



Dear Photonics21 Secretariat

We herewith submit the nomination of the following Photonics21 Board of Stakeholder candidate (organization) / representative (person).

**- Letter of Nomination -  
Photonics21 Board of Stakeholders  
Election 2018**

## Photonics21 Board of Stakeholders - Letter of Nomination

*§ 5 BOARD OF STAKEHOLDERS (6) b....A candidate nomination will always contain the name of the candidate organisation together with its proposed BoS Representative, and voting on a candidate implies voting on this combination.*

### **1. Full legal name of the affiliation nominated as BoS Member (candidate's organisation):**

Centre Tecnològic de Telecomunicacions de Catalunya (CTTC)

### **2. Full contact details of the affiliation (street, postal code, country) nominated as BoS Member and invoice address (in case the candidate is elected, the affiliation needs to pay an annual service fee according the Photonics21 Terms of Reference §5 (10)):**

Address: Avinguda Carl Friedrich Gauss, no. 7

City: Castelldefels

Postal code: 08860

Country: Spain

### **3. Name of the suggested BoS Representative (the personal candidate)**

Josep M. Fabrega

### **4. Information about the BoS candidate and the BoS representative**

*Extract Photonics21 Terms of Reference<sup>1</sup>: “§ 5 BOARD OF STAKEHOLDERS; ... (6) Election of BoS Members: “Description of the activities of, and information about the added value and contribution to the BoS by both the nominated BoS member and the BoS Representative”*

**a)** Description of the activities and information about the expected contribution and value added the nominated BoS member (candidates organization) will bring to the BoS<sup>2</sup>

is a non-profit research institution based in Castelldefels (Barcelona), resulting from a public initiative of the Regional Government of Catalonia (Generalitat de Catalunya). Research activities, both fundamental and applied, are organized onto four research divisions: Communication Networks, Communication Systems, Communication Technologies and Geomatics.

Since its creation in 2001, CTTC has participated in more than 150 projects funded by European, Spanish or Catalan administrations or by direct contracts with industry, in the fields of, among others, 5G broadband communication systems, next-generation optical transport networks, embedded systems, software defined networking, satellite communications, positioning systems, M2M com-

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<sup>1</sup> Photonics21 Terms of reference are available at [https://www.photonics21.org/download/about-us/structure/ETP\\_Photonics21\\_Terms\\_of\\_Reference\\_C3.pdf?m=1513688127&m=1499877714](https://www.photonics21.org/download/about-us/structure/ETP_Photonics21_Terms_of_Reference_C3.pdf?m=1513688127&m=1499877714)

<sup>2</sup> The candidate is aware and accepts that according to the Photonics21 Terms of Reference a service agreement and a service fee invoice is to be signed / paid with the Photonics21 association.

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munications, smart grids. CTTC also develops strategic internal research projects for proof of concept and experimental prototypes.

Within the Communication Networks Division, the Optical Networks and Systems (ONS) department of CTTC has broad experience in research programs due to its participation in several Spanish and European public-funded R&D projects, closely collaborating with leading research institutions in Europe or Japan. The ONS department has produced over 330 publications in peer-reviewed journals and international conferences, result of its studies on the most advanced optical subsystems and networking technologies, and cutting-edge laboratory infrastructure/equipment. Additionally, ONS department has participated in several industrial contracts with different relevant companies.

Furthermore, CTTC is member of the steering board of Networkd 2020 ETP, and member of the 5G-IA (5G-PPP).

Therefore, the expected contribution to BoS from CTTC will be related to information and communication technologies, bringing its expertise covering optical devices, systems, and networking technologies from a unique (and holistic) point of view.

**b) Description of the activities and information about expected contribution and value added the BoS Representative (candidate / person) will bring to the BoS.**

Josep M. Fabrega has been involved in Photonics 21 since 2016, where he actively contributed to the definition of research and innovation actions as well as the corresponding photonics multi annual roadmap, focusing on information and communication applications and services.

His research activity is focused on photonics and ICT (including 5G), being involved in different H2020 projects, such as PASSION, METRO-HAUL, 5G-BLUESPACE, 5G-CROSSHAUL. Thanks to this experience, he has been able to contribute to the definition of research and innovation actions related to photonics for optical networking.

Josep M. Fabrega is a Senior Researcher in the optical networks and systems department of CTTC, being involved and leading several private and public R&D projects (National and EU- funded).

During his 15 years of professional experience in optical transmission and networks, his activity encompassed the use of photonic devices for broadband optical communications and optical signal delivery over novel network architectures.

Josep M. Fabrega is the author of more than 40 papers and co-author another over 60 papers, including 2 patents.

In 2017 has was elevated to IEEE Senior Member in recognition to his experience, and received the EuroFOS best student research award for his PhD thesis back in 2010.

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### *Final information from the Photonics21 secretariat:*

- *We recommend limiting the BoS nomination letter to 3-4 pages max.*
- *Letters of nominations should be either submitted via the Photonics21 website*

<https://www.photonics21.org/bos-election/index.php>

*or via e-mail to [secretariat@photonics21.org](mailto:secretariat@photonics21.org) .*

- *It is highly recommended to consult the Photonics21 Terms of Reference before submitting the nomination.*
- *Please note that the deadline for providing BoS nominations to the Photonics21 Secretariat is the **21<sup>st</sup> September 2018**.*