

D8.2 - THE INVISIBLE 5G PROJECT AT SCIENTIFIC AND TECHNICAL EVENTS



INVISIBLE 5G

VIRTUALLY INVISIBLE SMALL-CELLS FOR 5G DENSIFICATION

Contractual Date of Delivery:	31/Out/2021
Actual Date of Delivery:	31/Out/2021
Responsible:	Altice Labs
Editor:	João R. Reis (IPL/ESTG)
Authors:	João R. Reis (IPL/ESTG)
Internal reviewers:	Rafael F.S. Caldeirinha, Telmo Fernandes (IPL/ESTG), Renato Bispo (LiDA/ESTG), Samuel Madail (Altice Labs)
Activity:	A8
Security:	Public
Version:	1.0
Total number of pages:	5

SUMMARY (EN):

This deliverable identifies the technical and scientific events relevant to INVISIBLE 5G. It presents a dissemination plane identifying possible journal publications and conference participations. It also gives details about the final demonstrator. This deliverable verifies milestone M8.2 - “Communication and Dissemination Plan”.

SUMÁRIO (PT):

Este entregável identifica os eventos técnicos e científicos relevantes para o INVISIBLE 5G. Apresenta um plano de divulgação identificando possíveis publicações em revistas e participações em conferências. Também fornece detalhes sobre o demonstrador final. Este entregável verifica o marco M8.2 - “Plano de Comunicação e Disseminação”.



Competitiveness and Internationalization Operational Program—COMPETE 2020 and Regional Operational Program of Lisbon—Lisboa2020, in the scope of Portugal2020, through European Regional Development Fund (FEDER); and by national funds through FCT—Foundation for Science and Technology, under the project Invisible 5G (POCI-01-0247-FEDER-069770 + LISBOA-01-0247-FEDER-069770)

Table of Contents

1. Scope	3
2. Scientific and Technical Events	3
2.1. Conferences and symposiums	3
2.2. Journal Papers	4
2.3. Other Scientific and technical events	5
2.4. Demonstrator	5
3. Conclusions.....	5

1. Scope

This Deliverable presents a complete plan for communication and dissemination of project results identifying several scientific and technical events, including the final project showcase (pilot demonstrator), where the consortium envisages to be present to communicate and disseminate the work developed within the project to the public. It verifies milestone M8.2 - "Communication and Dissemination Plan".

2. Scientific and Technical Events

The scientific dissemination is a necessary and important form dissemination, conveying the knowledge and relevant results from the scientific point of view. The Consortium identifies in this deliverable the most relevant and highly reputed spaces for the scientific dissemination of the project results, as journals/magazines and international conferences and symposiums. In line with the defined in the Technical Annex, the Consortium expects to deliver, at least, the following results in terms of publications: at least 2 journal papers, 10 international conference papers, 1 national conference, and presentation in 1 technical-scientific meeting in the area.

2.1. Conferences and symposiums

The Consortium has identified the following international, peer-reviewed conferences, of which they would like to submit the most recent advances of the project's work:

- IEEE EuCAP – European Conference on Antennas and Propagation: the largest and most significant antennas and propagation conference attracting more than 1400 participants from academia and industry, and more than 50 industrial exhibitors, from all over the world. The conference takes place yearly, typically in March/April, with call for papers being typically announced during the month of October (of the previous year). The upcoming edition is the EuCap22, taking place in 'March-01 April 2022, in Madrid, Spain. Call for papers for this event is close at the time of this report.
- URSI GASS – It is the General Assembly and Scientific Symposium (GASS) of the International Union of Radio Science (Union Radio Scientifique Internationale-URSI), where scientific community reunite to present new discoveries and make plans for the future research and special projects in all areas of radio science. This Scientific Symposium is held at intervals of three years to review current research trends. The upcoming edition (URSI CASS 2023) will take place in August 2023, Sapporo, Hokkaido, Japan;
- IET APC - The Antennas and Propagation Conference (APC) is an annual event dedicated to the fields of Antennas and Propagation, organized by The Institution of Engineering and Technology (IET). The conference supports our proactive and diverse A&P community within the UK and abroad, attracting delegates from academia, industry, research institutes and government bodies. At the time of the deliverable, the date for APC 2022 is not yet defined.

