

Synergies between Horizon 2020 & Regional activities

Combining Funds in the Field of Photonics



PHOTONICS PUBLIC PRIVATE PARTNERSHIP



Horizon 2020



→ The biggest EU Research and Innovation programme with nearly €80 billion of funding available over 7 years (2014 to 2020).

→ Research and innovation with emphasis on excellent science, industrial leadership and tackling societal challenges.

→ Financial instrument implementing the Innovation Union, a Europe 2020 flagship initiative aimed at securing Europe's global competitiveness.

→ More breakthroughs, discoveries and world-firsts by taking great ideas from the lab to the market.

→ Photonics is a Key Enabling Technologies (KET). KETs are areas of key industrial relevance determining Europe's global competitiveness.



Horizon 2020 : Calls for proposals

FoF-13-2016: Photonics Laser-based production - Research and Innovation Action

- **From "design to piece" - Excellence in laser-based additive industrial manufacturing**

→ Topic : addresses laser-based additive industrial manufacturing of metallic materials.

→ Improve the overall performance in terms of speed and costs whilst producing high quality work pieces.

Opening : 15 October 2015

Closing : 21 January 2016

Funding : In total €30 Million. Proposals requesting a contribution from the EU between EUR € 2 and € 4 Million.



Horizon 2020 : Calls for proposals

FoF-13-2016: Photonics Laser-based production - Innovation Action

- **Rapid individualised laser-based production**

→ Develop and set-up efficient, highly flexible high throughput pilot facilities on the basis of existing processes for laser-based production and validate them in real settings.

Opening : 15 October 2015

Closing : 21 January 2016

Funding :In total €30 Million. Proposals requesting a contribution from the EU between EUR € 2 and € 4 Million.



Horizon 2020 : Calls for proposals

ICT-29-2016 : Photonics KET 2016 - Research and Innovation Actions

- Application driven core photonic technology developments for a new generation of photonic devices (including components, modules and sub-systems).
 - ▶ Biophotonics : advancing imaging for in-depth disease diagnosis.
 - ▶ Breakthrough in miniaturization of SSL light engines and systems.
 - ▶ Pervasive high-specificity and high-sensitivity sensing for a safer environment.

Opening : 20 October 2015

Closing : 12 April 2016

Overall funding budget : € 40 Million



Horizon 2020 : Calls for proposals

ICT-29-2016 : Photonics KET 2016 - Innovation Actions

- Application driven core photonic devices integrated in systems (Microdisplay-based immersive, augmented and virtual reality visualisation systems.)
- Pilot line for Assembly and Packaging of integrated photonic components.

Opening : 20 October 2015

Closing : 12 April 2016

Contribution from the EU between €2 Million and €4 Million (for the first theme), and between €6 Million and €14 Million (for the second theme).



Horizon 2020 : Calls for proposals

ICT-29-2016 : Photonics KET 2016 - Coordination and Support Actions

- **Coordination of regional photonics strategies**

Stimulate collaboration of photonics clusters to extend the range of Go-To-Market services for SMEs (including access to finance).

- **Photonics enhanced MakerLabs**

Raise awareness, support hands-on learning and enhance skills of students, technicians and young professionals interested in photonics by extending existing facilities in order to provide access to photonic components, photonics-based equipment and related support services.

Opening : 20 October 2015

Closing : 12 April 2016

Contribution from the EU up to €1.5 Million



Another call : I4MS (ICT Innovation for Manufacturing SMEs)

→ Aims at improving the competitiveness of the EU manufacturing sector by increasing the uptake of advanced ICT, with a specific focus on SMEs in the industrial sector (FP7).

Early November 2015 - early March 2016 : I4MS will open a call to request proposals for the establishment of Regional Innovation Hubs in regions not currently participating in the I4MS initiative.

Proposals should include :

- Solid plan for creating a digital innovation hub in the regions by a consortium of relevant organizations.
- Plan for financing such a hub.

Funding : up to €50,000 (direct costs and travel) with a total of 20-30 hubs.

Project time frame (including mentoring, coaching and the development of a solid plan for the regional hub) : 6 months.



Synergies among programmes

Joint or coordinated efforts to achieve greater impact and efficiency.

Synergies can be achieved through:

- Bringing together Horizon 2020 and ESIF money in the same project (that could be a single action or a group of coordinated actions/operations, but always provided that there is no double funding of the same expenditure item) in view of achieving greater impact and efficiency.
- Successive projects that build on each other.
- Parallel projects that complement each other.
- ESIF programmes could also be designed and implemented to take up high quality project proposals from Horizon 2020 or other centrally managed programmes, for which there is not enough budget available in the respective programmes.



Combined funding of ESIF programmes and Horizon 2020

ESIF : 110 billion dedicated to innovation activities, ICT, small and medium-sized enterprise (SME) competitiveness and low carbon economy.

→ Regions : develop smart specialization strategies prior to receiving ESIF funding for projects in the area of innovation.

→ Allows regions to concentrate their investments on their comparative advantages.

→ Several regions identified Key Enabling Technologies (KET) in their Smart Specialisation Strategies.

Basic principles of combined funding (ESIF programmes and Horizon 2020) :

- ✓ **No substitution** of national/regional or private co-funding to EU projects /programmes under direct Commission management by ESIF money (and vice versa).
- ✓ **No double financing** : in no circumstances shall the same costs be financed twice by any budget.



Combined funding of ESIF programmes and Horizon 2020



ERA-NET instrument in Horizon 2020

→ Designed to support public-public partnerships in their preparation, establishment of networking structures, design, implementation and coordination of joint activities as well as topping up of single joint calls and of actions of a transnational nature.

→ From the funding of networks to the top-up funding of single joint calls for transnational research and innovation in selected areas with high European added value and relevance for Horizon 2020.

→ Increasing substantially the share of funding that Member States dedicate jointly to challenge driven research and innovation agendas.



ERA-NET instrument in Horizon 2020

Call for proposals 2016 “PhotononicSensing”

Several targets :

- Safety (including food safety)
- Civil security
- Manufacturing/Production
- Environmental monitoring
- Medical applications

→ The complete budget of submitted projects should be between €0.5 and €3 Million, with at least 2 partners from 2 different countries.

→ Countries and Regions involved in this call : Austria, Brittany (France), Flanders (Belgium), Germany, Israel, Poland, Portugal, Tuscany (Italy), Turkey, UK.



Vanguard Initiative for New Growth through Smart Specialization



- Driven by a political commitment of regions to use their smart specialization strategy for boosting new growth through bottom-up entrepreneurial innovation and industrial renewal in European priority areas.
- Seeks to lead in developing interregional cooperation and multi-level governance for supporting clusters and regional eco-systems to focus on smart specializations in priority areas for transforming and emerging industries.
- The Vanguard initiative in 3D printing may represent an interesting initiative for the Photonics PPP to interact with.



Vanguard Initiative for New Growth through Smart Specialization



ERRIN : European Regions Research and Innovation Network

→ Promotes knowledge exchange between its members, focusing on joint actions and project partnerships to strengthen regional research and innovation capacities.

→ Seeks to contribute to the implementation of the Europe 2020 Strategy, the Innovation Union flagship initiative and Smart Specialization strategies.

→ ERRIN vision : enhancing regional competitiveness.

→ A dedicated work group on Photonics to coordinate and foster intra-regional activities.