

Smart5Grid



Demonstration of **5G** solutions for
SMART energy **GRIDs** of the future

WP7 Meeting 22/05/2023

5G-PPP IA WG Trials 2023 activities

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The 5G Infrastructure Public Private Partnership

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Summary

Content overview

- Mission of the WG
- Activities in 2023
- Smart5Grid Contributions



Mission of the WG Trials



WG Chair: Carles Antón-Haro, CTTC (Centre Tecnològic de Telecomunicacions de Catalunya)

V 1.5 (March, 10 2022) – no changes since last updates in the Smart5Grid WP7 meeting (07/11/2022)

The Trials Working Group was launched by 5G Infrastructure Association in September 2016 after the publication of the 5G Manifesto of industry in Europe and in the context of the 5G Action Plan of the EU Commission. According to the 5G Manifesto, industry in Europe was expected to develop a European trial roadmap on technology trials and Pan-European trials with vertical sector use cases. Consequently, the 5G Infrastructure Association decided to launch this Working Group in order to provide a neutral place for such discussions to take place.

Objectives:

- To develop a 5G, 5G Advanced and 6G European Trial Roadmap and leverage on the knowledge gained for upcoming trial roadmaps for beyond 5G/6G systems in the context of the Smart Networks and Services partnership in Horizon Europe.
- To facilitate the involvement of verticals in the trials' roadmap.
- To discuss and define business principles underpinning the economic viability of trials.
- To consider and coordinate the activity on trials and verticals with other relevant initiatives at international level.
- To investigate and propose how to link trials to upcoming calls for project proposals within Horizon Europe (HEU) Smart Networks & Services (SNS) Partnership
- To increase the visibility of the trials and pilots carried out by 5G-PPP and SNS projects, with emphasis on 5G-PPP/Phase 3 and SNS/Phase 1 projects.
- To keep track and disseminate to the broadest possible audience the work on verticals done by EU funded projects.
- To support the development of European strategic research and innovation agenda and preparation of Smart Networks & Services Partnership 2023-2024 work program in relation to trials and experimentations.

Mission of the WG Trials



Activities:

The activities of the WG Trials are organized in several Streams which may change (be created or removed according to the activities that are required by the overall WG, no more often than 6 months):

- 5G Private Trials / Observatory, led by Didier Bourse (Nokia) and Carole Manero (iDATE)
- 5G and towards 6G Verticals, led by Valerio Frascolla (Intel)
- 5G Trials Cities, led by Jyrki Huusko (VTT)
- 5G International Cooperation: ~~Baruch Altman (LiveU-TV)~~ to be decided

Meetings:

- The Trials WG organizes regular plenary only conferences, on a **quarterly basis**.

Operation:

- The Working Group operates with the following e-mail reflectors
- wg-trials@5g-ppp.eu for the overall WG coordination.

Reports and Reviews:

- Every quarter, the Working Group reports to the 5G IA Board (5G IA WGs) and presents its progress according to the agreed overall time-plan.
- At the end of every year, the Trials WG submits to the 5G IA board their key achievements for the past year along with any issues that need to be considered for the following year. The 5G-IA board provides an evaluation back to the WG, 2 weeks after the reception of the yearly report.

Activities of the WG Trials in 2023



2023 Workplan and Terms of reference to Stream Champions is still **on-going (was due Feb 2023)**.

Transversal activities from all streams

- Plenary meetings every quarter with reports from on-going projects and from the champions of the WG Streams
- Brochures (only completed projects could propose trials and pilots for the selection process):
 - PPP Trials & Pilots Brochure n°4. Overall coordination in collaboration with 5G PPP TB, organization/ participation in evaluation panel (~~to be released by end of 2022~~) -- due date updated to **June 2023**.
 - PPP Trials & Pilots Brochure n°5. Overall coordination in collaboration with 5G PPP TB, organization/ participation in evaluation panel (Dec. 2022 – the definition phase)
- White Paper ‘Evolution of use cases and verticals towards 6G’ -due date updated ~~from Dec 2022~~, to April 2023.

