Special Session on:

GROWS: 6G empoweRed iOt netWorkS

October 12-27 2023 Aveiro Congress Center, Portugal

In conjunction with IEEE WF-IoT 2023



As 5G before, 6G is being heralded as the most immersive capable communications architecture to be developed in the coming years. To support this, we have started to see

impressive displays of potential directions, technological advances, key performance (and

value) indicators, standards evolution, and partnerships being established to foment policy

making and research. Additionally, 6G can also pave new ways for a more streamlined experience, by more tightly coupling other kinds of network access such as Non-Terrestrial Networks, and by enabling radical new ways for communications in complex

environments, such as maritime communications. But what does that mean for IoT? What

will be the key enablers, the new scenarios and business opportunities? Will the enhancements allow the full fledged realization of an enhanced cyber-physical world, or just another incremental step towards such vision? How new worldwide concerns, such as environmental footprint, impact new technological designs? And what of IoT applications: what have key players learnt from the radical changed brought in by 5G, and which new

requirements would they imprint over 6G? GROWS (6G-empoweRed iOt netWorkS) is a

Special Session at 2023's WFIoT, aiming to contribute with a concrete, holistic, multi-stake

holder vision on what 6G really means for IoT, by presenting new results, discussions and

prospect plans from different professionals from the full range of value chain.

Organizing Chairs:

Daniel Corujo

Institute of Telecommunications and University of Aveiro, Portugal

Håkon Lønsethagen Telenor Research, Norway

Important dates: Paper submission: Jul 30, 2023 Notification of acceptance: Aug 21, 2023

Camera-ready submission: Sep 29, 2023 Presentation submission: Oct 2, 2023

Topics of Interest:

-Efforts towards 6G standardization for IoT

-Proposals for 6G enhancements for radio, RAN and core targeting IoT

-Seamless interconnection with non-terrestrial and mobile networks in IoT deployments, considering 5G/B5G and 6G prospects -Proposals for new 6G-enabled architectures and their expected contribution/impact for IoT

- -Contributions of supportive/complementary technologies such as virtualization, cloud, AI/ML, edge, federation and others
- -Characterization and assessment of new IoT scenarios and industries enabled by 6G-capable IoT
- -Comparison between the outcomes achieved by 5G-enabled IoT, and the prospects expected from 6G

Description:

-Evolution techniques and solutions for evolving 5G deployments towards 6G

-Energy-efficiency and sustainability aspects for 6G-enabled IoT

- -Lessons learnt from 5G-enabled IoT deployments and further requirements for 6G enhancements
- -Contributions of 6G for maritime IoT-based scenarios
- Industrial vertical areas certification and regulation impact in upcoming 6G solutions

Paper Submission:

All papers must be submitted through eWorks. You must choose the **Special Session track** (**Spes-05**) when submitting your paper in order to be considered for this special session. The paper should be up to six (6) pages in length. The conference allows up to two additional pages for a maximum length of eight (8) pages upon payment of extra page fees once the paper has been accepted.

The paper can be prepared using the template available through the Authors / Proposers tab from the WF-IoT conference website main page at:

https://wfiot2023.iot.ieee.org.

An alternative is to use the IEEE Word or Latex tools that can be found through: <u>https://conferences.ieeeauthorcenter.ieee.org/write-your-paper/authoring-tools-and-templates/</u>.

Authors of accepted papers will need to provide a final version of your paper in PDF format and upload it by the camera-ready deadline and complete the assignment of copyright and release form. For your paper to be included in the proceedings and published in IEEE Xplore, at least one author is required to register for WF-IoT 2023 by the deadline.