



D 6.1 DEFINITION OF PASSION DISSEMINATION PLAN

Project title	Photonics technologies for ProgrAmmable transmission and switching modular systems based on Scalable Spectrum/space aggregation for future agile high capacity metro Networks
Project acronym	PASSION
Grant number	780326
Funding scheme	Research and Innovation Action - RIA
Project call	H2020-ICT-30-2017 Photonics KET 2017 Scope i. Application driven core photonic technology developments
Work Package	WP6
Lead Partner	EPIC
Contributing Partner(s)	POLIMI, VLC, SMO, TID, CTTC
Nature	R (Report)
Dissemination level	PU (Public)
Contractual delivery date	30/04/2018 (Foreseen delivery date as in Annex I)
Actual delivery date	11/12/2018
Version	1.1

History of changes

Version	Date	Comments	Main Authors
0.1	06/04/2018	Draft	Ana Gonzalez EPIC
0.2	10/04/2018	Revision	P. Parolari and P. Boffi POLIMI
0.3	20/4/2018	Revision	G. Parladori SMO, J. Fernando-Palacios and D. Larrabeiti TID-UC3M, M.





			Svaluto-Moreolo CTTC, M. Garcia-Porcel VLC
0.4	26/04/2018	Comments and quality review	K. Solis-Trapala EFP
1.0	27/04/2018	Final version	EPIC and POLIMI
1.1	10/12/2018	Revision after first Brussels intermediate review meeting	EPIC and POLIMI



Disclaimer

This document contains confidential information in the form of the PASSION project findings, work and products and its use is strictly regulated by the PASSION Consortium Agreement and by Contract no. 780326.

Neither the PASSION Consortium nor any of its officers, employees or agents shall be responsible or liable in negligence or otherwise howsoever in respect of any inaccuracy or omission herein.

The contents of this document are the sole responsibility of the PASSION consortium and can in no way be taken to reflect the views of the European Union.



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under Grant Agreement No 780326.



Table of contents

Executive Summary..... 5

1 Introduction..... 6

 1.1 Passion messages 6

 1.2 Objective of the dissemination activities 6

2 Dissemination tools..... 7

 2.1 Visual identity 7

 2.2 Website 7

 2.3 Social media..... 7

 2.4 Banners..... 7

 2.5 Flyers 8

 2.6 Webinars 8

 2.7 Publications in specialized and general media..... 8

 2.8 Participation to industrial events 8

 2.9 Newsletter 9

 2.10 Contact data management 9

 2.11 Passion supply chain interest group 9

3 Dissemination strategy 9

 3.1 Identification of the stakeholder groups 9

 3.2 Timing 12

 3.3 Calendar 2018..... 14

4 Key performance indicators 15

5 Annex I - Banners as a dissemination tools: roll-up..... 16

6 Annex II - Flyer for a quick, general picture of the project 17

7 Annex III - Visual identity concept of PASSION including the logo design, fonts, colours..... 18





EXECUTIVE SUMMARY

Here, we are presenting the initial dissemination plan for PASSION, addressing both scientific and industrial perspectives. The main objective of the dissemination activities is to promote the generation of business around the results of the project including the creation of paths for the commercialization of innovation resulting from the project and the complete transfer of PASSION technology at the end. In this context, the dissemination plan has been carefully designed to be aligned with the commercial goals of the project. This document presents the initial dissemination plan to achieve these goals. However, it is a flexible plan that will be continuously updated to be adapted to the project, next modifications of this plan will be presented at the corresponding Dissemination yearly reports.

The main concepts that are showed in this deliverable are

- i) the messages that will be transmitted to the different audiences (especially during the first year of the project),
- ii) the main dissemination tools including social media, website, dissemination kit (flyers and banners),
- iii) the planning of the events that PASSION will attend,
- iv) the identification of the different stakeholders and their relationships, including the different levels of the PASSION supply chain, standardization bodies and associations and
- v) the communication strategy to follow to reach and to align the different stakeholder groups.

During the first period of the project, the technological points that will be highlighted are: i) the introduction of novel 3D stacked modular design combining a silicon photonics (SiPh) circuit layer with VCSELs light sources, ii) a novel InP based coherent receiver arrays which avoids separate polarization handling, and iii) a compact and cost-effective switching concept supporting Pb/s, using a combination of InP and SiPh PICs. The main advantages that will be highlighted will be: i) a ten-fold reduction in energy consumption and footprint, compared to current approaches, ii) modularity, iii) scalability, and iv) flexibility

The different stakeholder groups have been preliminary identified and the messages/actions that will be directed to each group as well as the different events that will address each group are pointed out.

The dissemination strategy will involve two different periods, the first and second years of the project in which the goal is to create the PASSION brand, from the visual identity to the definition of expectations, stories and results that will influence the potential use of the technology. In the last year of the project, demonstrators will be available, so dissemination activities will be focused on presenting the PASSION devices to potential users of the technology. Likewise, standardization activities will be monitored to identify exploitation opportunities.

Finally, Key Performance Indicators (KPIs) to evaluate the effect of the different dissemination activities are proposed.



1 INTRODUCTION

1.1 PASSION MESSAGES

The PASSION project will develop new photonic technologies for supporting agile metro networks, enabling capacities of Tb/s per channel, 100 Tb/s per link and Pb/s per node over increased transport distances. Increased system flexibility and modularity is obtained by sliceable bandwidth/bitrate variable transceivers. There are different main technological concepts that will be disseminated:

- On the transmitter side a novel 3D stacked modular design will be developed combining a silicon photonics (SiPh) circuit layer with directly modulated high-bandwidth 1550nm VCSELs light sources.
- At the receiver side we will develop novel InP based coherent receiver arrays which handle polarization on chip.
- Finally, we will develop a compact and cost-effective switching concept which can support the Pb/s capacities generated by the transceiver modules, using a combination of InP and SiPh PICs.

