MISSION AND VISION STATEMENT

Photonics is a technology that is an essential building block for the digital transformation and for a green and healthy future in Europe. The new Photonic partnership aims to speed up photonic innovations for a digital, green and healthy future in Europe, securing Europe's technological sovereignty, raising the competitiveness of Europe's economy and ensuring long-term job and prosperity creation. A holistic approach and strong links to applications are key elements.

The main objectives of the Photonics21 partnership are threefold: (1) Foster a focused, continuous and synergetic development of key photonics technologies, components and systems in Europe; (2) Push for the rapid diffusion into the various sectors that critically depend on innovative photonics solutions; and (3) Provide a framework for the shaping of ecosystems to address changes of value creation.

For more information, please refer to:

- MoU - Final_MoU_Photonics_C_2021.pdf (photonics21.org)
- SRIA (Photonics Strategic Research and Innovation Agenda by Barbara - Flipsnack),
- Proposal (European Partnership for Photonics | European Commission (europa.eu).

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster:	Pillar II – Cluster 4: Digital, industry and space
Type of partnership:	Co-programmed
Coordinating entity:	Photonics21 Association* represents more than 3000 members and 1700 affiliations. Board of Stakeholders consists of members coming from 18 countries, 50% of them representing private companies.
Total estimated budget:	EUR 680 m
EU commitments:	EUR 340 m
Partners' commitments:	Up to EUR 340 m
Predecessor under Horizon 2020:	Photonics cPPP

* c/o Anne De Moor BV, Rijvisschestraat 124, 9050 Ghent (Zwijnaarde), Belgium.

FIND OUT MORE

www.photonics21.org
https://www.photonics21.org/download/ppp-services/photonics-downloads/Photonics_leaflet.pdf

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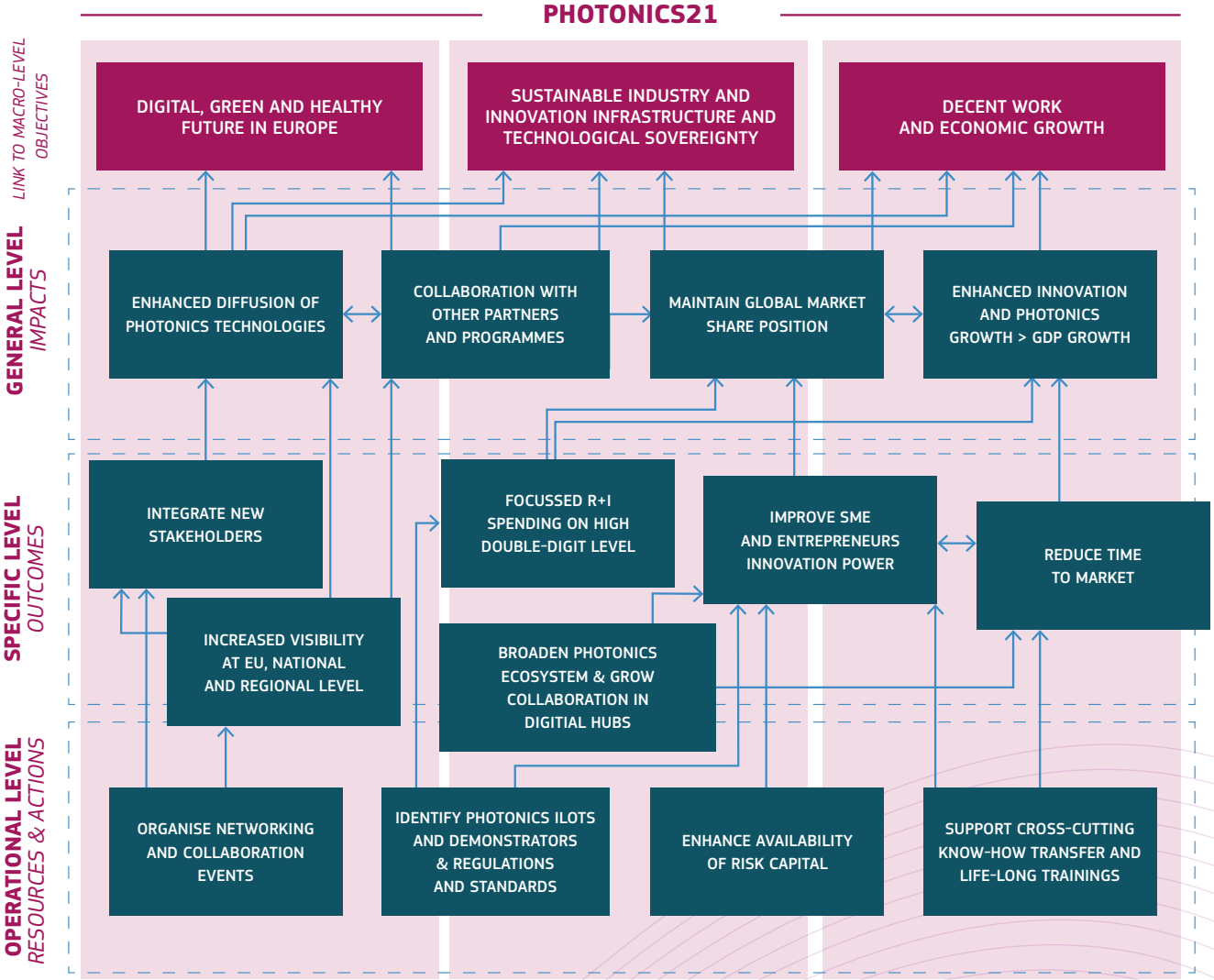
c/o VDI Technologiezentrum GmbH
VDI-Platz 1, 40468 Duesseldorf, Germany

