



To Photonics21Secretariat
via eMail: secretariat@photonics21.org

or via Mail:
c/o VDI Technologiezentrum GmbH
ST / QS
Attn: Barbara Kehrer, Ursula Tober, Markus Wilkens
VDI Platz 1
40468 Düsseldorf
Germany

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 2019**

**Company: DAS PHOTONICS, S.L.
Candidate: SANTIAGO SIMÓN**

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):

DAS PHOTONICS, S.L.

2. Full contact details of the affiliation (street, postal code, country) nominated as BoS Member and invoice address *(In accordance with the Terms of Reference §5, which the Affiliation acknowledges having received, an Annual Service fee will be invoiced every year during the first quarter to the BoS Member. By signing the present letter the BoS candidate agrees to pay this Service Fee. The Service Fee will be considered an asset of the Photonics 21 AISBL in accordance with its statutes (article 12,c).*

**Camino de Vera s/n
Universitat Politècnica de València, Edif 8F
46022 – Valencia (Spain)**

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

SANTIAGO SIMÓN

Photonics21 Board of Stakeholders - Letter of Nomination

4. Information about the BoS candidate and the BoS representative

Extract Photonics21 Terms of Reference¹: “§ 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 BoS²

DAS PHOTONICS (Valencia, Spain) is a Spanish SME focused on the development of innovative value-adding products based on our proprietary photonics technology. Our products are at the forefront of R&D in Photonics for Space, Defence, and Aeronautics being recognised as the leading company in the application of microwave photonics in such sectors^{[2],[3],[4],[5],[6]}. DAS was created in 2005 as a spin-off of the Valencia Nanophotonics Technology Centre and currently employs 90 people and is commercialising its products worldwide.

Our activity is mainly driven in three directions:

- ✓ Provide innovative solutions and products based in our proprietary photonics technology for our target markets.
- ✓ Design and fabrication of photonic components and photonic integrated chips (PIC) based on proprietary technology
- ✓ System integration using our own photonics components as well as COTS offering significant benefits in terms of SWAP (Size, Weight and Power consumption) and performance regarding incumbent technologies.

Since its creation, DAS has been improving and upgrading its technology from laboratory prototypes to fully operative products, developing in parallel R&D activities in the field of PIC, where DAS has focused special attention in order to maintain the competitive advantage that allows the company to stay at the forefront of next generation technologies development. The company exploits the advantages of photonics technology to offer solutions with improved bandwidth, mass and power consumption, compared with electronic implementations.

DAS products are oriented towards highly specialised applications in our target markets, with requirements that go beyond the technological limits of conventional electronic systems and where photonics technology enable to reach these necessities offering solutions with high added value for our customers. The ISO 9001:2015 certification assures our management system for “Design and development of photonic and electronic devices and systems for applications in Security, Defence, Aerospace and Telecom” and the ISO 9100:2016 certification for “Quality Management Systems - Requirements for Aviation, Space and Defense Organizations”. DAS is also certified under AQAP 2110 “NATO Quality Assurance Requirements for Design, Development and Production of Photonics and Electronics devices and systems for Applications in the Defence Sector”.

¹ Photonics21 Terms of reference are available at

http://www.photonics21.org/download/general_inf/TermsOfReference/ETPPhotonics21TermsOfReference.pdf

² 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.

^[2] [www.youtube.com/Hispasat 30W-6 - Growing Connectivity](http://www.youtube.com/Hispasat_30W-6_-_Growing_Connectivity)

^[3] [www.youtube.com/Amazonas 5 - More Latin America, more HISPASAT](http://www.youtube.com/Amazonas_5_-_More_Latin_America,_more_HISPASAT)

^[4] twitter.com/Moedas

^[5] www.instagram.com

^[6] [www.youtube.com/European Commissioner, Carlos Moedas@UPVTV 14-03-2018](http://www.youtube.com/European_Commissioner,_Carlos_Moedas@UPVTV_14-03-2018) (full interview, subtitles available)

Photonics21 Board of Stakeholders - Letter of Nomination

For space, DAS develops solutions for both, ground segment and on-board systems. The aim is to bring the benefits that photonic technology provides to the space market, such as significant mass and size reduction as well as EM immunity. The current applications developed by DAS are in the line of photonics links for digital and analogue signals, multi-frequency conversion and antenna beamforming. These applications are preliminary steps to reach a more challenging objective, which is to be able to provide a transparent photonic payload. In the application of photonics technologies to the Aerospace sector, DAS is a major player in many ESA contracts and EC projects, and has direct contracts with major players in the field. DAS has developed several photonic modules and subsystems (Active Optical Cables - AOC, downconverters) that are flying in ALPHASAT, PROBA-V, HISPASAT AMZ5, HISPASAT 30W-6 and EUTELSAT-7C satellites.

