



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):

Fraunhofer Heinrich Hertz Institute

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)):

Prof. Dr. Martin Schell
Fraunhofer HHI
Einsteinufer 37
10587 Berlin

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

Martin Schell

4. Information about the BoS candidate 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 BoS¹

The Fraunhofer Heinrich Hertz Institute is a worldwide leading research institution with a major focus on components and systems for optical data transmission, and a focus on photonics enabled sensing methods, e.g. Terahertz spectroscopy and fiber bragg grating design and technology. About 160 researchers work in these fields, complemented by about 120 students.

HHI's contribution to the BoS would be mainly:

- As most Fraunhofer institutes, HHI has large experience in bridging the R&D gap between basic research and industrial application*
- HHI covers most research topics in the value chain of optical communications from chip level to system level. HHI is vertically integrated, and also has other communication research fields like Wireless Broadband and Video Coding in house. This puts HHI into a good position when identifying potential economic impact of new research ideas already in a very early stage*
- HHI has a worldwide track record of expertise in research. Several world records in optical transmission have been achieved, and about every second bit transported in the internet touches an optical device with its roots at HHI.*

¹ 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.

Photonics21 Board of Stakeholders - Letter of Nomination

HHI is very visible and very well connected to non-European research, which may prove valuable for BoS discussions about research direction.

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

Martin Schell got a PhD on semiconductor lasers in 1992. After a year post-doctoral research at the University of Tokyo, he joined the Boston Consulting Group as a management consultant, where he worked in various high tech and non-high tech industries. Later, he worked at Infineon Fiber Optics as product line manager for optical components, and as head of production. In 2005, he joined Fraunhofer HHI as department head Photonic Components. Since 2013, he is professor for optic and optoelectronic integration at the Technical University of Berlin. Since 2014, Martin Schell co-heads HHI together with Thomas Wiegand. He is a board member of EPIC (European Photonics Industry Consortium), speaker of the board of OptecBB (Berlin Brandenburg Competence Network for Optical Technologies), and Associate Editor of the IEEE Journal of Lightwave Technology.



His research interests include high end optics for data communication, photonic integrated circuits in various technologies, and Terahertz sensing by various optically enabled methods.

Martin Schell would contribute to the BoS

- *A good understanding of both the economic and the scientific aspects of photonics*
- *A large experience in bringing photonics device ideas into manufacturable and sellable products*
- *Personal experience in photonics industry, in non photonics industry, and in academics*

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*

Photonics21 Board of Stakeholders - Letter of Nomination

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

or via e-mail to 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 **21st September 2018**.*