Smart5Grid Contributions to the WG Trials in 2022



- Smart5Grid representatives: Irina Ciornei, Madiha Shahzad, and Lenos Hadjidemetriou (UCY)
- Participation in all plenary meetings of the WG
- Delivered a presentation with the updates on the progress of the Smart5Grid
 - “Uninterruptible Smart Grid Operation, Use Case 1: 5G Network Architecture and Network Application” – **17/05/2023 (Athonet & STAM)**
 - **Presentation available on our TEAMS under T7.3.../WGs/Trials WG**
- Proposed to showcase a possible UC (Evolution of UC4) for 5G advanced and 6G as part of the White Paper ‘Evolution of use cases and verticals towards 6G’ **-no feedback yet (finalization was expected April 2023)**
 - Smart5Grid team participated in several dedicated calls discussing the input/editing for this White Paper (IPTO, OTE, UCY), however after Winter holidays no update was provided.

PPP Trials & Pilots Brochure n°4 - opportunity

Due date 15th of June 2023



- 3 instructions documents available on our SharePoint **T7.3.../WGs/Trials WG/Brochure Templates**
 - **Flyer (this is the form to be filled in with concise information)**

Trial / Pilot Name:	
Overview	<p><i>Summarize briefly the Trial / Pilot objective, introduce the Project and the Trial / Pilot use-case. Include the date of the Trial / Pilot. The Trial / Pilot shall be completed and not on-going or planned.</i></p> <p><i>Include the list of involved Partners.</i></p> <p><i>Position the Trial / Pilot (and Project) in the PPP Programme, e.g. possible connections to other PPP Projects or to other PPP Trials & Pilots (past / future).</i></p> <p>LIMIT: 1250 characters without image / 750 with image</p>
Architecture	<p><i>Explain and illustrate the Project Trial / Pilot architecture.</i></p> <p>LIMIT: 1250 characters without image / 750 with image</p>
Deployment	<p><i>Explain and illustrate the Trial / Pilot deployment and configuration.</i></p> <p><i>Provide a link where readers can have more information about the deployment of the Trial / Pilot.</i></p> <p>LIMIT: 750 characters without image / 500 with image</p>
Results	<p><i>Explain the outcomes of the Trial / Pilot, indicating key achievements, Performance and Business <u>KPIs</u>.</i></p> <p><i>Provide a link where readers can have more information about the results from of the Trial / Pilot.</i></p> <p>LIMIT: 750 characters without image / 500 with image</p>

Criteria	Project Trials / Pilot Information
Does the Trial/Pilot have social impact? If so enumerate up to 3 social impacts. Is the Trial / Pilot potentially bringing added value in COVID-19 / pandemic context?	
Is the Trial/Pilot validating a service that could be monetized? If yes, describe it. If yes, is there a plan to possibly commercialize the service? If already identified, include information on the potential <u>economical</u> impact.	
Is the Trial/Pilot bringing a unique disruptive innovation application/service? If yes, describe it.	
How many 5G KPIs is the Trial/Pilot validating? Is the Trial / Pilot addressing Energy Efficiency (EE) / Energy consumption.	
What is exactly the 5G Empowerment (key features and benefits/value brought by 5G technology)?	
How many users (vertical use cases) are supporting the Trial/Pilot?	

- **Criteria Form: a survey with 10 questions (business-value related)**
- **Process (describes the selection process and the award criteria)**

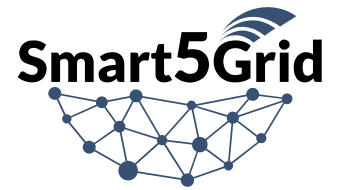
PPP Trials & Pilots Brochure n°4 - opportunity

Due date 15th of June 2023



- Flyer and Criteria completed files need to be sent to Didier Arnaud Bousie (Nokia): didier_arnaud.bourse@nokia.com
- Carefully read Process... document and the ...
 - Previous Brochure, as an example: <https://5g-ppp.eu/the-5g-ppp-infrastructure-trials-and-pilots-brochure-3-is-out/>

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Thank you

Any questions?