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
RESOURCES (INPUT), PROCESSES AND ACTIVITIES						
SME Innovation support	Development of digital and photon hubs	TBD	TBD	TBD	TBD	TBD
Rapid diffusion	# of end-user workshops	2/year	>2	>2	>2	>2
Industry participation	% industry in Horizon Europe calls	50 %	N/A	N/A	N/A	>50 %
OUTCOMES						
Stakeholder integration upstream/downstream	# new workshop attendees	New	TBD	TBD	TBD	>30 %
Collaboration and synergies other programmes	# collaborations	New	TBD	TBD	TBD	min. 2 per WP
Cross-cutting digital innovation hubs	# common events and actions	New	TBD	TBD	TBD	Increase
Access to risk capital	Satisfaction rate	EIB study	Improve			
IMPACTS						
Photonics gross added-value growth (GDP)	GDP multiple	2x in 2019	> Global GDP (CAGR 2020-2026)			
Employment growth	CAGR % growth	2 % (vs 1 % Industry)	Keep			
EU global market share	% market share EU	#2	N/A	N/A	N/A	#2

More detailed information on the partnership's activities, performance and impacts is found in the market and activity reports available here Photonics Downloads | Photonics21

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Considering the challenges, the global economy and societies are currently facing, Horizon Europe and the Photonics partnership are situated in a complex and challenging environment. The way we live and work together is facing fundamental changes: digitisation and the increased convergence of different technologies that goes with it; a new and just questioned global innovation dynamic; the request for more national and technical sovereignty; a tightening resource scarcity and uncertain supply chains - all challenges that call for changing business models. For photonics as a key technology and its broad community in science and industry, this means working even more closely with other key technologies and value-chain partners to find the best solutions to the challenges of the Green Deal, technological sovereignty, digitisation, and competitiveness, which are also the focus of the European Commission.

FOSTERING SYNERGIES WITH OTHER PARTNERSHIPS

The European Partnership on Photonics will place a particular focus on identifying both the cooperation needs and opportunities for synergies with other disciplines, major European platforms and EU public private partnerships. As photonics is a key enabling technology, there is considerable scope for multilateral collaboration to address the socio-economic challenges of application-oriented partnerships.

To reach this goal, Photonics21 has already engaged in discussions with several other partnerships under Horizon Europe, setting up workshops in autumn 2021 for identifying thematic opportunities for future joint cooperation agreements and calls.

SUPPORTING PHOTONICS SMES: SYNERGIES WITH PHOTON HUB AND FINANCING INNOVATION

The Photonics partnership will foster synergies with Photon Hub, a pan-European initiative bringing together more than 500 photonics experts from 15 Member States with the aim of supporting companies regarding photonics orienteering, training and reskilling, deep technology innovation support, business and investment coaching, as well as guidance to regional support.

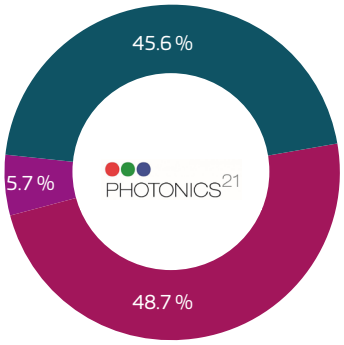
Furthermore, the Photonics partnership will encourage photonics start-ups to participate in the newly established activities of the European Innovation Council and will advise them of financing opportunities and actively promote their participation in investment events. Access to venture capital for photonics start-ups and entrepreneurs will be created by holding an annual European Photonics Venture Forum. The Photonics partnership will also help to generate potential leads for the EIB to invest in photonics, furthering access to capital for SMEs in the later growth phase.

FOSTERING SYNERGIES WITH THE NATIONAL AND REGIONAL ADVISORY BOARD (FORMER MIRROR GROUP)

The efficient coordination of photonics investment and public initiatives at the European, national and regional level is a major challenge for Europe and has so far been insufficiently successful. At the Member State level, the partnership had already established the Photonics21 Mirror Group, which is made up of representatives of national ministries coordinating national priorities and investments in photonics. As a result of this activity, five joint transnational photonics calls on different photonics subjects have been implemented under the ERANET co-funded partnership and the EUREKA programme scheme. The partnership will now take this activity to the next level to trigger new joint cross-Member State calls in photonics, and to enable a close alignment with Horizon Europe's Photonics partnership investments and an efficient preparation and coordination of new joint calls.

