Discussion on the photonics research and innovation topics for the first calls (2021-2022) of the new Horizon Europe work programme

All workshop participants

PHOTONICS²¹

AI-powered optical IT

2021

Drive the convergence of electronics and optics as well as IT and communications.

Artificial-intelligence based automation is key to achieve zero touch operation leveraging the power of light.

- Dynamically self-configuring optical network technologies based on AI/ML for control, optimization, and fault detection

- Optical devices enabling energy-efficient telemetry & analytics in optical networks

- Programmable devices and optical nodes based on open HW and SW (white boxes, open platforms, open interfaces & APIs)

- Taking advantage of Europe's leading position in telecom to expand into the new optical IT

- Research & Innovation Action, 20M€ (max 8M€ per project)

PHOTONICS²¹

Industries at the speed of light
2022

Guaranteed delivery on time, always, everywhere

Making possible mission and time- critical services

- Lossless delivery of data (end-to-end, across all technologies)

- time-sensitive optical networking technologies

- latency-optimised optical interconnects, switches and devices (laser, cross-connects)

- optical precision timing solutions

integrated optical comms in sensor/actuator systems (e.g. 3D machine vision)

- Investing in digital infrastructure of European industries is a matter of sovereignty

- Research & Innovation projects (24 M€ max, 12M€/project)

PHOTONICS²¹

PHOTONICS PUBLIC PRIVATE PARTNERSHIP