

**Photonics PPP call topics for Horizon 2020 Work Programme 2018-2020 determined! - Process successfully completed by Photonics21**



PHOTONICS PUBLIC PRIVATE PARTNERSHIP

The prioritization process for the Photonics21 PPP calls 2018-20 - started at the Annual Meeting 2016 - was successfully completed mid of April. Based on the Board of Stakeholder Prioritization of the Photonics21 Work Group Proposals the Photonics PPP Partnership Board prepared a proposal how to implement the photonics research and innovation priorities into the Work Programme 2018-20. The proposal was approved by the Board of Stakeholders mid of April (Yes: 50, Abstention: 2; No: 2).

**DRAFT - Core Photonics PPP call: Photonics KET  
ICT-03-2018 Photonics Manufacturing Pilot Lines - Innovation Actions**

- Providing low entry barrier access for industry in particular SMEs, low and medium production volumes
- Indium Phosphide
- Silicon Photonics

**ICT-04-2018 Photonics based manufacturing and production of advanced photonics**

**a) Innovation Actions**

- Access to advanced photonics for researchers
- Enabling automated mass manufacturing of Datacom photonics products
- Connected Lighting

**b) Research and Innovation Actions**

- Highly productive ultra-short laser systems for fast materials processing
- Tailored laser beams

**ICT-05-2019 Application driven photonics components and Photonics Manufacturing Pilot Lines**

**a) Innovation Actions**

- Photonics devices for advanced imaging to support diagnostics driven therapy
- Sensor-Based optimization of Production Processes
- Maturing a technology platform and providing low entry barrier access for industry in particular SMEs, low and medium production volumes
- Free-form optics
- Advanced optical medical device technologies for both in-vivo and in-vitro diagnosis

**b) Research and Innovation Actions**

- Photonics system on Chip/ System in Package for optical interconnect applications
- Photonics devices for advanced imaging to support diagnostics driven therapy
- Flexible Farm-to-Fork Sensing Photonics

**c) Coordination and Support Actions**

- **Fostering Careers in Photonics**

#### **ICT-06-2020 Disruptive photonics technologies**

##### **a) Research and Innovation Actions**

- **3D light field and holographic displays**
- **New concepts for assembly and packaging for photonics components**
- **Light to Fuel**
- **Next generation biophotonics methods and devices as research tools to understand the cellular origin of diseases**

#### **ICT-07-2020 Advancing photonics technologies and application driven photonics components**

##### **a) Innovation Actions**

- **Hyperspectral VIS-NMIR Sensing and Deep Learning**

##### **b) Research and Innovation Actions**

- **New Photonics Integrated Circuit Technology**

##### **c) Coordination and Support Action**

- **Photonics21 strategy support**

#### **DT-01-[2020]: I4MS (phase 4) – uptake of digital game changers and digital manufacturing platforms**

##### **a) Innovation Actions**

- **IoT and cyber-physical systems contributing to the circular economy**
- **Human-robot cooperation**
- **Analytics, simulation and artificial intelligence**
- **Additive manufacturing**
- **Laser based equipment in advanced manufacturing**
- **Uptake of emerging platforms by SMEs and mid-caps**

#### **DT-03-[2020]: Photonics Innovation Hubs**

##### **b) Innovation Actions**

- **Open Access to Photonics Innovation Hubs**

The call topics are now implemented into a draft call text for Horizon 2020 Work Programme 2018-20 by the European Commission. As a next and final step in the process the European Commission coordinates the draft call text with the member states for their comments and approval. Changes can still be implemented by the member states. It is expected that the overall budget for the topics may add up to 333 Mio EUR. The call text for Horizon 2020 Work Programme 2018-20 will be published in autumn 2017.

Overall, more than 800 participants attended the Photonics21 workshops to determine the PPP call topics, many more were providing feedback in the subsequent consultation phases. On behalf of the Photonics21 Boards and the European Commission we thank all members for their active participation and contribution!

For information on the overall prioritization process, tasks and responsibilities within the process please visit the [PHOTONICS21 WEBSITE](#).