The main advantages of the system will be the scalability, programmability and reconfigurability together with a tenfold reduction in component energy consumption and footprint.

1.2 OBJECTIVE OF THE DISSEMINATION ACTIVITIES

The goal of the dissemination activities is to promote the project among the different stakeholder groups in order to establish strategic partnerships, with the final objective to maximize the commercial opportunities for PASSION. For that, the communication plan must be aligned with the exploitation plan of the project that includes the identification of the commercialization opportunities and the complete migration of PASSION solutions to the industry at the end of the project.

For that, the different levels of the PASSION supply chain have been identified in three main groups: i) suppliers for the massive amount of components required for implementation of PASSION technology in the metro-networks (Yelo, Focuz, Ficontec and PIXAPP), ii) the developers of metro-network (Huawei, Nokia, SM-Optics...) and iii) End-users of the metro-network such as Telefonica.

The messages will range from the dissemination of photonics technologies for the general public to the communication of the results of the project for the potential users of the technology. Furthermore, monitoring the standardization activities, we could identify an opportunity to promote PASSION technology within standard bodies and associations.

We envisage two periods in the dissemination plan, with dissemination activities adapted to the needs of the project. In the first year, the objective will be to brand the project (visual- and content-wise) by presenting it to the photonic community. The second period, that will start in the second year, will have the objective to exploit the more consolidated results and demonstrators in shows, to attract potential users and organize dissemination actions focused on paving the way for the commercialization of the results.



2 DISSEMINATION TOOLS

Different tools such as social media, marketing material, website, and industrial and academic events will be employed to disseminate the objectives, benefits and results of the technology developed by PASSION. The main partners that are developing these tools are EPIC, POLIMI and VLC. Marketing material such as banners and flyers are employed at the booths, workshops and networking events. Social media such as Twitter, LinkedIn and Facebook are used to disseminate news, upcoming events and to show the activities in the past events. These dissemination tools will be used to raise awareness within different target communities and general public.

2.1 VISUAL IDENTITY

The visual identity is the visual aspect of PASSION including the logo design, fonts, colors and photos. The visual identity will be used in all the promotional material to keep uniformity and facilitating the recognition of the brand. The visual identity concept is fully described in Annex III.

2.2 WEBSITE

The website of the PASSION project (<http://www.passion-project.eu/>) provides information on the project objectives, impact, and achievements addressing both a broad public and expert groups, aiming at building a community around the project. It was launched in January 2018 and it is constantly updated. For a detailed description, please see deliverable D1.2.

2.3 SOCIAL MEDIA

The main social media channels have been set up from the beginning of the project. PASSION is a "social project", on LinkedIn you can find the "PASSION H2020 project", the Twitter account is "PASSION project" @PASSIONeuH2020, and on Facebook "Passion project" @H2020PASSION is at the address <https://www.facebook.com/H2020PASSION/>

All communication activities related to the project will acknowledge the context of the Photonics PPP, for example by stating that the project is an initiative of the Photonics Public Private Partnership. Specifically, for workshops, press releases, presentations etc., the "EU emblem and Photonics21" logo will be displayed prominently along with the text "Photonics Public Private Partnership"; the link www.photonics21.org will also be included. When communicating on Twitter or other social media about project activities, #Photonics will be included together with @Photonics21 and @PhotonicsEU.

2.4 BANNERS

A roll-up has been already designed to give a general overview of the project (see Annex I). This is the first roll-up and it is focused on the goal of the project using the designed logo and visual identity to start branding the project. New roll-ups will be designed to highlight other aspects of the project, depending on the dissemination activity in which they are going to be used, technical operational aspects and/or the benefits will be evidenced.





2.5 FLYERS

A first flyer has been designed to give an immediate and general picture of the project outlining the goals, the benefits and the main innovative technologies introduced in PASSION (see Annex II).

2.6 WEBINARS

Webinars will be further introduced into the dissemination actions of the project. They will be directed to different stakeholder groups and they will aim to communicate PASSION photonic technologies advancements applied to telecommunications.

2.7 PUBLICATIONS IN SPECIALIZED AND GENERAL MEDIA

The project will generate several results that will be published on specialized media and peer-reviewed journals. Furthermore, a broad audience will be target by general articles presenting photonics technologies for telecommunication and indirectly highlighting PASSION as key actor in the communication arena.

PASSION publications will be made available with the green open access model, with self-archiving and any other tools proposed by the European Commission. Moreover, when allowed, maximum effort will be placed in ensuring the gold open access.

