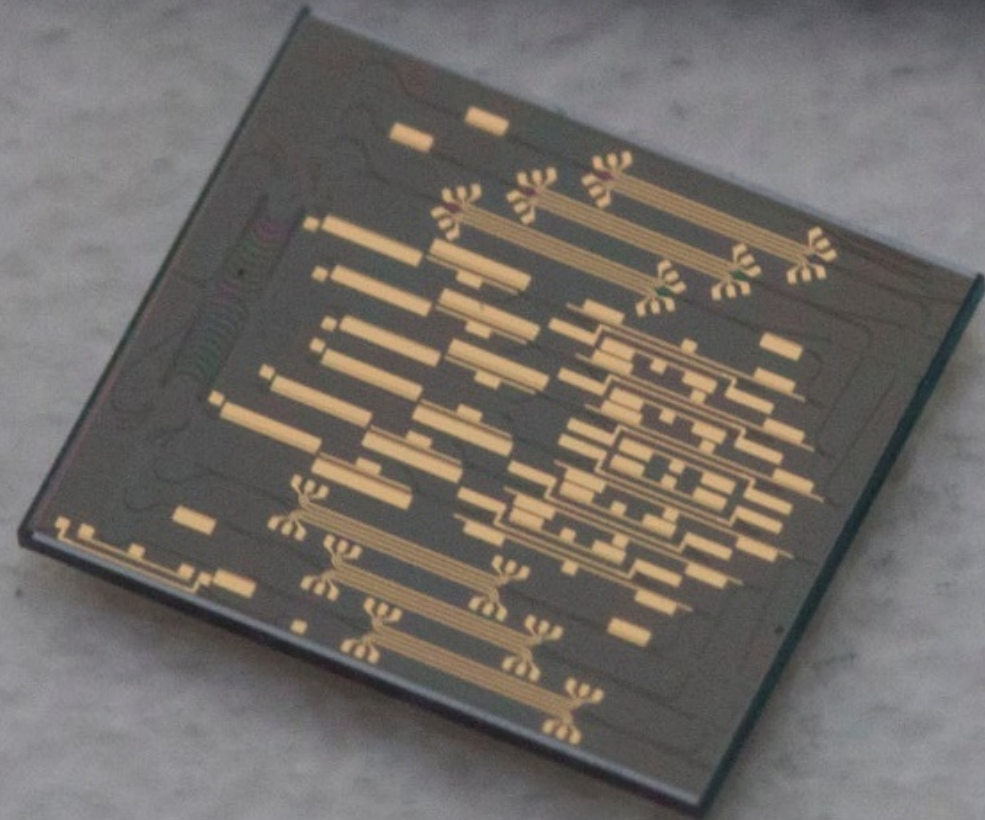


Open Innovation Photonic ICs OpenPICs

Progress Meeting
04/04/2018

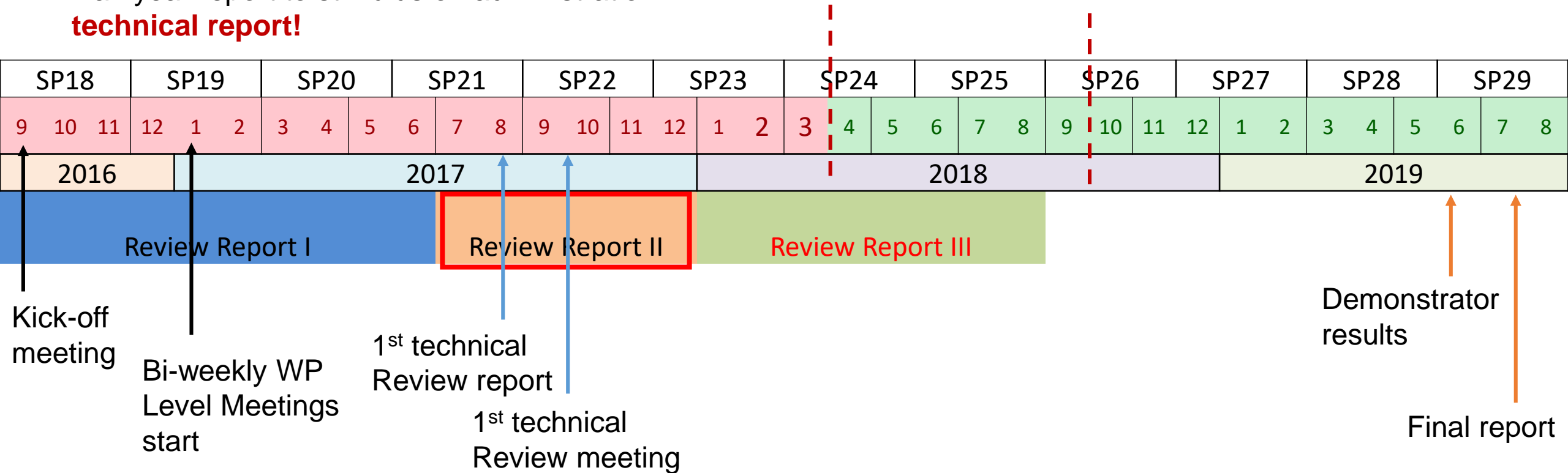


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| 14:00 - 14:10 | Getting ready | |
| 14:10 - 14:25 | Introduction & Project Timeline | (Weiming) |
| 14:25 - 14:40 | Smart Photonics Progress | (Rui, WP2, WP3, WP4) |
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Project Timeline

