

Photonics Public Private Partnership

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Photonics21 Executive Board

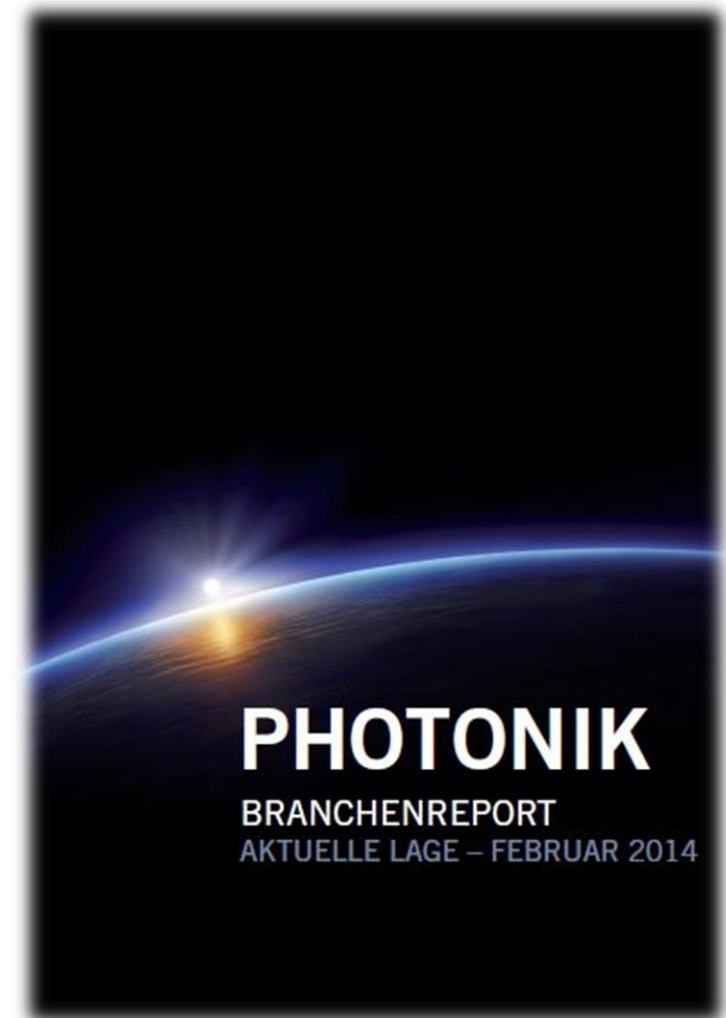


PHOTONICS PUBLIC PRIVATE PARTNERSHIP



Photonics - strong European industry with huge economic impact

- Global photonics market ~373 bn EUR (2013)
- European photonics market ~69 bn EUR (2013)
- Market share ~18% (2013)
- Estimated global photonics market in 2020 ~615 bn EUR
- SME based - more than 5.000 SMEs in Europe
- ~370.000 employees in the European photonics sector
- Market shares of European companies
 - Production technology 55%
 - Optical components & systems 40%
 - Measurement & automated vision 35%
 - Medical technology & life sciences 30%



“Photonics impacts around 10% of the European economy”

[Study: The Leverage Effect of Photonic Technologies, European Commission, 2011]

Why a PPP in Photonics?

