

Photonics21 Strategic Multiannual Roadmap – Proposed timeline

Until mid-July 2018:	Follow-up Photonics21 workshops if needed We kindly ask you to let us know by mid- May if you plan a further workshop.		
End of August 2018:	First draft of the introduction chapter provided by the Photonics21 Secretariat, circulation for feedback First draft of the Work Group chapters, circulation to Photonics21 Work Groups for feedback		
End of September 2018:	Second draft of the Work Group Chapters, circulation to the Board of Stakeholders		
Until November 2018:	Provide good photos of photonics application areas to the Photonics21 Secretariat which will be used to illustrate the Strategic Multiannual Roadmap (Official template for the publication & copyright of photos will be provided)		
End of October 2018:	Final draft of the Photonics21 Strategic Multiannual Roadmap Circulation to the Board of Stakeholders (BoS) in preparation of the BoS meeting		
November 2018:	BoS meeting and final approval of the Photonics21 Strategic Multiannual Roadmap		
December 2018 and January 2019:	Final editing & layout of the Strategic Multiannual Roadmap		
Spring 2019:	Publication of the Photonics21 Strategic Multiannual Roadmap alongside the Photonics PPP Annual Meeting 2019		

Photonics21 Strategic Multiannual Roadmap 2021-2028

1. Executive Summary

2. Introduction

- Objectives and Missions
 - i. Challenges and Missions addressed incl. overview table: missions / markets addressed by Ph21 work group
- Photonics Ecosystem in Europe
 - i. Photonics21/Cluster/National Technology Platforms
 - ii. Photonics Digital Innovation Hubs

3. Unleash the innovation potential of Digital Technologies

- Leaving the technology silo key to speed up innovation pace

 examples of cross sectoral cooperation addressing megamarkets
- ii. Improve boundary conditions– better link up R&I policy with other EU policies addressing societal challenges and markets
- iii. Eye level Partnership needed for successful implementation of industrial strategy

4. Expected impact for Europe

i. Key Performance Indicators to measure success

5. Photonics Research and Innovation Challenges

Proposed structure per work group chapter:

Work Groups

- 1. Information & Communication
- 2. Industrial Manufacturing & Quality
- 3. Life Sciences & Health
- 4. Emerging Lighting, Electronics & Displays
- 5. Security, Metrology and Sensors
- 6. Design and Manufacturing of Components and Systems
- 7. Photonics Research, Education and Training

(+ two additional application areas)

- 8. Automotive & Transport
- 9. Agriculture & Food

> Main socio-economic challenges addressed (~1 page)

This part should briefly describe the most relevant missions of the Photonics21 vision document and markets to be addressed by the work group's technical field

> Major photonics research & innovation challenges (~2 pages)

Based on the identified missions this section should describe the major photonics research & innovation challenges which will contribute to address the adjunct markets.

> **Cooperation needs with other disciplines or fields** (~0.5-1 page)

This section should mention any relevant cooperation partners to successfully reach the identified missions.

 $(\sim 1-3 pages)$

Roadmap for 2021 – 2028

This part should be structured in form of a table, see the draft table on the following page.

Proposed template roadmap table (~1-3 pages)

Proposed roadmap for 2021 - 2028

	2021	2022/2023	2024/2025	2026/2027	2028
Overview Technology Challenges					
Critical milestones to move from Science to Market					
Photonics Research (R) & Innovation (I) Challenges					
Joint actions required with other disciplines (e.g. Artificial Intelligence) or fields (e.g. robotics)					