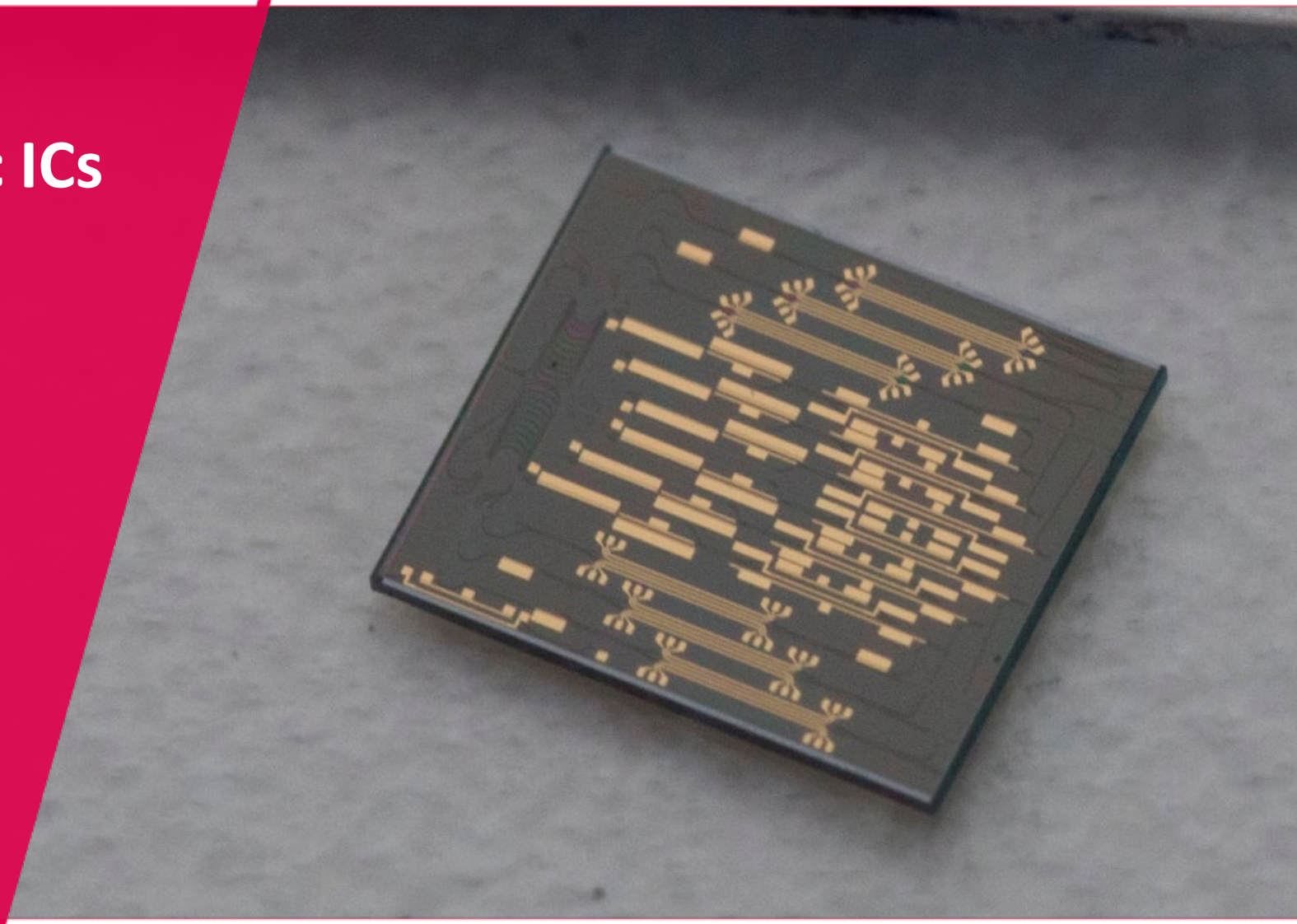
Technische Universiteit
Eindhoven
University of Technology