OVERVIEW OF MEMBERS

MEMBERS PER TYPE

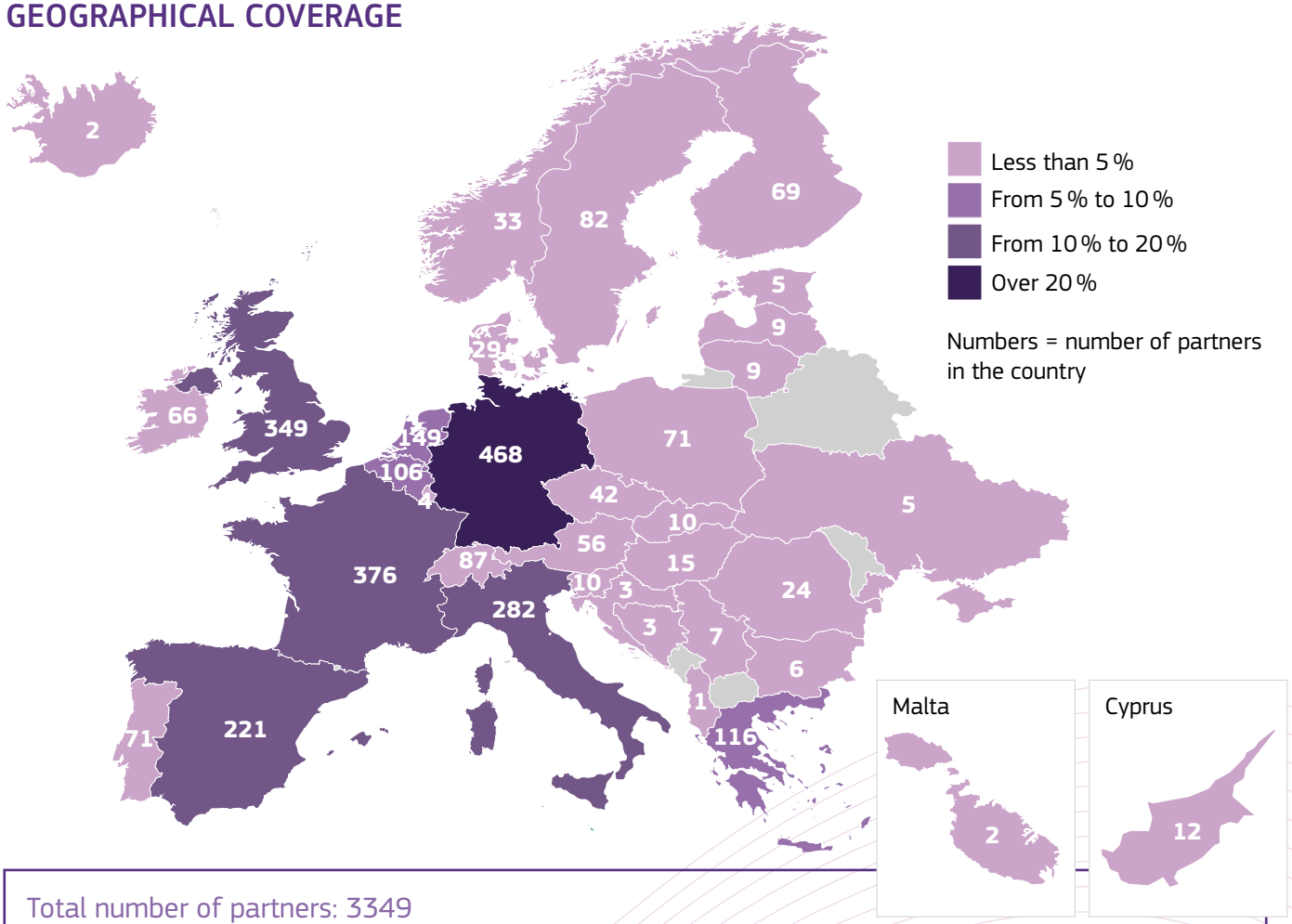


INDUSTRY Other Industrial and/or profit Private organisation

RESEARCH Public research organisation (including international research organisation as well as private research organisation controlled by a public authority)

OTHERS Non-profit, associations, state companies etc.

GEOGRAPHICAL COVERAGE



Total number of partners: 3349

79.9 % of the partners are represented in the map.

Other partners that do not fit to the map are from Afghanistan, Algeria, Argentinia, ,Armenia ,Australia, ,Azerbaijan, Bangladesh, Botswana, Brazil, Canada, Chile, China, Colombia, Cote d' Ivoire, Dalan, Egypt, Fiji, French Guiana, Ghana, Guinea-Bissau, Hong Kong, India, Iran, Israel, Japan, Jordania, Korea (Republic), Korea, (Democratic People's Republic of), Mexico, Moldova, Morocco, New Zealand, Nigeria, Oman, Pakistan, Peru, Phillipinen, Reunion, Saudi Arabia, Serbia, Singapoore, Sri Lanka, Syrian Arab Republic, Tunesia, Turkey, USA, Uzbekistan, Vietnam and Zambia.