Table 1 List of possible journals and specialized media

Publications		
Scope/Topic	Specialized media	Journals (peer review)
Compact integration	LaserFocusWorld, OpticalConnectionsNews, PICMagazine, ELE Times, NovusLight, Lightwave	Optics Express; IEEE/OSA Journal of Lightwave Technology
Metro transmission and switching		IEEE/OSA Journal of Lightwave Technology; IEEE Photonic Technology Letters; Elsevier Optical Switching and Networking; Optical Fiber Technology
Metro networks		Journal of Optical Communications and Networking; Elsevier Optical Switching and Networking; IEEE Communications Magazine; IEEE Network magazine

2.8 PARTICIPATION IN INDUSTRIAL EVENTS

PASSION will be present at many industry-involving events with different levels of participation:

- Roll-ups and flyers at EPIC Executive Events: EPIC organizes Executive Dinners and social gatherings at some of the target events for PASSION such as ECOC and OFC. These events will be sponsored by PASSION, which will provide a great visibility for the project within decision makers at the target companies.
- Presentations and Booths at the main conferences: ECIO, ECOC, OFC, OSA Photonics in Switching, ICTON, SPIE Photonics West, IEEE ICC, IEEE GLOBECOM, IEEE ONDM, and NOC will be considered.
- PASSION workshops: they will be organized at the same time and place of the main conferences. They will include a discussion on PASSION developments together with presentations of other projects and platforms.





- PASSION will create an interest group containing the companies that might be interested in the technology developed, such as components providers, that will be fundamental for the development of the PASSION supply chain.
- EPIC will partnership and attend the meetings with some associations in which the key actors of the telecom are represented such as the Consortium for On-Board Optics (COBO), the Pacific Telecom Council (PTC) and the North America Network Operators' Group (NANOG). The attendance at these meetings will be fundamental in order to connect with the key players in the development of metro-network.

2.9 NEWSLETTER

Newsletters will be released every 4 months starting from M4, they will essentially include the latest news and achievements of the PASSION project. Possibly specific analysis performed by the PASSION partners will be also included. The newsletter can be subscribed from the footer of the PASSION website. PASSION will proceed to Personal Data Treatment in compliance with relevant provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016.

2.10 CONTACT DATA MANAGEMENT

From the beginning, the dissemination activities will arise an interest for the project, generating a list of contacts. These contacts will be added to a data management file (excel file) that will be used as a distribution-list for the newsletter and to promote the PASSION events such as workshops and webinars. PASSION will proceed to Personal Data Treatment in compliance with relevant provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016.

2.11 PASSION SUPPLY CHAIN INTEREST GROUP

PASSION will arise a lot of interest from companies that could become providers for the new metro network systems. To keep these companies informed about the results and adoption of standards, they will be encouraged to register in the PASSION website, the registration will be performed through a link in the footer of the PASSION website. This will be the starting point to set the future PASSION network concept supply chain. Again, PASSION will proceed to Personal Data Treatment in compliance with relevant provisions of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016.

3 DISSEMINATION STRATEGY

3.1 IDENTIFICATION OF THE STAKEHOLDER GROUPS

Considering that the goal of the dissemination actions is to maximize the commercialization of the results of the PASSION project, the effort will be directed to reach other end-users of the technology so different actions are planned to get contacts in these groups:



End-users group: companies that commercialize metro-network systems such as China Mobile, Verizon, AT&T, NTT and Vodafone. For that, the contact with these companies will be prioritized at shows and exhibitions such as the NGON2019, PTC2019, NANOG75 and COBO meetings. These companies will be invited to attend the workshops organized to be informed of the technology developed in PASSION, also to the EPIC executive events organized at ECOC and OFC.

Developers of metro-network: it is essential to monitor the developments of competitor technologies and to share information about PASSION technologies. These companies such as CISCO, Infinera, Huawei and Nokia will be contacted at shows and conferences, also through the EPIC partnerships. Representatives of these companies will be invited to the PASSION workshops and EPIC executive events.

Component manufacturers: these companies are already at the EPIC network, they are attending EPIC events and are involved in EU projects in which EPIC is participating such as PIXAPP, the Pilot Line for packaging and assembly of Photonic Integrated Circuits. Component manufactures will be reached at EPIC workshops and events shows and exhibitions.

In addition to the stakeholder groups comprised in the PASSION supply chain (suppliers of components/services, developers of metro-network and end-users), there are other stakeholder groups that must be taking into account such as:

1. Policy Makers & Funding Agencies

From the beginning of the project, PASSION will promote photonic technologies as the current technology for the future of telecommunications among policy makers and funding agencies focusing on KPIs on revenue generation and job-growth opportunities. Key policy makers include the EU Commission, Photonics21 PPP and national agencies. Dissemination tools: presentations, newsletters, events.

2. Media & General Public

During all the duration of the project, different articles and press-releases will be published to promote PASSION among the photonics community. At least one webinar will be organized per year focused on the general public (students) to make awareness of the role of photonics in the next generation of telecommunication devices.

3. Partners of the Consortium

The consortium must be joint, and the messages must be unified. For that, dissemination messages will be agreed during the consortium meetings. The consortium must be convinced that they are the right partners to develop the PASSION technology that will impact in the network telecommunications. Gadgets and merchandising could be created and distributed among the partners such as memory sticks, business cards, etc. to rise the corporative PASSION spirit.

4. Research & Scientific Community

The research community can be divided into two groups; photonic experts and non-experts, with different dissemination measures required for both. The key method for engagement with these groups will be through technical conferences such as ECOC, OFC and Photonics West and articles in specialized and non-specialized media.