Open Innovation Photonic ICs
OpenPICs

Progress Meeting
04/04/2018



Where innovation starts

Photonic Integration Technology Centre

JePPIX

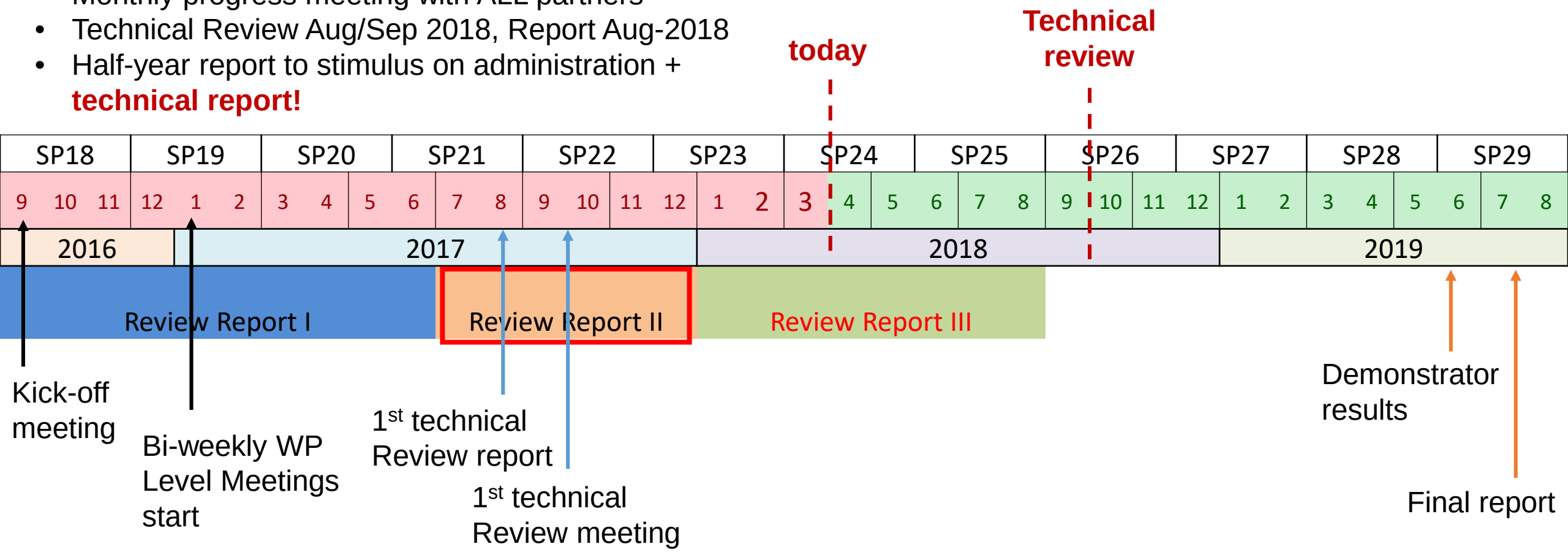
Agenda

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)
14:40 - 14:55	Bright Photonics Progress	(Ronald, WP3)
14:55 - 15:10	Phoenix Progress	(Marcel, WP3)
15:10 - 15:20	Effect Photonics Progress	(Saeed, WP3)
15:20 - 15:25	Technobis Input	(Vincent, WP1, WP3)
15:25 - 15:40	TU/e Progress	(Weiming, Victor, WP1, WP3, WP4)
15:40 - 15:50	Demonstrators/Milestones	
15:50 - 16:00	Actions/AOB	

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!**



Technical Reports

Technische Universiteit Eindhoven University of Technology

OpenPICs

Open Innovation Photonic ICs

OpenPICs

Technical Summary Report

(09/2016 – 06/2017)

Europese Unie

Europees Fonds voor Regionale Ontwikkeling

OPZuid

Europees Innovatieprogramma Zuid-Nederland

JePPIX

Photonic Integration Technology Centre

PhotonDelta

Integrated Photonics Ecosystem

CO Confidential, only for members of the consortium CO

OpenPICs

Open Innovation Photonic ICs

OpenPICs

Technical Summary Brief

(07/2017 – 12/2017)

Europese Unie

Europees Fonds voor Regionale Ontwikkeling
Europees Innovatieprogramma Zuid-Nederland

