



Centro para el Desarrollo
Tecnológico Industrial



Photonics PPP INFO DAY
Madrid, 15 March 2013

Photonics in Horizon 2020

Thomas Skordas

Head of the Photonics Unit
DG CONNECT, European Commission

EU 2020 Strategy & Photonics

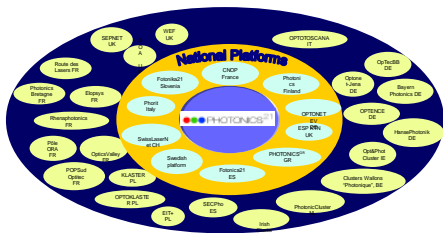
Policy actions



Key Enabling Technologies

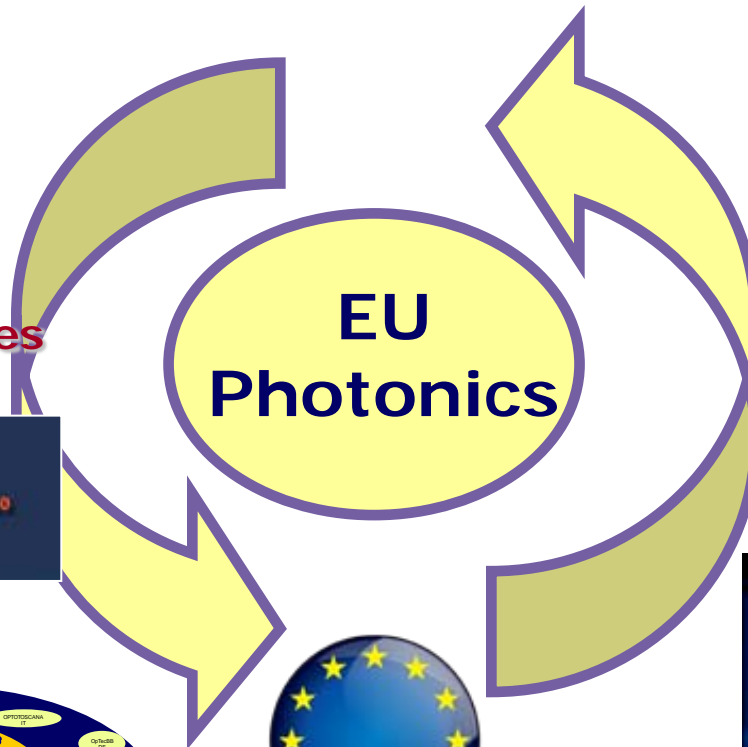


Green Paper on SSL



Photonics Clusters

Research & Innovation actions



Photonics in Horizon 2020

Horizon 2020

R&I in the EU: 2014-2020

EC proposal: 80 B€



**Horizon
2020**

■ Societal challenges

Health & Ageing, Energy, Transport, Resource Efficiency, Climate Challenge, ...

■ Industrial Leadership

Leadership in Enabling Technologies (ICT, Nanotechnology materials, Biotechnology, Production Technologies, ...)

■ Excellent Science

ERC, Marie Curie actions, FETs, Research infrastructures

Photonics

<http://ec.europa.eu/research/horizon2020>

Creating Industrial Leadership & Competitive Frameworks

Leadership in enabling and industrial technologies **13.8 B€**

■ ICT

8 B€

- A new generation of components and systems
- Next generation computing
- Future Internet
- Content technologies and information management
- Advanced interfaces and robots
- **Micro- and nano-electronics and photonics**

■ Nanotechnologies

■ Advanced Materials

■ Advanced Manufacturing and Processing

■ Biotechnology

■ Space

1.6 B€

3.8 B€

0.5 B€

**KETS
5.9 B€**

**~30% to
cross-cutting KETS**

Photonics in Horizon 2020

A Public Private Partnership (PPP)



Implement Photonics in Horizon 2020 through a PPP

- The proposed Horizon 2020 legal text foresees a potential PPP for Photonics
- ~1.6 B€ foreseen for both photonics and micro- and nano-electronics

Photonics PPP in Horizon 2020

➔ A long-term commitment between the EC and the Photonics Stakeholders to invest in Europe with the aim to:

Secure EU's industrial leadership in those application areas where photonics is driving innovation and Europe is strong or where there is potential for creating new markets

Objectives

- Address and strengthen the full innovation and value chain in photonics
- Reinforce excellent cooperation of photonics stakeholders in Europe to accelerate the development of new technologies, the innovation process and the time to market
- Mobilise, pool and leverage public and private resources to provide successful solutions for the major societal challenges facing Europe

**Support R&I activities based on
a business-driven Strategic R&I Agenda**

PPPs in Horizon 2020

[COM(2011) 809 final of 30 NOV 2011]