- ICHAD 2023: 17 - International Conference on Heritage Architecture and Design aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Heritage Architecture and Design Conference. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of Heritage Architecture and Design Conference. Upcoming conference: February 08-09, 2023 in Lisbon, Portugal.

2.2. Journal Papers

The Consortium has identified the following international, highly reputed journals, for possible dissemination of the project's work, per scientific area:

- IEEE TAP - Transactions on Antennas and Propagation (TAP) is a peer-reviewed scientific journal published by the IEEE Antennas & Propagation Society. It covers research on and applications of all aspects of antenna technology and the propagation of electromagnetic waves. It was established in 1952 and is published monthly along with occasional special issues. Impact Factor: 4.388, Quadrille 1.
<https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=8>
- IEEE AWPL - IEEE Antennas and Wireless Propagation Letters is an annual peer-reviewed scientific journal with the goal of rapid dissemination of short manuscripts in the antennas and wireless propagation domains. It is an official journal of the IEEE Antennas & Propagation Society. Impact factor: 3.834, Quadrille 1.
<https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=7727>
- IEEE Access - It is a peer-reviewed open-access scientific journal published by the Institute of Electrical and Electronics Engineers (IEEE). It was established in 2013 and covers all IEEE fields of interest. The journal won a PROSE Award in 2015 for the best new journal in science, technology, engineering, and mathematics. Impact factor: 3.367, Quadrille 1.
<https://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=6287639>
- IET MAP – IET Microwaves, Antennas & Propagation (MAP) is dedicated to coverage of microwave and RF circuits such as, microwave and millimetre wave amplifiers; oscillators, switches, mixers and other components, and antennas, including designed and prototyped antennas for operation at all frequencies; multiband antennas, antenna measurement techniques and systems, antenna analysis and design, aperture antenna arrays, adaptive antennas, printed and wire antennas, microstrip, reconfigurable, conformal and integrated antennas. Impact factor: 1.972, Quadrille 2.
<https://digital-library.theiet.org/content/journals/iet-map>
- IJAH - International Journal of Architectural Heritage provides a multidisciplinary scientific overview of existing resources and modern technologies useful for the study and repair

of historical buildings and other structures. Modern requirements for an intervention include reversibility, unobtrusiveness, minimum repair, and respect of the original construction, as well as the obvious functional and structural requirements. Restoration operations complying with these principles require a scientific, multidisciplinary approach that comprehends historical understanding, modern non-destructive inspection techniques, and advanced experimental and computer methods of analysis. <https://www.tandfonline.com/journals/uarc20>

2.3. Other Scientific and technical events

Consideration will be given to other scientific and technical events during the project, particularly Techdays – Aveiro, subject to confirmation given the pandemic situation.

2.4. Demonstrator

As considered in Activity 7, the project envisages a public demonstration, within the scope of the project. This will be ensured through a technology showcasing via a TRL 7 system prototype demonstration in operational environment via a coordinated pilot phase, as the main output of the project that aggregates the knowledge transfer and incorporates contributions from every member of the consortium.

The demonstrator will provide a 5G small-cell pilot deployment in the Leiria district of Portugal, for 5G tests and validation, where 5G users will be requested to actively interact with the proposed solution and assess its innovative features from the user experience point-of-view.

At the time of this deliverable, the consortium is evaluating the key requirements (technical, legislative, and bureaucratic) for the deployment of the demonstrator in the area of Marinha Grande and/or Leiria, including the space/location for deployment, available technical infrastructures that facilitate the integration of the pilot with the Telecom operator (connectivity with the core network), and respective authorizations near the local authorities/council.

More details regarding the demonstrator will be given, in due time, in a dedicated document that will be appended to this deliverable.

3. Conclusions

This deliverable details the technical and scientific events relevant to INVISIBLE 5G, by pressing a complete dissemination plane and identifying possible journal publications and conference participations. It gives details about the final demonstrator that is expected to take place in the district of Leiria, Portugal. More details regarding the deployment of the demonstrator will be given in a dedicated document that will be further appended to the present deliverable. This deliverable verifies milestone M8.2 - “Communication and Dissemination Plan”.