With 2018

- Monthly progress meeting with ALL partners
- Technical Review Aug/Sep 2018, Report Aug-2018
- Half-year report to stimulus on administration + **technical report!**





Open Innovation Photonic ICs
OpenPICs
Technical Summary Report
(09/2016 – 06/2017)



Europese Unie
Europees Fonds voor Regionale Ontwikkeling



CO

Confidential, only for members of the consortium

CO



Open Innovation Photonic ICs
OpenPICs
Technical Summary Brief
(07/2017 – 12/2017)



Europese Unie
Europees Fonds voor Regionale Ontwikkeling
Europees Innovatieprogramma Zuid-Nederland

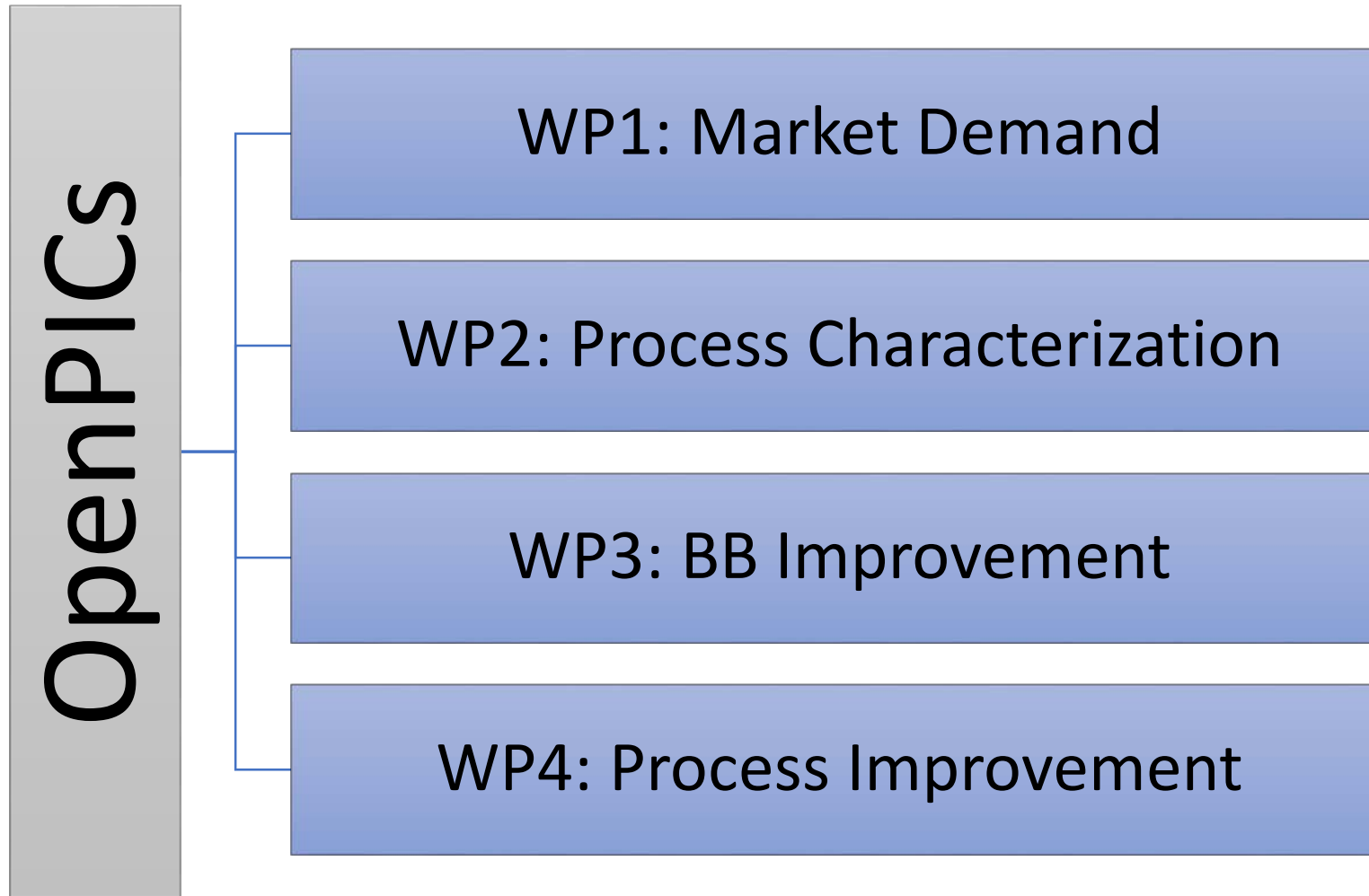


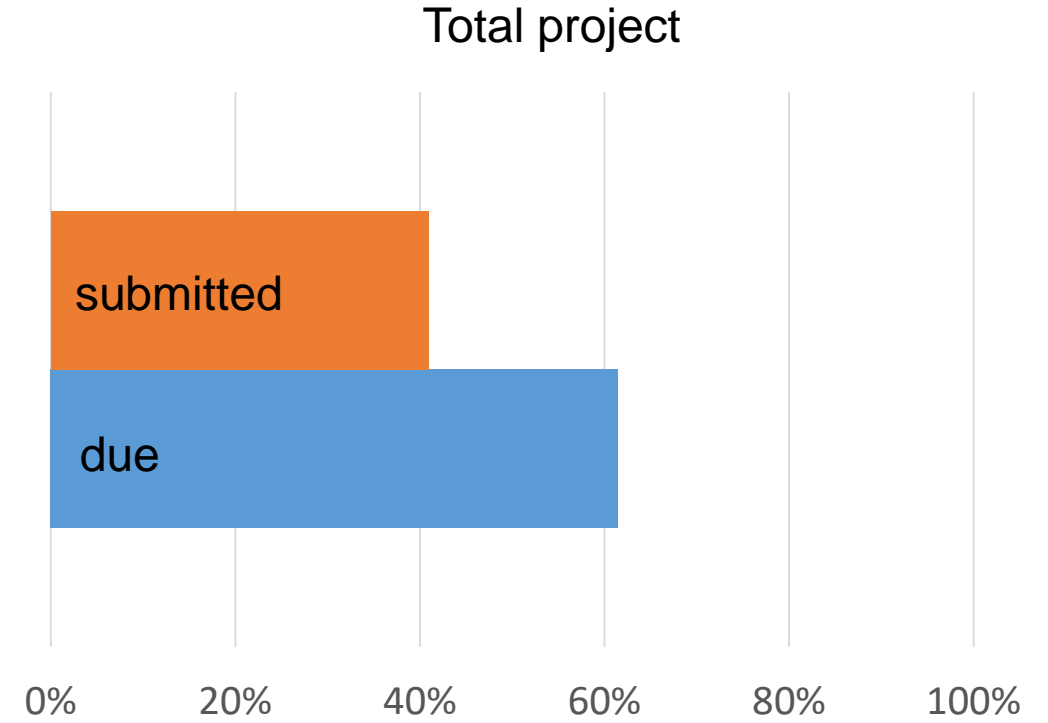
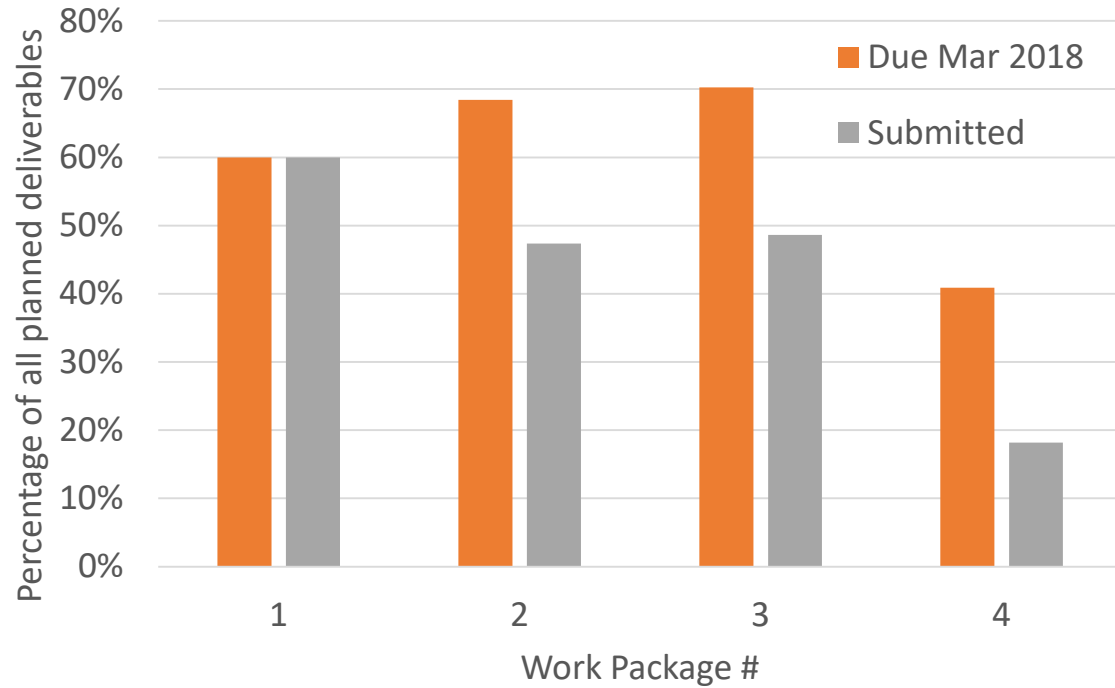
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Filename