Article 19: Public-Private Partnerships

1. *Horizon 2020 may be implemented through PPPs where all the partners concerned commit to support the development and implementation of R&I activities of strategic importance to the Union's competitiveness and industrial leadership or to address specific societal challenges*
2. *Involvement of the Union in those partnerships shall make use of the pre-existing and lean governance structures and may take one of the following forms:*
 - b) entering a contractual agreement between the partners ..., which specifies the **objectives** of the partnership, respective **commitments** of the partners, **key performance indicators**, and **outputs** to be delivered, including the identification of research and innovation activities that require support from Horizon 2020
3. *Public-private partnerships shall be identified in an open and transparent way based on all of the following criteria:*
 - (a) the added value of action at Union level;
 - (b) the scale of impact on industrial competitiveness, job creation, sustainable growth and socio-economic issues, including societal challenges;
 - (c) the long-term commitment from all partners based on a shared vision and clearly defined objectives;
 - (d) the scale of the resources involved and the ability to leverage additional investments in research and innovation;
 - (e) a clear definition of roles for each of the partners and agreed key performance indicators over the period chosen.

Photonics PPP: Rationale

Strong foundation:

- Close cooperation with community and within community
- Strong and visible community (1150 companies and institutions in Photonics21)
- Industry oriented strategy



What the PPP brings:

- Formalise with a real partnership
- Long term commitment from both public and private side
- Greater impact on innovation and leverage effect on complementary sources of financing

**More partnership, more commitment and
more leverage!**

■ Commitments of the Private Partner:

- To invest in growth & jobs (in Europe)
- To operate in open & transparent set-ups (no “closed shops”):
representativeness – openness – transparency → Governance!
- To provide data on an annual basis on KPIs & milestones for monitoring progress or exploitation in Europe (as a sector and individually)

■ Commitments of the Public Partner (EC):

- To invest on the PPP [ceiling budget over the PPP lifetime]
- To propose for decision an annual WP agreed within the PPP
- To use transparent accounting methods to measure contribution of the private partner

■ Other Issues:

- Member States can be involved in a PPP
- Coordination with national / regional levels
(smart specialisation under the new Cohesion policy)

Photonics PPP

What will it mean for you?



WHAT DOES CHANGE

- Long-term commitment from the EC to the process + overall indicative budget
- Long-term commitment by industry to invest + demonstrate it!
- KPIs and their monitoring
- Greater focus on innovation activities – goal is growth and job creation
- Leverage financing from other sources (Structural funds, the EIB, ...)

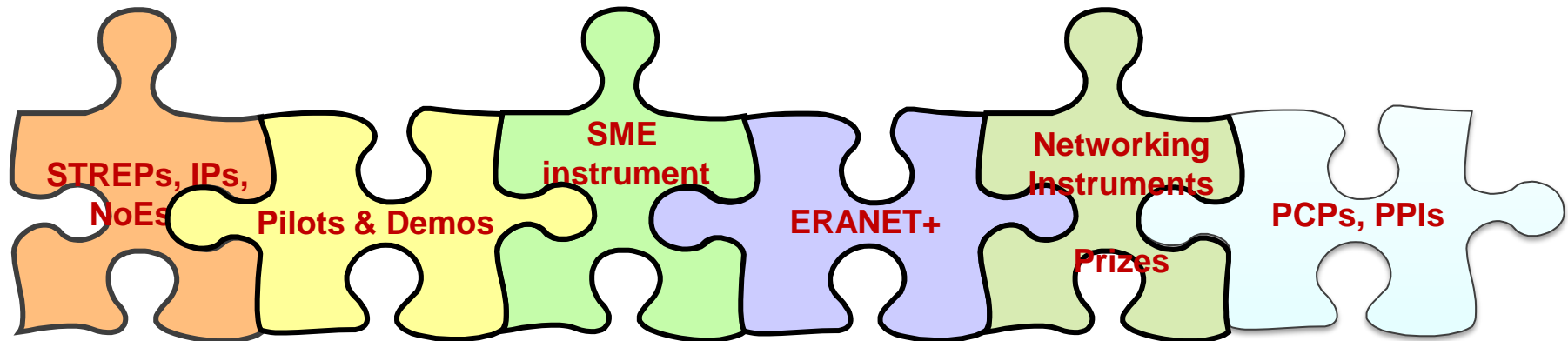
WHAT DOES NOT CHANGE

- The financial rules are those of Horizon 2020
- Final responsibility for Work Programme stays with EC and is subject to comitology
- Implementation remains with the EC: selection of proposals, negotiation, review of progress and payments

