

Objective ICT-2007.3.5

Photonic Components and Subsystems

ICT Proposers' Day
Köln, 1 February 2007



Expected Outcome - I

a) Core photonic components and subsystems

(Certain kinds of lasers, solid state light sources, optical fibres, image sensors and other sensors)

b) Application-specific photonic components and subsystems

(for certain kinds of applications in broadband networks, medical diagnosis and prevention, and sensing)

Work on components covers also related materials, fabrication technologies and system concepts



Expected Outcome - II

c) Underlying Technologies:

- Integration and manufacturing technologies
(holistic approaches for producing photonic components and subsystems)
- Design methodologies and tools
(holistic approaches for designing photonic components)

d) Complementary measures

- Assessment actions to promote European suppliers
- Networking, integration and structuring of R&D

e) Support measures

- To give access to advanced technologies
- To stimulate photonics education
- To support the development of R&D strategies



Expected Impact

- Leading position of European industry in high value photonic products
- New photonic based applications
(with emphasis on communications, health, well-being, environment, safety and security)
- Continued European leadership in photonics RTD
(securing the necessary human resources and knowledge to design, produce and use new generations of photonic components)



Link to the overall Challenge

- To strengthen Europe's position as a leading supplier of electronic/photonic components and systems
- To enable Europe's industry to stay at the forefront of electronics/photonics developments and applications



Cross-objective Opportunities

- **Objective 2007.1.1:** The Network of the Future
[components for communication networks]
- **Objective 2007.3.2:** Organic and large-area electronics, visualisation and display systems
[e.g. organic light sources / OLEDs]



Other opportunities for photonics related R&D

In ICT:

- Objective 2007.8.1 FET proactive 1: Nanoscale ICT devices and systems

In NMP:

- Activity 4.2.2 Knowledge-based smart materials with tailored properties

[e.g. organic materials for photonics; nano-structured materials with tailored magnetic properties]

- Activity 4.2.4 Advances in chemical technologies and materials processing

[e.g. flexible efficient processing for polymers]

- Activity 4.4 Indicative priority for future calls:
New generation of High Brilliance Lasers and Beam Delivery Equipment for Industrial Applications



Recommendations

- For a directory of European photonics expertise in research (institutions, universities and SMEs, in particular from new member states), see www.micro-optics.org/deper/
- For background on European photonics R&D strategy, see www.photonics21.org
- For FP7 activities in photonics and presentations of existing projects, see www.cordis.europa.eu/fp7/photonics/



Budget & Call Information - I

Funding schemes

a) Core photonic components and subsystems b) Application-specific photonic components and subsystems c) Underlying technologies	CP
d) Complementary measures - Assessment actions - Networking, integration and structuring	CP NoE
e) Support measures	CSA

CP = Collaborative Project, existing in two types:
STREP (small and medium scale), IP (large scale)

NoE = Network of Excellence

CSA = Coordination and Support Action



Budget & Call Information - II

Indicative budget distribution

[amounts to be confirmed after the Commission decision on 2008 budget]

90 M€:

- CP 76 M€ (min. 26 M€ to IP, min. 30 M€ to STREP)
- NoE 9 M€
- CSA 5 M€

ICT call 2

- Planned publication date: May/June 2007
- Planned closure date: Sep/Oct 2007



Further Information & Contact

Contact points for

“Photonic components and
subsystems” in ICT call 2:

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