Table 2 List of possible conferences, workshops and events





Scope/Topic	Conferences	Workshops	Events
Compact integration	ECIO, ECOC, IEEE IPC, PW, OFC, CLEO	OFC, ECOC, IEEE/OSA Topical Meetings	PIC International Conference (www.picinternational.net)
Metro transmission and switching	ECOC, OFC, OSA Photonics in Switching and computing, IEEE ICTON, SPIE Photonics West, CLEO	OFC, IEEE/OSA Topical Meetings, ICTON, ECOC,	joint Photonics21 PPP workshops/sessions
Metro networks	IEEE ICC, IEEE GLOBECOM, IEEE ONDM, NOC, ICTON, HPSR	OFC, ECOC, ICTON	NGON & DCI (https://tmt.knect365.com/next-generation-optical-networking/)

5. Standards & Regulatory Bodies

As stated in the project proposal, PASSION partners consider alignment with international standards (ETSI, ITU-T, IEEE) as a must. Through the active involvement of the industrial Partners of PASSION in standardization bodies, there is the opportunity of influencing them to incorporate the PASSION achievements in the future standards. Likewise, the PASSION technologies will be aligned as much as possible with existing and evolved standards.

The project activities and its derivatives cover a wide range of possible standardization bodies and Fora, the same that today are addressing 100-400Gb/s solutions and 600Gb/s-1.2Tb/s in the near future (announcements already present on the market). In particular, we highlight:

- IEEE – It is mainly dealing with the client-side specifications. IEEE P802.3bs 200 Gb/s and 400 Gb/s Ethernet Task Force (<http://www.ieee802.org/3/bs/index.html>).
- ITU-T – It addresses mapping and networking topics, including fibre standards (G.65x). In particular, we refer to ITU-T SG15 and the current recommendation G.709/Y.1331 (2016) Amendment 1.
- OIF- It addresses both physical and Link Layer and optical networking. One of the OIF Projects is currently addressing 400Gb/s Framework.

Among Fora, Consortium and Association we are considering ONF and ON.LAB and Broadband Forum, which are mainly dealing with the management of the network. In addition, the participation in COBO (<http://onboardoptics.org/>) will be considered, if concluded that it will bring added value to the project.

To maximize the PASSION impact the consortium will follow the following strategy.

First, monitor the standardization activities of the most influencing standardization bodies. Then identify a possible opportunity to bring PASSION solution into the standard, arranging presentation during the actual standardisation meetings and possibly sign liaison letters.

Finally, identify possible opportunities to place PASSION solution in approved standards. This activity will be tuned according to the Project progress and results.





Table 3 Summary of the dissemination strategy

Stakeholder group	Dissemination focus	Dissemination tools/events employed to achieve the goal
Component manufacturers	Technology developed by PASSION	PASSION workshops, booths at conferences, EPIC workshops
End-user group	PASSION technology benefit demonstration	PASSION workshops, newsletters, booths at conferences, EPIC workshops
Metro-network providers	Collaboration, interchange of information and complementarity	PASSION workshops, booths at conferences, newsletters, EPIC workshops
Policy Makers & Funding Agencies	Top-line KPIs and metrics, potential user numbers, revenue generation and job-growth opportunities	Photonics21 annual meetings and H2020 promotional events, newsletters, EPIC events
Media & General Public	Photonics technologies as key enabling technology for telecommunications	Website, webinars
Other Projects & Competitors	Collaboration, interchange of information and complementarity	PASSION workshops, booths at conferences, newsletters, EPIC workshops
Partners of the Consortium	Strengthen the brand into the consortium	Merchandizing, business cards
Research & Scientific Community	The technological developments and results achieved during the project	Articles in specialized and non-specialized media, presentations at conferences
Standards & Regulatory Bodies	Collaboration and exchange of information	Regulatory bodies meetings

3.2 TIMING

The dissemination strategy will differentiate on a year by year basis as detailed below. During the first year we will attract the interest towards the project in order to create a stakeholder community; in the second year the first devices and subsystems will be released and tested and specific presentations will be given, while the possibility to contact standardization bodies will be evaluated; during the third year demonstrators of the PASSION devices and subsystems will prove the obtained performance and the dissemination will be more oriented towards the engagement of industrial partners.

During the **first year**, the objective will be to make the photonic community aware of the project technology and the expected benefits. In particular, the photonic ecosystem related to telecommunications will be involved.





The activities that will take place the first year of the project and that will be maintained over the project duration are:

- Set the Social Media/ Website/ Newsletter
- Prepare the dissemination kit (banners, flyers...)
- PASSION sponsors EPIC executive events at photonic telecom/datacom conferences such as OFC and ECOC.
- PASSION participation in workshops such as EPIC Meeting on Singlemode vs Multimode Communication at CommScope (<http://www.epic-assoc.com/epic-meeting-on-singlemode-vs-multimode-communication/>) and the workshop for photonic integrated circuits at ECOC 2018. The presentations will be completely dedicated to give an overview of the PASSION project focusing on the technology and the socio-economic benefits.

During the **second year** of the project, the brand will be already known by the photonics community specialized on telecom. At the same time, we are expecting the first results in terms of fabrication of new high-bandwidth VCSELs, release of SOI-PIC for VCSEL massive integration, realization of single channel monolithic coherent receiver and availability of polymer based photonic switch matrices. Possibly these devices and subsystems will be arranged in demonstrators to show PASSION capabilities at the exhibitions. In addition to these activities, the new activities introduced will be:

- PASSION participation with a booth at the main exhibitions (starting by OFC and ECOC)
- At least one PASSION workshop co-located with one of the top conferences in photonics.