Photonics PPP

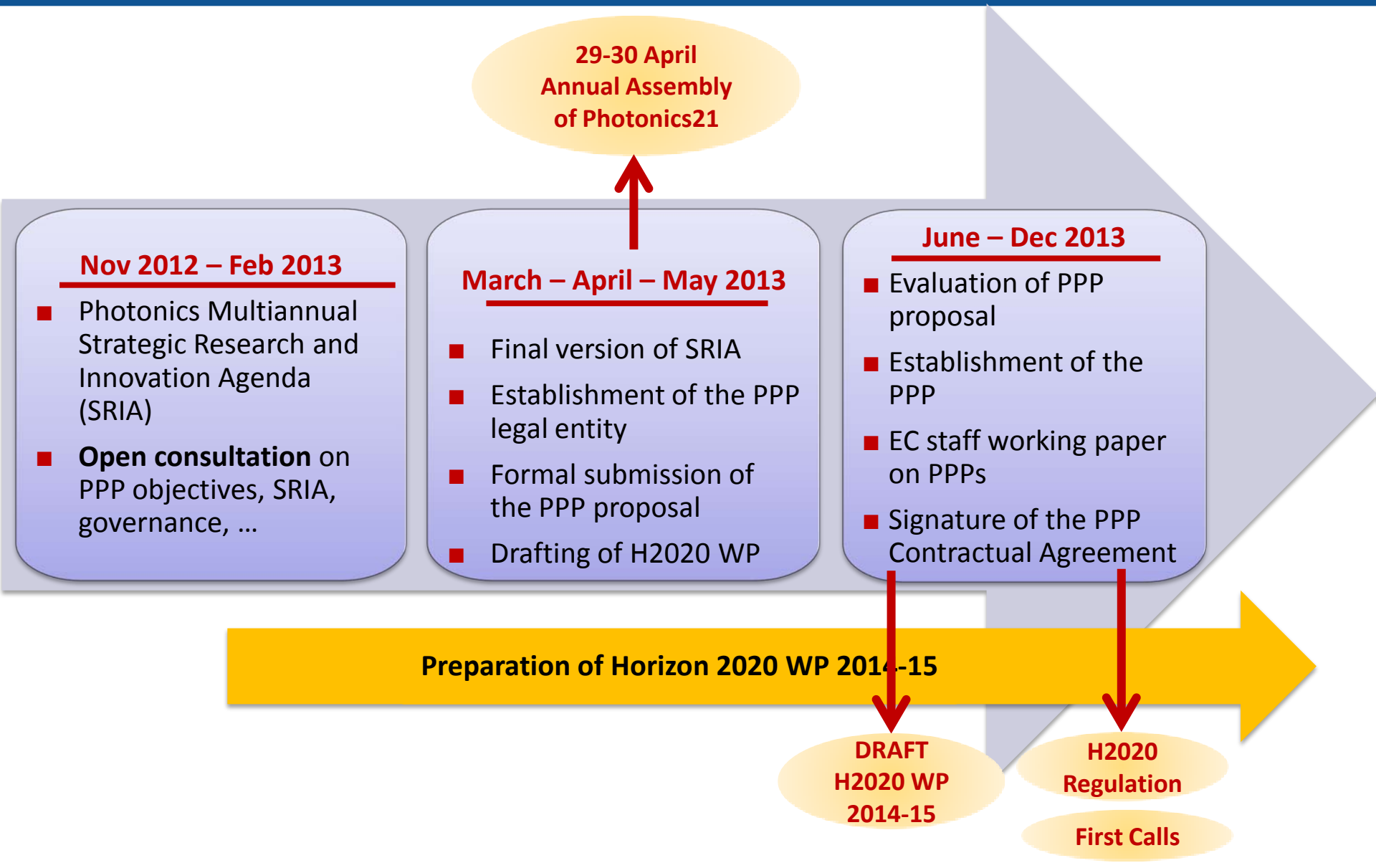


A large set of R&I Measures & Instruments



- Roadmap based and bottom-up (disruptive?) R&D
- **Pilot manufacturing lines; Large scale demonstration activities; ...**
- **Innovative SMEs:** light touch open schemes; access to technology and support services
- **Innovation Support Actions:** Inducement prizes; Pre-commercial procurement actions & public procurement of innovation initiatives; Support to collaboration among and with innovation clusters
- **Coordination with national programmes** (e.g. through ERANET+)
- **Coordination and support actions:** Education, training and skills development; Standardization; International Cooperation; Outreach, ...

Roadmap towards Photonics PPP



THANK YOU!

Thomas.Skordas@ec.europa.eu

For more information, see:

<http://cordis.europa.eu/fp7/ict/photonics/>