JePPIX

Photonic Integration Technology Centre

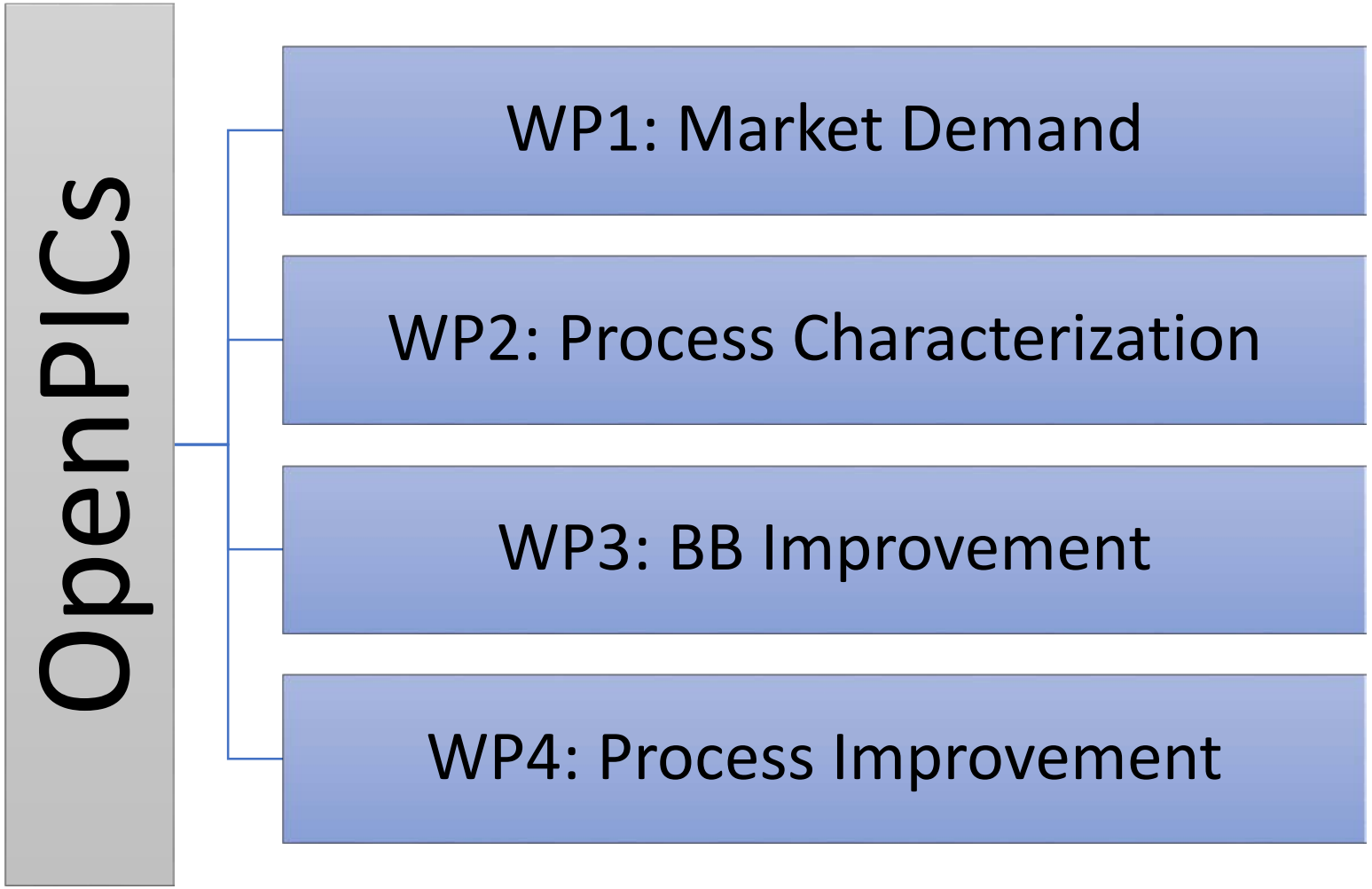
Table of Contents

TABLE OF CONTENTS 1
INTRODUCTION 2
WORK PACKAGE 1 – MARKET DEMANDS 2
Milestone (WP1.M4): Key Performance Indicators for MPW runs (KPIs) 2
WORK PACKAGE 2 – PROCESS CHARACTERISATION 3
Milestone Summary (WP2.2-M3.1): Generic BB Improvements Planarisation Sequence on SP20 3
Milestone Summary (WP2.3.-M1.1): NEW Building Block Introduction DBR laser 3
WORK PACKAGE 3 – BUILDING BLOCK IMPROVEMENT 3