For **the last year of the project**, the results will start converging into the end solutions, and the dissemination activities will be more aligned with the exploitation of the technological platform for signal generation, detection and switching devices and modules, driving new technological paths for metro applications. The activities will aim to demonstrate PASSION impact in short-medium reach communications applications, where cost reduction and energy sustainability are mandatory. The development of suitable sliceable, programmable and modular transceivers based on multicarrier modulation formats can be exploited for the migration towards a more flexible network paradigm targeting SDN-enabled advanced functionalities. PASSION aims to position Europe as a world leader in the design, production, and implementation of strategic, high-value, low-cost, compact and low power consuming photonic technologies for the next generation of ultra-high-speed metro network scenario, and final dissemination activities will target to boost the consortium market share among the global photonics market. Also, promotion of photonics for the general public will be considered. Activities that will be introduced during the second half of the project are (in addition to the activities already proposed for year 1 and 2):

- Possible meeting with investors
- Meetings with standardization bodies
- Webinars
- Presence (including a booth and/or a dedicated workshop) at non-photonic but telecom/datacom events such as the Mobile World Congress.



3.3 CALENDAR 2018

PASSION will be/has been already present at the following events:

- PASSION was mentioned at SPIE OPTO PhotonicsWest 2018 in the invited talk “Optical interconnects based on VCSELs and low-loss silicon photonics“ by T. Aalto et al. (January)
- PASSION flyers and roll-up were at the EPIC VIP Party at OFC2018, several partners also attended (March)
- PASSION was at OFC2018 Session M1A • Network Techno-economics with paper M1A.7 • Modular SDN-enabled S-BVT Adopting Widely Tunable MEMS VCSEL for Flexible/Elastic Optical Metro Networks by Michela Svaluto Moreolo et al. (March) and at Session Th1E Components for Future PON with paper Th1E.2 • Beyond 25 Gb/s Directly-modulated Widely Tunable VCSEL for Next Generation Access Network, by Alberto Gatto et al. (March)
- PASSION was mentioned in the Eindhoven Workshop on Optical Communications (EWOOC 2018) in the invited talk “Cost-effective high speed optical transceivers for short reach IMDD and/or coherent applications” by A. Albores-Mejia (April)
- PASSION will have an invited talk at ONDM 2018 titled “Exploring the Potential of VCSEL Technology for Agile and High Capacity Optical Metro Networks,” by Michela Svaluto Moreolo et al. (May)
- PASSION will have a talk at the EPIC workshop “Single mode vs. multimode” (June).
- PASSION will have an invited talk at ICTON2018 (July)
- PASSION will have an invited talk at OSA Advanced Photonics 2018 Congress within the topic Photonic Networks and Devices, titled “Programmable Optical Transmission Systems in the Hyperconnectivity Era: A Synergy of Photonic Technologies and Software-Defined Networking,” by Michela Svaluto Moreolo et al. (July)
- PASSION will have an invited talk at PSC2018 (September)
- PASSION will have a talk at the PIC workshop at ECOC (September)
- PASSION will have a talk at the ECOC 2018 - Workshop "Photonic transport systems for 5G networks" (September)
- PASSION will have a talk at the 6th international workshop organised by the Spanish research network on Elastic Networks (September).
- PASSION will have a session at the EPIC Meeting on Optical Communications: Coherent or Incoherent at HUBER+SUHNER Cube Optics, in which PASSION will be presented in front of the complete supply chain including end-users and metro-network developers.

Moreover below it is shown the calendar of main industrial events in which PASSION was present in 2018 and the planned industrial events for 2019.

