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European Technology Platform

Photonics 21

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ETP Photonics21

The European Technology Platform (ETP) Photonics21 is a European membership association with no legal form.

The **general objectives** of Photonics21 are:

- Establish strategic links and align common efforts in Photonics R&D;
- Transform knowledge into leading-edge technologies and products which are competitive on a global scale;
- Define medium to long-term research and technological development objectives;
- Provide for the necessary research environment capable of accelerating Photonics research in Europe.



Photonics21 in Figures (December 2006)

- More than 500 members
- representing 27 countries
- among these 21 EU Member States
- almost 50 % industrial members (BoS)
- about 3/4 of the industrial members represent SMEs
- Photonics21 unites the majority of the leading Photonics industries and relevant R&D stakeholders along the whole economic value chain throughout Europe.



Bodies of Photonics21



Board of Stakeholders (BoS)



Executive Board (EB)



Photonics21 Executive Board

President: Vice Presidents: Work Group Chairs:	Alexander von Witzleben, CEO Jenoptik Bernd Schulte, President EPIC Paul Lagasse, IMEC, Director Intec Division Malgorzata Kujawinska, Warsaw University of Technology		
1. Information and Communication	2. Industrial Production/ Manufacturing & Quality	3. Life Science & Health	4. Lighting & Displays
Giorgio Anania, CEO Bookham	Peter Leibinger, CEO Trumpf Lasertechnik	Michael Kaschke, CTO Carl Zeiss	Peter Stormberg, CTO Philips Lighting
5. Security, Metrology & Sensors	 Design and Manufacturing of Components & Systems 	7. Photonics Research, Education & Training	Secretariat Photonics21
Jean-Francois Coutris, Vice President SAGEM DS	Lars Thylen, Royal Institute of Technology KTH	Chris Dainty, European Optical Society (EOS)	VDI Technologie- zentrum GmbH



Photonics21 Work Groups





Genesis of Photonics21

• Autumn 2004:

Launch of an industry-led European Photonics initiative

• February 2005:

Publication of the joint strategic vision paper "Photonics for the 21st Century"

December 2005: Foundation of the ETP Photonics21

at Bibliotheque Solvay in Brussels

• April 2006:

Publication of the Strategic Research Agenda (SRA) "Towards a Bright Future for Europe", handed over to Commissioner Viviane Reding





Ph21 research priorities for the first calls in FP7

• April 2006 - May 2006:

Work groups 1-7 defined Photonics21 research priorities for the first calls in FP7 with special relevance for the European Research Area

May 2006:

President provided Photonics21 research priorities to Commissioner Viviane Reding

June 2006 - July 2006:

Delegations of the work groups 1-7 presented the research priorities to selected heads of units relevant to photonics within the European Commission.



Photonics21 Work Groups 1 and 6

1. Information and Communication	Industrial Production/ Manufacturing & Quality	Life Science & Health	Lighting & Displays
Giorgio Anania, CEO Bookham	Peter Leibinger, CEO Trumpf Lasertechnik	Michael Kaschke, CTO Carl Zeiss	Peter Stormberg, CTO Philips Lighting
Security, Metrology & Sensors	 Design and Manufacturing of Components & Systems 	Photonics Research, Education & Training	Secretariat Photonics21
Jean-Francois Coutris, Vice President SAGEM DS	Lars Thylen, Royal Institute of Technology KTH	Chris Dainty, European Optical Society (EOS)	VDI Technologie- zentrum GmbH



WG1 'Information and Communication' Research priorities for the first calls in FP7

1. Photonic technologies for high and ultra high speed optical core networks

Objective: To develop component technology that can deliver truly cost effective transport at 40Gbps and higher bit rates, to enable the next phase of core network evolution.

2. Photonic technologies for radical cost reduction and enhancement of the Access Network

Objective: To develop photonic technology for the scalable, future proof and economic access network.

Complete list and description of research priorities can be found at the Photonics21 website (member area)



WG 6 'Optical Components and Systems' Research priorities for the first calls in FP7

1. Photonic integration technologies for chips of higher functionality and drastically reduced footprint.

Objective: To develop integrated photonic technology that drastically reduces the size and increases integration levels and functionality of integrated photonics chips, thereby also making them more cost effective.

2. Production strategies and systems for the integrated manufacturing and packaging of components and subsystems Objective: To develop production technologies for photonic systems of different complexities, from packaged chips to subsystems and complete systems, such that dramatic savings in cost and time results.

Complete list and description of research priorities can be found at the Photonics21 website (member area)



Information and contact

Website:

www.photonics21.org