- 3.8 million jobs lost in manufacturing in Europe

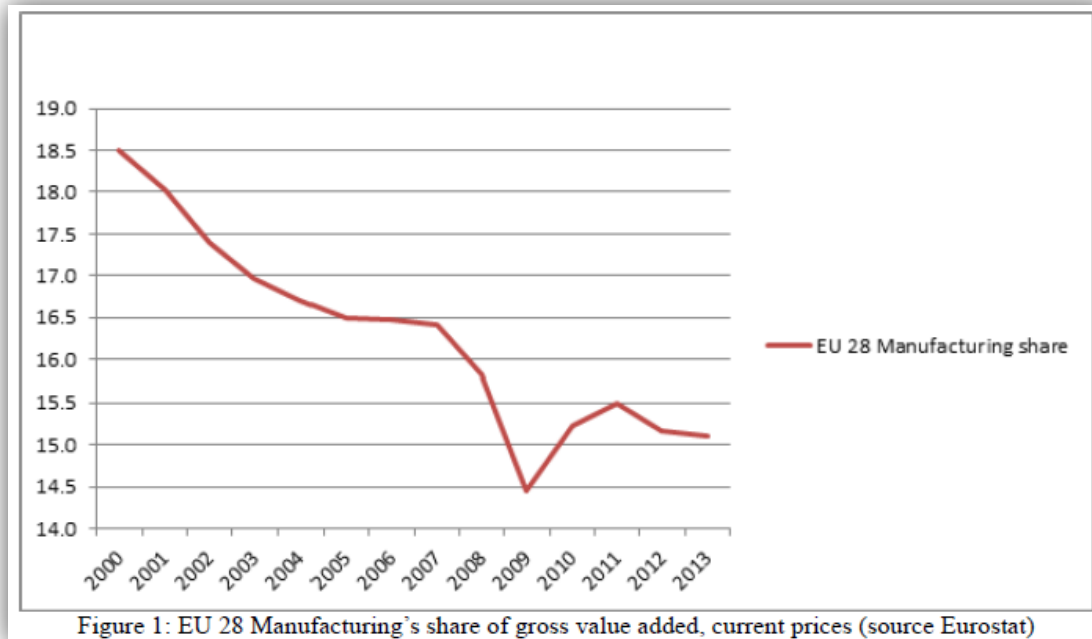


Figure 1: EU 28 Manufacturing's share of gross value added, current prices (source Eurostat)

COMMISSION STAFF WORKING DOCUMENT 'Advancing Manufacturing - Advancing Europe' – Report of the Task Force on Advanced Manufacturing for Clean Production; 2014

Competing economies leap-frogging up global manufacturer's ranking supported by political leadership



About 600,000 jobs added to US manufacturing over the past five years



22% of market share
China is now the world's largest factory for advanced products, ahead of US and EU

Source: Report High Level Group on Key Enabling Technologies (KET)

Public funding for Photonics in Asia will double to 4,2 bn EUR

EAC Study on Photonics Research Funds in China, South Korea, and Japan

Countries	Governmental Research Funds Breakdown (bn EUR)			EAC INTERNATIONAL CONSULTING
	Photonics Funding 2014	Photonics Funding 2020	CAGR 2014 -2020	
China	0.14 bn EUR	1.09 bn EUR	+40.9%	←
Japan	0.26 bn EUR	0.29 bn EUR	+1.7%	←
South Korea	1.65 bn EUR	2.84 bn EUR	+9.4%	←
Total SE Asia	2.06 bn EUR	4.22 bn EUR	+12.7%	