- MeetingNotes
- ProgressMeeting_1_2018
- ReviewAug2017
- ReviewReport
- WP1
- WP2
- WP3
- WP4
- [0] OpenPICs_Project.pdf
- [1] ALL_Milestones.pdf
- [2] WP3_Chip_Plan 2017-12.pdf
- template





Open Innovation Photonic ICs (OpenPICs)

The South Netherlands region is a leader in the field of photonics and is home to leading research facilities and an innovative photonics industry. With the OpenPICs project, the partners develop a strong industrial platform for PIC production and develop the open access tools to make the technology available to a broad range of companies. At present, the following technological challenges need to be overcome to make open access PIC technology suitable for a wide uptake:

- **Design:** Development of efficient sub-circuits (which are built up from a variety of basic building blocks) in order to reach a "first time right" chip design.
- **PDK:** Improvement of the PDK which provides a designer with all the information about the measured and expected key figures of merit for each building block, enhancement of the software infrastructure for the PDK and acquisition of the necessary process data to fill the PDK.
- **Production:** Achieve higher level for the generic photonic integration process by means of the development of new building blocks, and the optimization and ultimately industrialization of the process of making photonic devices on a generic platform.
- **Application:** The progress in the above three factors determines the extent to which application developers are able to obtain quickly, reliably and cost-effectively the required functionality from chips which can also be produced in large volumes.

Related Sites

Background on Photonic Integrated Circuits:

- [Integrated Photonics on Wikipedia](#)
- [Technology and application roadmap on Integrated Photonics](#)
- [MEMPHIS Project](#)
- [Integrated Photonics Ecosystem PhotonDelta](#)

Support in developing your Photonic Integrated Circuits:

- [JePPiX](#)
- [PICSA4I](#)
- [ACTPHAST](#)

This project receives funding from the OPZuid 2014-2020 Stimulus program of the European Union.

Project website

- Promote on events, presentations

- Promote on partner websites

- Communicate on which events it was mentioned

Partner Area

OPZuid documents - partner area

Filename	Type	Size
MeetingNotes	<Directory>	<Directory>
ReviewAug2017	<Directory>	<Directory>
ReviewReport	<Directory>	<Directory>
WP1	<Directory>	<Directory>
WP2	<Directory>	<Directory>
WP3	<Directory>	<Directory>
WP4	<Directory>	<Directory>
[1] ALL_Milestones.pdf	PDF Document	90.5 KB
[2] WP3_Chip_Plan 2017-12.pdf	PDF Document	122.8 KB
OpenPICs_Project.pdf	PDF Document	1.5 MB

Minutes from OpenPICs meeting 15-01-2018

Present: Weiming, Kevin, Victor, Vincent, Rob, Rui, Ronald, Saeed, Marcel

Time: 13:00-15:00

Discussion/action points

Effect Photonics Demonstration Discussion

- two options best effort vs building block freeze
- 400G = 4x (100 Gb/s per channel)
- bandwidth requirements 40-50 GHz
- PAM 4 modulation
- before demonstrator design: Laser-Mod integration approach needs to be tested
- SP27 is last run
- SP24 is try-out run

Demo Technobis

- SP26/27 targeted
- Process tolerances are important
- spot-size converter performance was requested from Smart
- linewidth of lasers is important
- **(action) Ronald connects with Technobis on this.**

Spot Size Converter

- more data is needed from Smart
- converter couples too much into the cladding
- **(action) Rui supplies more data**

Phoenix

- **(action) Marcel works on documentation**

- | | | |
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		Man month			
Partner	Person	WP1	WP2	WP3	WP4
Effect	Saeed	1.4	0	22.4	0
Technobis	Vincent	2.9	0	4.9	0
Bright	Ronald, Valentina	1.6	0	62	0
Smart	Rob, Rui, Roel	3.5	61	25	24.3
Phoenix	Marcel	1.6	0	39	0
Lionix	Joost	3.2	0	3.3	11.4
TU/e	Victor, Weiming, Michalis, Ekaterina	44.8	0	75.6	61.2

Partner effort to be reflected also in the reporting/documentation