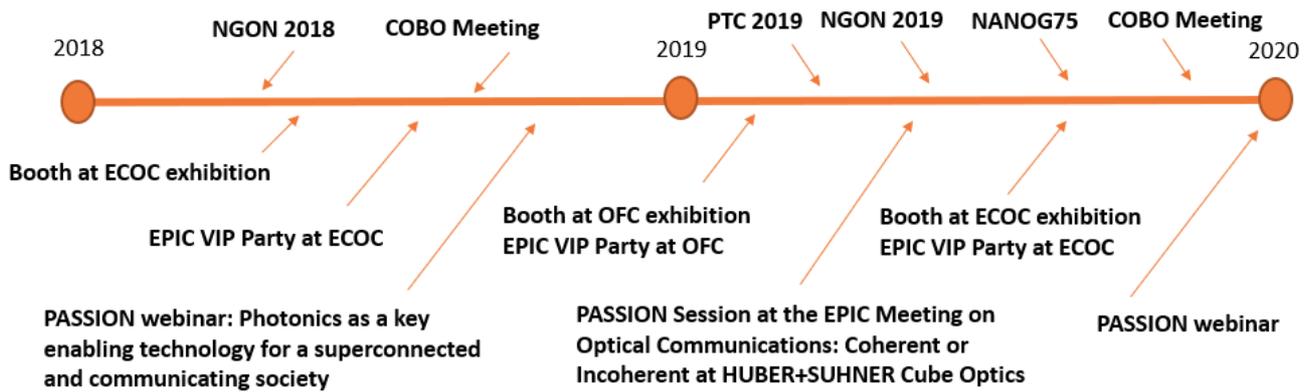


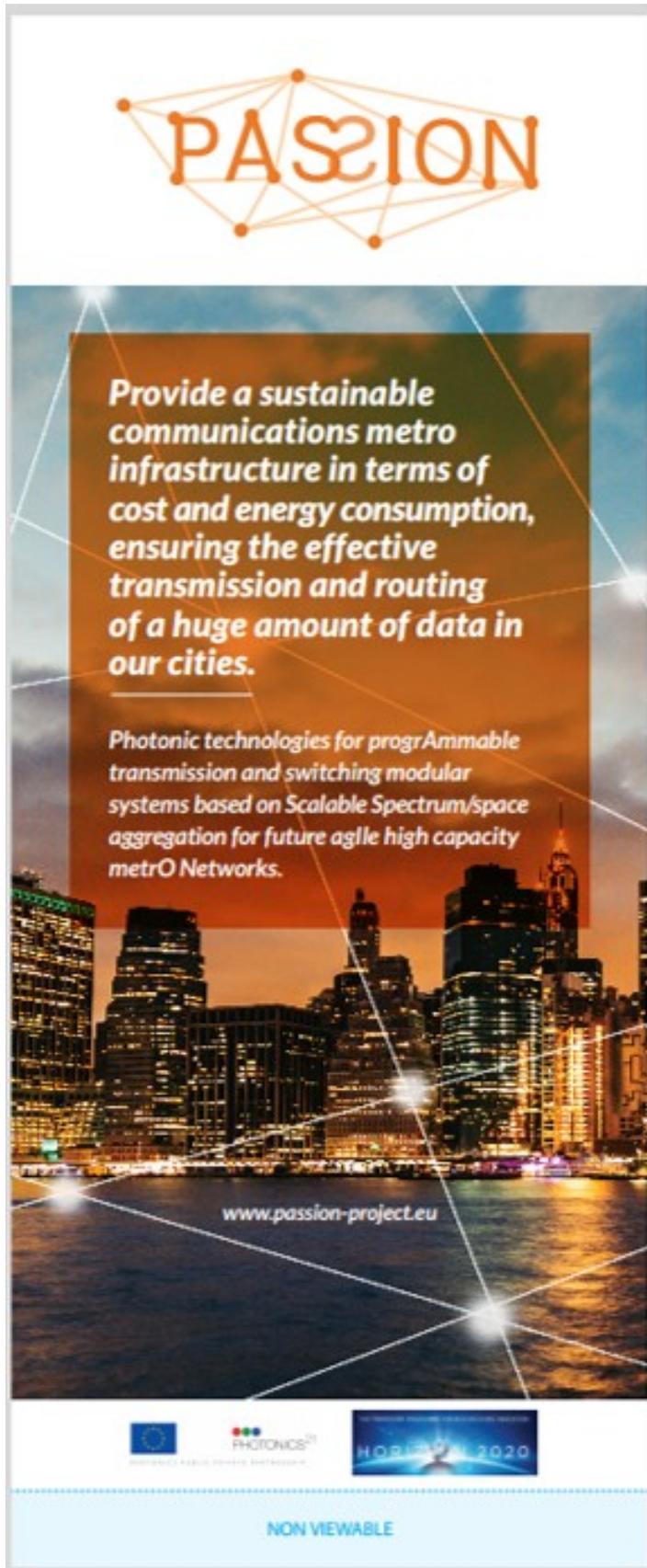
Figure 1 •Calendar of main industrial events in which PASSION was present in 2018 and planned industrial events for 2019

4 KEY PERFORMANCE INDICATORS

Table 4 KPI

	After 12 months	After 36 months
Workshops	0	2
Booths at conferences	0	1
PASSION mentioned during presentations	8	20
PASSION dedicated presentations	2	25
PASSION sponsoring	2	4
LinkedIn Activity (average of 2000 views per post)	8 posts	28 posts
LinkedIn Group members	50	>300
Twitter Activity	40 tweets	100 tweets
Twitter Followers	36	100
Webinars	0	3
Newsletters	3	9
Visits to the PASSION website	250	>1000
Companies attending PASSION workshops	N.A.	30
Publications in Conferences/Journals	6	>15
Companies in the PASSION supply interest group	25	100

5 ANNEX I - BANNERS AS A DISSEMINATION TOOLS: ROLL-UP





6 ANNEX II - FLYER FOR A QUICK, GENERAL PICTURE OF THE PROJECT

INFORMATION

Acronym: PASSION
Grant Agreement: 780326
Total cost: 8.393.076 EUR
EU Contribution: 7.535.747 EUR
Starting date: 01/12/2017

Duration: 36 months
Website: www.passion-project.eu
Contact: Prof. Pierpaolo Boffi,
passion-project@polimi.it

Photonic technologies for programmable transmission and switching modular systems based on Scalable Spectrum/space aggregation for future agile high capacity metro Network.

www.passion-project.eu

In the last decade we have observed a continuous development of the fibre-optic networks for metropolitan applications. However, we are now facing a bottleneck in the transmission and the routing of data. Photonics is a key enabling technology for the evolution of the entire telecommunications infrastructure, but the technologies used so far for the metro network directly derive from the long-distance transport and they proved to be too expensive and power hungry.

Alternatively, PASSION will develop an innovative technological platform based on directly-modulated vertically emitting Laser sources (VCSEL) and on multi-channel coherent receivers integrated on Silicon-Photonics technology, providing high modularity and aggregating signal flows with a capacity of 16 Tb/s per spatial channel and 112 Tb/s per link exploiting a 7-core fiber.

PASSION technologies will achieve a 10-fold power consumption reduction with respect to commercially available modules based on externally modulated traditional sources. The dimensions of the PASSION modules will be even three orders lower than the current WDM solutions.

Thanks to these innovative transmitters and receivers PASSION will design a flexible network architecture, optimized for metro applications, based on aggregated signal flows, exploiting the full wavelength spectrum and the "space" dimension in a multi-core fibre.

Photonic devices capable of aggregating/disaggregating and/or routing data flows in spectrum and/or in space will allow a switching capacity of 1 Pb/s per node. The metro network architecture that will be developed in PASSION will thus provide a full programmability to match the traffic evolution.