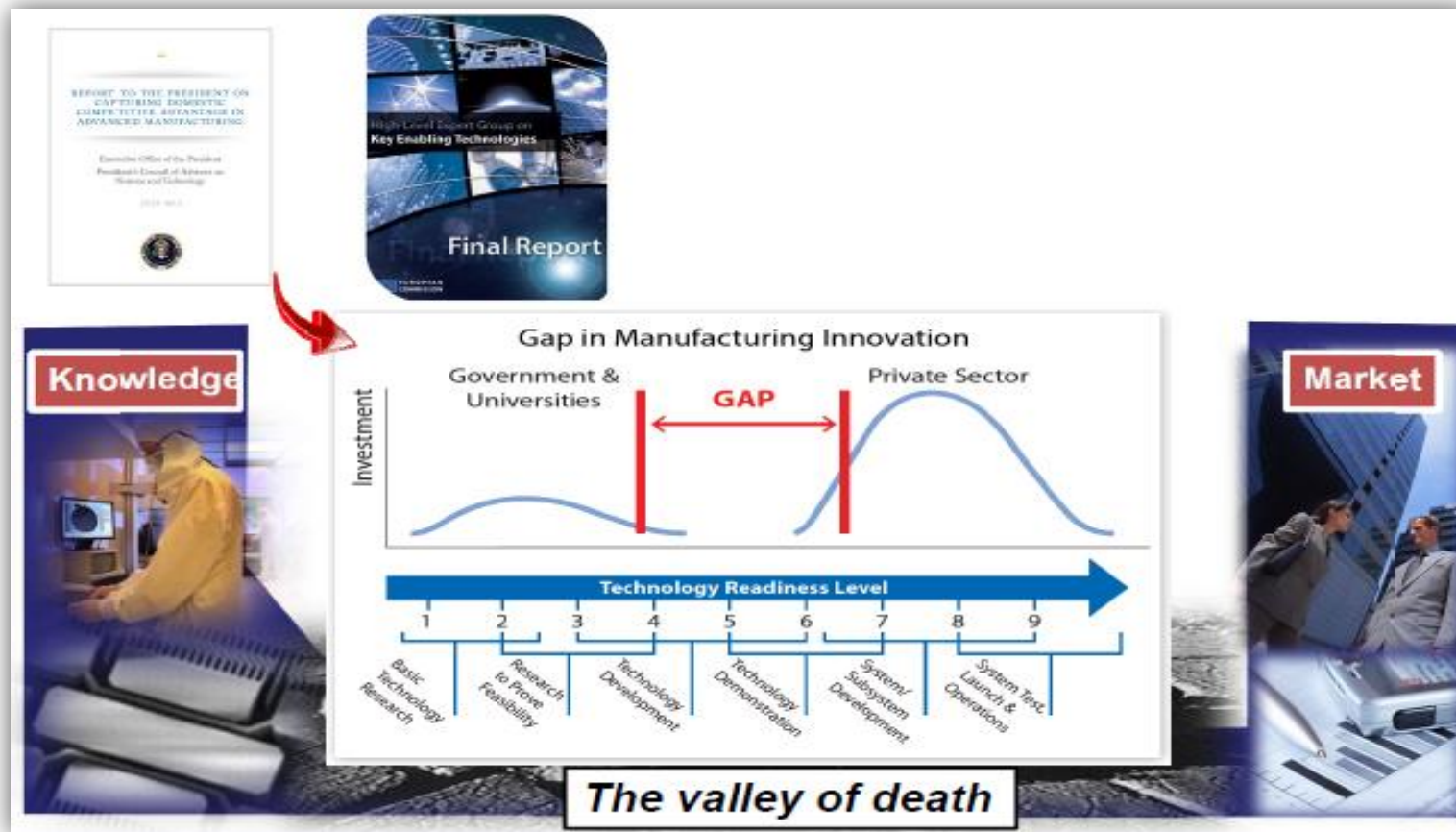
Source: EAC – Euro Asia Consulting PartG by VDMA, SPECTARIS, BMBF

Europe	~0,6 - 1 bn EUR	~0,6 - 1 bn EUR	Consolidated figures for the EU not available
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Photonics21 Estimate for the EU (Horizon 2020 program) + Member States 2014-2020

Why a Photonics PPP in Horizon2020?