Report Summary (WP3.3.R1): Design of Composite BB Test Cell 3
Report Summary (WP3.4.PDA.R0): Full Documentation of PDAFlow Template 3
Milestone Summary (WP3.4.DRC.M0): DRC Implementation in PDKs 4
Report Summary (WP3.4.DF.R0): Design Flow Document 4
WORK PACKAGE 4 – PROCESS IMPROVEMENT 4
Milestone (WP4.M5.1): AZ resist process development on PAS 2500/40 stepper 4
OUTLOOK 5
PARTNERS 5

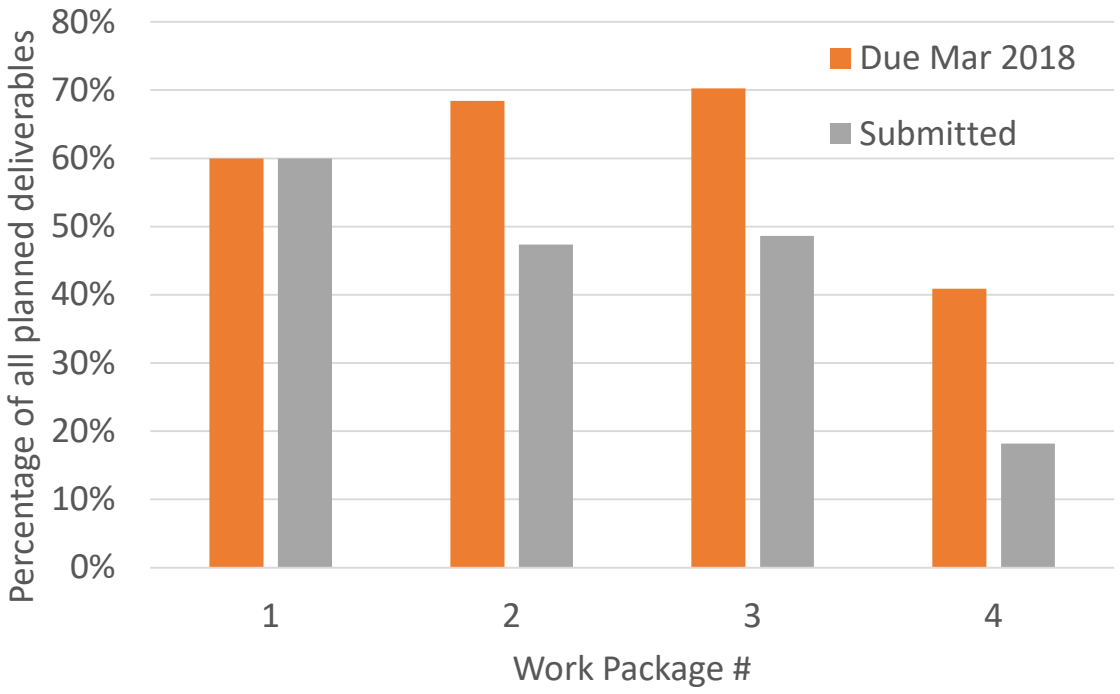
CO Confidential, only for members of the consortium CO