PASSION will pave the way for the future metropolitan infrastructure of European high-bitrate communications that will connect people, content, clouds and things. PASSION will contribute to reinforce the European industrial technological leadership in high-capacity photonic devices and sub-systems, addressing the growing market of metro network scenarios, and improving business opportunities in Europe.





7 ANNEX III - VISUAL IDENTITY CONCEPT OF PASSION INCLUDING THE LOGO DESIGN, FONTS, COLOURS



PASSION: Photonic technologies for programmable transmission and switching modular systems based on Scalable Spectrum/space aggregation for future agile high capacity metro Networks

The PASSION project will develop new photonic technologies for supporting agile metro networks, enabling capacities of Tb/s per channel, 100 Tb/s per link and Pb/s per node over increased transport distances. A new metro network infrastructure is envisioned, fitting the network operator roadmap and targeting at least a tenfold reduction in components energy consumption and footprint. These breakthroughs are achieved by developing all the essential photonic building blocks. On the transmitter side a novel 3D stacked modular design will be developed combining a silicon photonics (SiPh) circuit layer with directly modulated high-bandwidth 1550nm VCSELs light sources. At the receiver side we will develop novel InP based coherent receiver arrays which handle polarization on chip making polarization handling off chip unnecessary. Finally, we will develop a compact and cost-effective switching concept which can support the Pb/s capacities generated by the transceiver modules, using a combination of InP and SiPh PICs. Increased system flexibility and modularity is obtained by sliceable bandwidth/bitrate variable transceivers. The resulting solution will offer scalability, programmability and re-configurability using agile aggregation in spectrum, polarization and space dimensions. PASSION will contribute to reinforce European industrial technological leadership in high-capacity photonic devices and sub-systems, addressing the growing market of metro network scenarios, improving business opportunities in Europe. Politecnico di Milano is the project coordinator and the PASSION consortium includes other universities, research centres, device manufacturers, a supplier of communication equipment and a network operator, addressing the entire value chain. PASSION has a strong industrial commitment, demonstrated by the presence of two large enterprises and four SMEs, which will identify the path to industrial exploitation, standardization and commercialization, while universities and research centres will support the scientific dissemination. The project is an initiative of the Photonics Public Private Partnership and is funded by EU through the H2020 RIA ICT-30 call PHOTONICS KET.

Positive



Greyscale



Network

The *network* embracing the project name symbolises the aim of the project, finalized to support the future connected and communicating society.

Nodes

The *nodes* of the network represent the innovative technologies developed in the project. They are 13, as the 13 partners of the project, connected to work together and to share their experience and research.

Heart

The *heart* (shaped by the two S) is at the center of the project name and of the network, representing the passion followed in the challenging approach to the project research

Orange colour

The *orange colour* used for the logo is creative, youthful, and enthusiastic, as the PASSION project team is.

Synthetic logo



Minimum size



05.

COLOURS

2017



RGB

R: 241
G: 121
B: 56

HEX

#f27838

CMYK

C: 0
M: 64
Y: 87
K: 0

OPACITY: 100%



RGB

R: 251
G: 148
B: 60

HEX

#fb943c

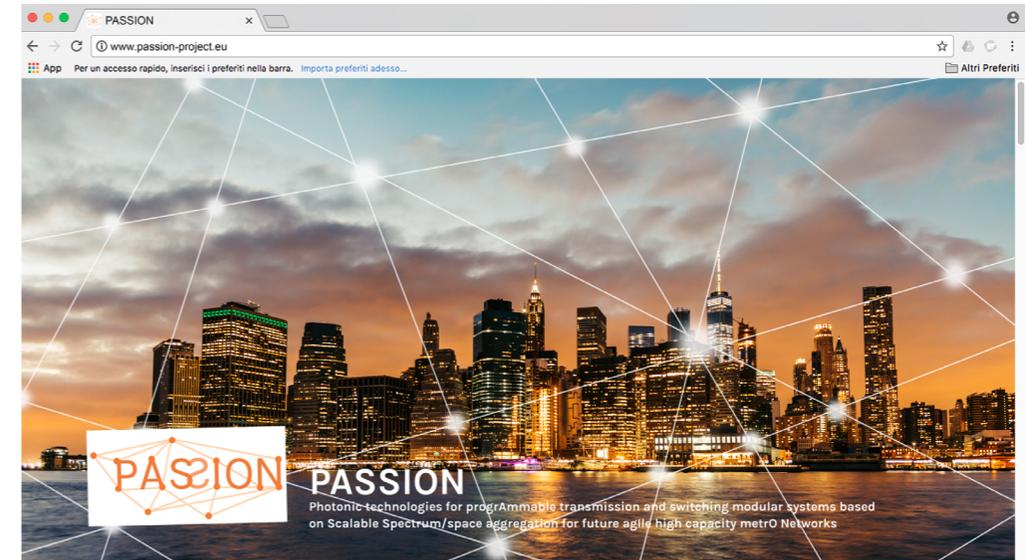
CMYK

C: 0
M: 50
Y: 85
K: 0

OPACITY: 35%

a b c d e f g h i j k l m n o p q r s t u v w x y z
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
1 2 3 4 5 6 7 8 9 0 ? ! , ; () &

