since the commencement of the project. 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.

The Dissemination and Community building Strategy and Plan identifies the main target stakeholders, the activities that will be pursued to effectively reach them and the specific communication and dissemination measures, including a description of the communication and media tools, including the EMPOWER web portal.

The dissemination and community building strategy and plans follows an iterative approach, to release WP4 deliverables and meet the planned milestones, while ensuring broad impact of EMPOWER. A summary is reported hereby.

*Table 3 - List of planned dissemination and community building deliverables*

Deliverable	Description	Due date	Status
D4.1 Communication and Community Building Strategy and Plan	This report will define the communication and community building strategy and describe the activities EMPOWER partners will pursue so as to guarantee broad visibility, promotion and up-take. Input from all the three WP4 tasks will inject into this document. This will also include a record of activities related to dissemination and exploitation that have been undertaken, and those still planned.	M4 (February 2019)	Current deliverable
D4.2 Communication and Community Building Report	This document will update the communication and community building strategy plan as appropriate and report on activities took place till M18. It will also include input about what have been the most effective communication tools and channels in terms of community reach, and report on activities pursued to grow the community and engagement of stakeholders. This will also include a record of activities related to dissemination and exploitation that have been undertaken, and those still planned.	M18 (April 2020)	Planned
D4.3 Final Communication and Community Building Report	This document will be the final report on all various dissemination and communication activities pursued within EMPOWER. It will provide a critical assessment of the most successful actions and means, trying to qualitatively and quantitatively measure the impact generated within the community and beyond. This will also include a record of activities related to dissemination and exploitation that have been undertaken.	M36 (October 2021)	Planned
D4.4. Report on the organisation of events and engagement activities	This report present the organisation of the different events, such as workshops, hackathons, researchers mobility for the first 18 months of the project.	M18 (April 2010)	Planned
D4.5 Report on the organisation of events and engagement activities	This report present the organisation of the different events, such as workshops, hackathons, researchers mobility for second 18 months of the project.	M36 (October 2021)	Planned