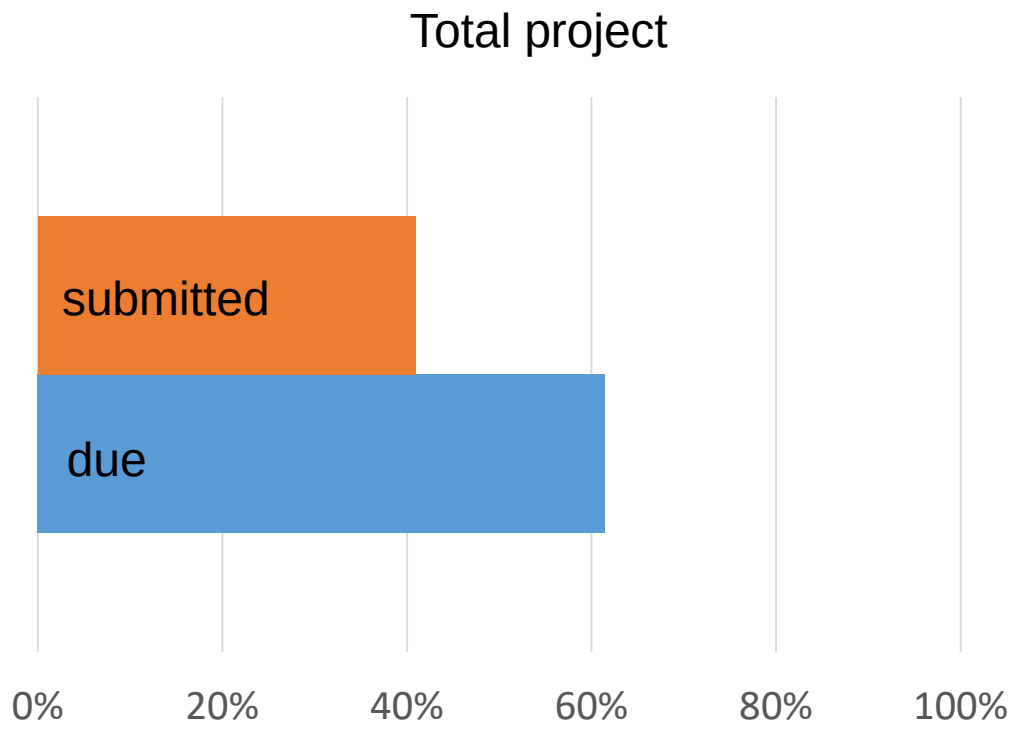
Filename
MeetingNotes
ProgressMeeting_1_2018
ReviewAug2017
ReviewReport
WP1
WP2
WP3
WP4
[0] OpenPICs_Project.pdf
[1] ALL_Milestones.pdf
[2] WP3_Chip_Plan 2017-12.pdf
template

Work Packages



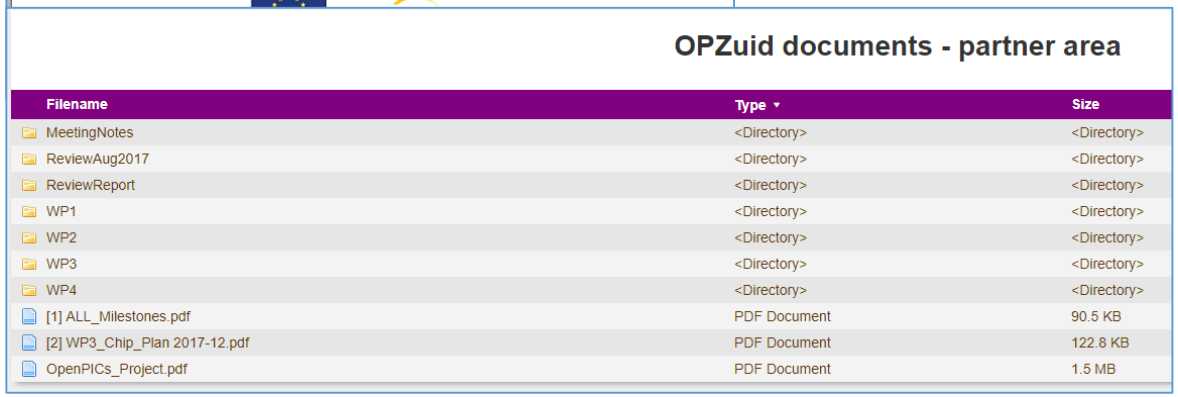
Project Progress





Dissemination

Project website



Partner Area

- Promote on events, presentations
- Promote on partner websites
- Communicate on which events it was mentioned

Last Meeting

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

Last Meeting

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**

Agenda

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)
14:40 - 14:55	Bright Photonics Progress	(Ronald, WP3)
14:55 - 15:10	Phoenix Progress	(Marcel, WP3)
15:10 - 15:20	Effect Photonics Progress	(Saeed, WP3)
15:20 - 15:25	Technobis Input	(Vincent, WP1, WP3)
15:25 - 15:40	TU/e Progress	(Weiming, Victor, WP1, WP3, WP4)
15:40 - 15:50	Demonstrators/Milestones	
15:50 - 16:00	Actions/AOB	

Effort Table

		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