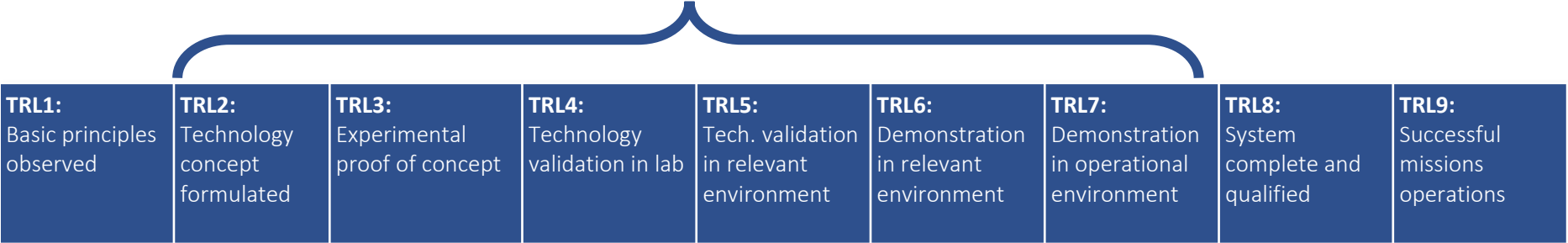
Speed up Process from Lab to Fab



Source: High Level Group on KETs – final meeting (24/06/2014)

Industry Research collaboration: PPP projects move up to TRL 7

Focus of Photonics PPP Projects



*KET** Report: The Technological Readiness Level (TRL)*

FP7 funding



Challenge: Activities closer to the market are often 10 times more expensive

Photonics Public Private Partnership in Horizon2020

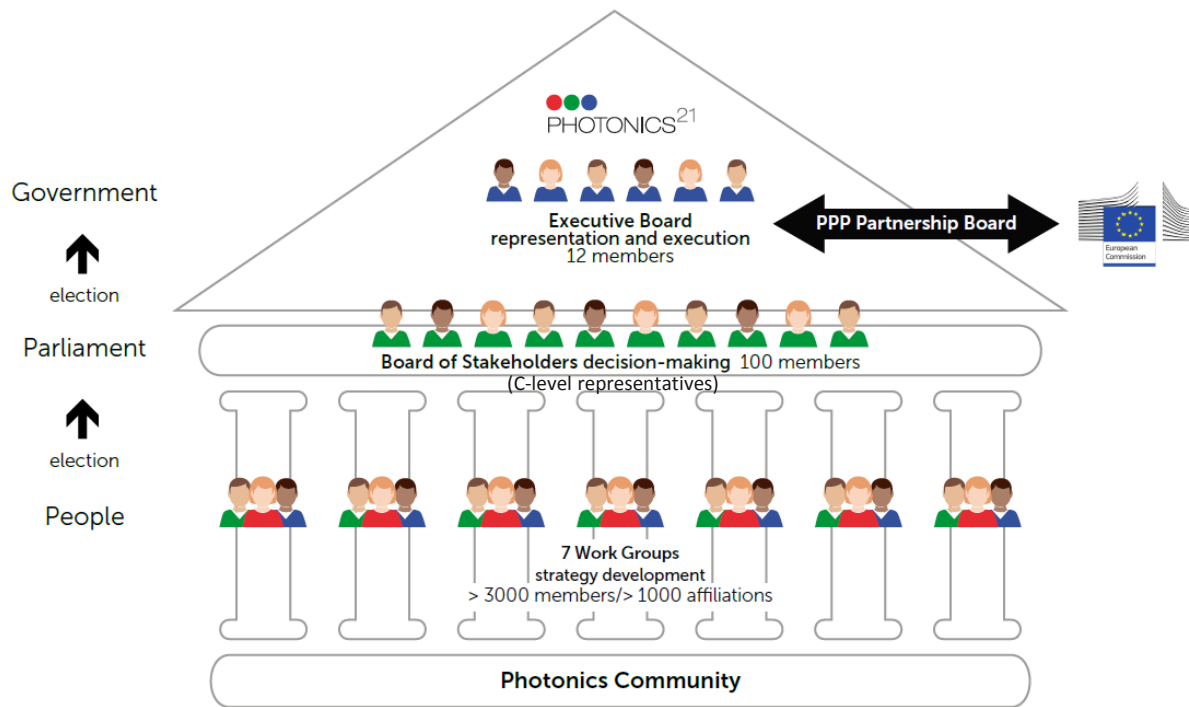
Bridge the Valley of Death

Key Commitments of PPP partners monitored by Key Performance Indicators:

European Commission	Photonics21
Up to 700 Mio Eur Investment in Photonics R&I	4x industry investment in R&I in Europe
	At least keep a global market share of 18%
	Increase number of people directly employed by the photonics industry by at least 10% (Baseline 300.000)
New photonics R&I capabilities for addressing the valley of death	
<ul style="list-style-type: none"> ▪ New pilot lines and manufacturing capabilities and involvement of stakeholders ▪ new open access infrastructures and services to design, prototyping, manufacturing or testing, etc., and involvement of SME stakeholders 	
The PPP Project Performance	
<ul style="list-style-type: none"> ▪ Target: Increase industry participation to 50 % in terms of both participants and funding over the 2012 baseline of approximately 36 % (in terms of participants) and 35 % (in terms of funding). SMEs should account for 50 % of industry participation. 	
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Photonics21 community drives the Photonics PPP – fully democratic structure & decision making



- European photonics strategy implemented by Photonics21 and European Commission
- Photonics21: More than **3000 members** (representing **>1000 affiliations**) from all over Europe:
 - Balanced share of industry and Research & Technology Organisations, Associations, Clusters, National Technology Platforms
 - Value-chain covered
- Photonics21 stakeholders (business representatives, researchers, scientists) engage on a voluntary basis
- Membership is **open to all and free of charge**

Photonics Public Private Partnership

#next.photonics_forum



Annual Meeting, 28th and 29th of March 2017, Le Plaza Hotel, Brussels

Schedule

Drive the change

Take part in developing the future strategy for Photonics PPP in Europe

Get informed about:

- PPP achievements
- Latest news on European Photonics calls
- Financing possibilities beyond H2020

Meet key stakeholders from:

- European Commission
- European Parliament and Regions
- Photonics Industry and Science

Register now for Early Bird discount

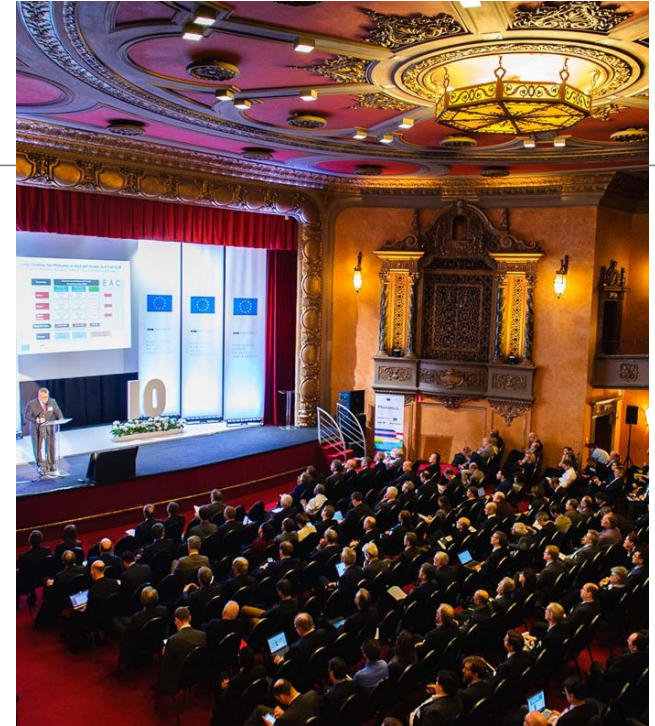
Before 31 January 2017: €150 (Students €70)
After 31 January 2017: €200 (Students €100)

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Find out more

Online registration and further details at www.photonics21.org.



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Further information

Thank you for your attention!

- For any further information you can contact Photonics21: secretariat@photonics21.org
- Further information available at: www.photonics21.org
- Follow us on twitter: <https://twitter.com/Photonics21>