As a result of the intense R&D activity, DAS has founded two additional spin-off companies, FIBERNOVA and LUMENSIA SENSORS, for telecoms and biosensing markets respectively, raising the overall staff of the group above 100 high skilled people.

DAS Photonics representatives, have been taking part of the Photonics21 BoS for years with contributions not only in the working groups they take part in, but also in the advocacy for photonics positioning in the Spanish and European Institution at high level, contribution that will continue in the near future. The experience of being a fast growing SME, the knowledge about the funding/investment ecosystem and the capability to bring R&D to final products give us a full landscape view very profitable for Photonics21 BoS.



Figure 1. Picture of EU R&D Commissioner Carlos Moedas and DAS Photonics CEO Javier Marti at DAS facilities^{4,5,6}.

Photonics21 Board of Stakeholders - Letter of Nomination

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

Santiago Simón (www.linkedin.com/in/santiagosimon), born 1973, got a MSc. in Telecommunication Engineering in 1997 in the Universitat Politècnica de València, and an Executive MBA in 2005.

Santiago holds at present two positions in DAS Photonics' Group

On the one hand, he is the Business Development Manager of DAS Photonics since 2015, overseeing the Defence and Telecom worldwide markets of DAS products. In this field, he has a good knowledge about abroad markets and the exportation problems that SME face in their growing phases. During these years, the staff and turnover of the company have grown by a factor of three.

On the other hand, he is the General Manager of LUMENSIA SENSORS, a start-up company founded by DAS Photonics some years ago to exploit the internal capabilities in the biosensing field using our proprietary Photonics Integrated Circuits (PIC) technology. Santiago took control in the very early stage of the company and by now it has reached 10 employees, raised two investment rounds and is getting ready to launch its first products for allergens and microbiology control in the Food industry.

Santiago Simón has been a member of the Photonics21's Board of Stakeholders since 2013, member of Photonics21 since its foundation and was also involved in the foundation of the Spanish photonics platform, Fotonica21, holding the Technical Secretariat from 2009 to 2015. Santiago Simón led the Spanish participation in Innopho21 and Europho21 projects, coordinated by Photonics21, with tasks centered in the coordination of the advocacy activities to national governments for the improvement of photonics position in national research policies.

From the R&D point of view, Santiago has been involved in European funded projects in Framework programs 5, 6, 7 and H2020. At present, both LUMENSIA SENSORS and DAS Photonics are involved in many project, leading some of them.

As an entrepreneur, he has founded several companies in different sectors, like renewable energies or tourism, getting years of experience in SME management

Expected contribution to Photonics21 BoS

Due to his position in DAS Photonics and LUMENSIA SENSORS and his previous experience in R&D centers, Santiago Simón has a deep knowledge of the funding needs of growing photonics SMEs. So, he will contribute not only in the technology issues but also in the proposals for SME oriented policies, instruments and topics and in the role to be played for national photonics structures like clusters and national platforms to foster photonics wide deployment.

The wide scope of activities in which Santiago Simón has industrial experience gives him a landscape view of the photonics sector, its challenges and, most important, the possibilities in the worldwide market. The positions he holds nowadays in the above-named companies have special importance in fast growing markets for photonics like Defence, Space, Food or Environment.

Photonics21 Board of Stakeholders - Letter of Nomination

Final information from the Photonics21 secretariat:

- *We recommend limiting the BoS nomination letter to 3-4 pages max.*
- *Letters of nominations can either be submitted*
 - *A) electronically (secretariat@photonics21.org) - **PREFERRED***
 - *B) by post mail to:*

*VDI Technologiezentrum GmbH
ST/QS
B. Kehrler/ U. Tober/ M. Wilkens
VDI-Platz 1
40468 Düsseldorf
Germany*

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 **21st. September 2019.** This is also valid for postal submission.*