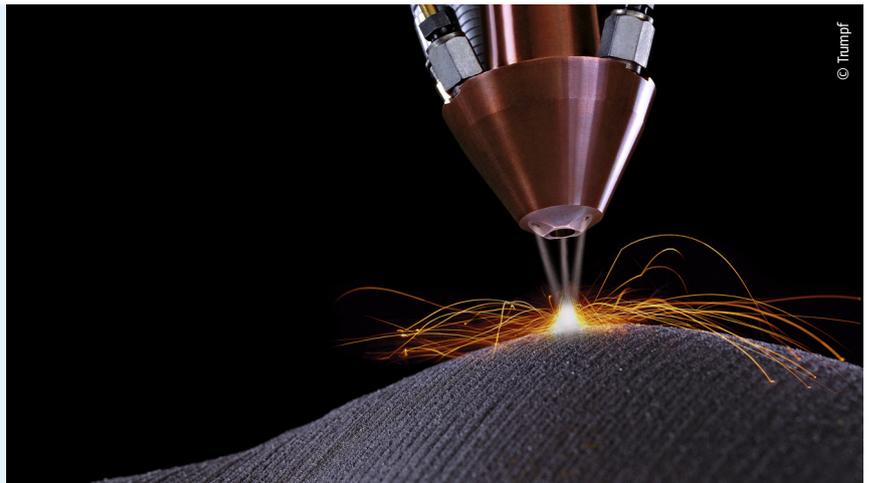


Photonics PPP: The next generation of photonics solutions to sustain Europe's industrial leadership

- Building on Europe's strengths in photonics to deliver growth and jobs
- New solutions for energy efficient lighting, a healthy society, fast communication, sustainable manufacturing, and safety
- The next generation of photonics technologies to sustain European industrial leadership.



What is the challenge?

Photonics is the science and technology of light, in particular generating, guiding, manipulating, amplifying and detecting light. It is behind many familiar innovations such as lasers, optical fibers and the cameras and displays in our phones but it also affects our daily lives in many less obvious areas. It is driving innovation in a broad range of sectors like, laser-based manufacturing, energy efficient lighting, health care and safety and security which are of economic and strategic importance for Europe. The global photonics market was € 350 billion in 2012 and Europe had a €66 billion share, around 18% of the total.

The challenge for this PPP is to secure leadership in those areas where Europe is strong or where there is potential for creating new markets. The PPP will accelerate Europe's innovation process and the time to market for solutions. It will encompass the entire innovation and value chain from advanced materials to manufacturing and from advanced research to technology take-up, pilot production lines and demonstration actions.

What is the PPP in photonics about?

The Photonics PPP brings together all players from the European photonics sector and related activities including end-user industries and professionals. Together they have created a strategic roadmap which outlines the main research

and innovation objectives for the European photonics sector for 2014-2020 which includes securing technology leadership in key areas, translating that leadership into a competitive advantage for European companies and skills generation.

As partners in the PPP, all parties have made a long-term commitment to invest in achieving these objectives. In particular, the PPP will help formulate photonics-related research and innovation priorities for Horizon 2020.

What results and benefits do we expect?

A stronger, more competitive and more innovative European photonics industry and closer cooperation between all actors including research and academic institutions and end-users.

The PPPs aims to

- Increase Europe's share of the global photonics market.
- See more companies, in particular SMEs using photonics-based technologies, which can give their products a competitive edge.
- Stimulate existing and grow new businesses across the entire sector and beyond.
- Provide EU-wide access to photonics technology, experimentation and manufacturing capabilities which will make SMEs more competitive.
- Increase the number of high skilled jobs in the photonics industry and leverage new jobs in other industry sectors.

What will the new total budget be?

The European Commission has earmarked around €700 million for the photonics PPP in Horizon 2020. The photonics industry will invest at least €2,800 million in activities related to PPP objectives.

How will it be managed or run?

The Photonics PPP is a contractual PPP, and it will be implemented by the European Commission. The Commission will be responsible for selecting and negotiating proposals received through calls which are open to everybody. It will also monitor projects' progress and make the related payments according to the Horizon 2020 financial rules.

The private side of the PPP is organised through the Photonics21 Association which represents more than 1150 industry, research and academic players and other organisations. They are responsible for providing inputs on the scope of the research and innovation actions in Horizon 2020 photonics calls for proposals.

Both sides of the PPP will meet regularly in a Partnership Board to discuss the joint strategy, agree on the content of future call for proposals and monitor the performance, outputs and impact of the PPP.

What has been achieved so far?

The Photonics PPP will only become operational in 2014. It has grown from the Photonics21 European Technology Platform which was launched in 2005 and has been instrumental in creating and structuring the European photonics community, growing from 250 to over 2000 members today. The Strategic Research Agendas created by the members of Photonics21 were the main input for photonics-related calls for proposals in FP7, where a total of €460 million has been dedicated to photonics R&D.

Useful links

ec.europa.eu/digital-agenda/en/photonics
www.photonics21.org

Success Story

ACTMOST has helped SMEs and other companies to develop photonics-enhanced products in biomedicine, green energy, safety and security, transport and other industrial sectors.

This one-stop-shop linked up innovative companies with photonics experts and micro-photonics technologies at 14 high tech research laboratories from 6 Member States. Between September 2010 and September 2013, 29 companies received support covering feasibility studies, proof-of-concept experiments, prototyping, personalised technology coaching.

80% of these companies were SMEs, and many were from beyond the photonics sector. EU funding of €1.2 million gave them risk-free access to the best photonics experts and technologies available in Europe without administrative overheads.

ACTMOST delivered quick results, with projects taking on average 10 months to be completed, leading to new products like a handheld optical scanner for cancer research, optical authentication features to prevent passport fraud and high-pressure optical fiber sensors for ultra-safe oil and gas exploitation.

In Horizon 2020, ACTPHAST, is the successor to ACTMOST, and will help even more SME partners with a wider range of photonics technologies and services. ACTPHAST will receive around €8 million in EU funding and support the objectives of the photonics PPP.

Web site link

www.actmost.eu