Homepage and favicon



HOME PROJECT PARTNERS PUBLICATIONS DOCUMENTS NEWS&EVENTS ↓

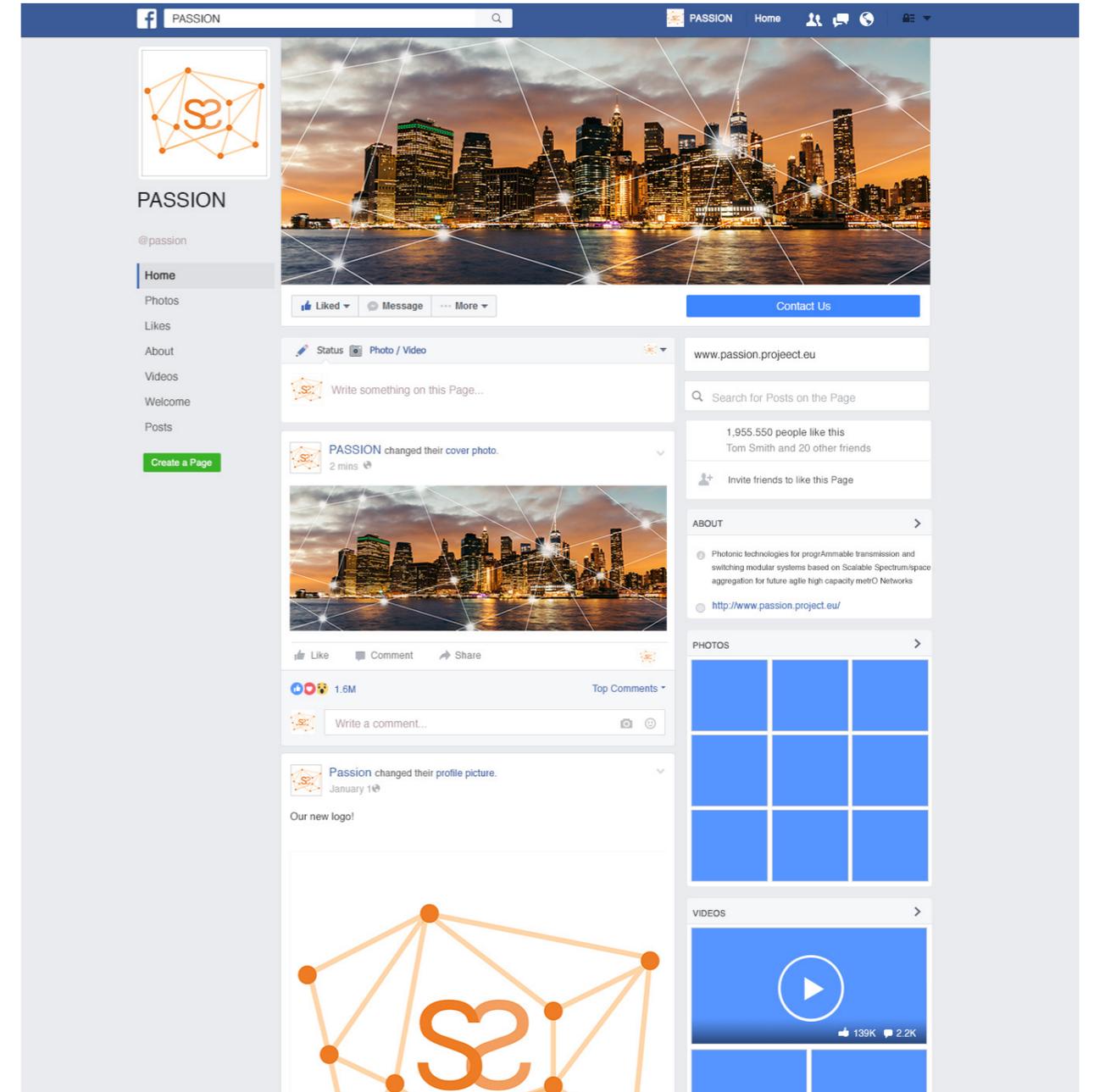
HOME



The PASSION project will develop new photonic technologies for supporting agile metro networks, enabling capacities of Tb/s per channel, 100 Tb/s per link and Pb/s per node over increased transport distances. A new metro network infrastructure is envisioned, fitting the network operator roadmap and targeting at least a tenfold reduction in components energy consumption and footprint. These breakthroughs are achieved by developing all the essential photonic building blocks. On the transmitter side a novel 3D stacked modular design will be developed combining a silicon photonics (SiPh) circuit layer with directly modulated high-bandwidth 1550nm VCSELs light sources. At the receiver side we will develop novel InP based coherent receiver arrays which handle polarization on chip making polarization handling off chip unnecessary. Finally, we will develop a compact and cost-effective switching concept which can support the Pb/s capacities generated by the transceiver modules, using a combination of InP and SiPh PICs. Increased system flexibility and modularity is obtained by sliceable bandwidth/bitrate variable transceivers. The resulting solution will offer scalability, programmability and re-configurability using agile aggregation in spectrum, polarization and space dimensions. PASSION will contribute to reinforce European industrial technological leadership in high-capacity photonic devices and sub-systems, addressing the growing market of metro network scenarios, improving business opportunities in Europe. Politecnico di Milano is the project coordinator and the PASSION consortium includes other universities, research centres, device manufacturers, a supplier of communication equipment and a network operator, addressing the entire value chain. PASSION has a strong industrial commitment, demonstrated by the presence of two large enterprises and four SMEs, which will identify the path to industrial exploitation, standardization and commercialization, while universities and research centres will support the scientific dissemination. The project is an initiative of the Photonics Public Private Partnership and is funded by EU through the H2020 RIA ICT-30 call PHOTONICS KET.

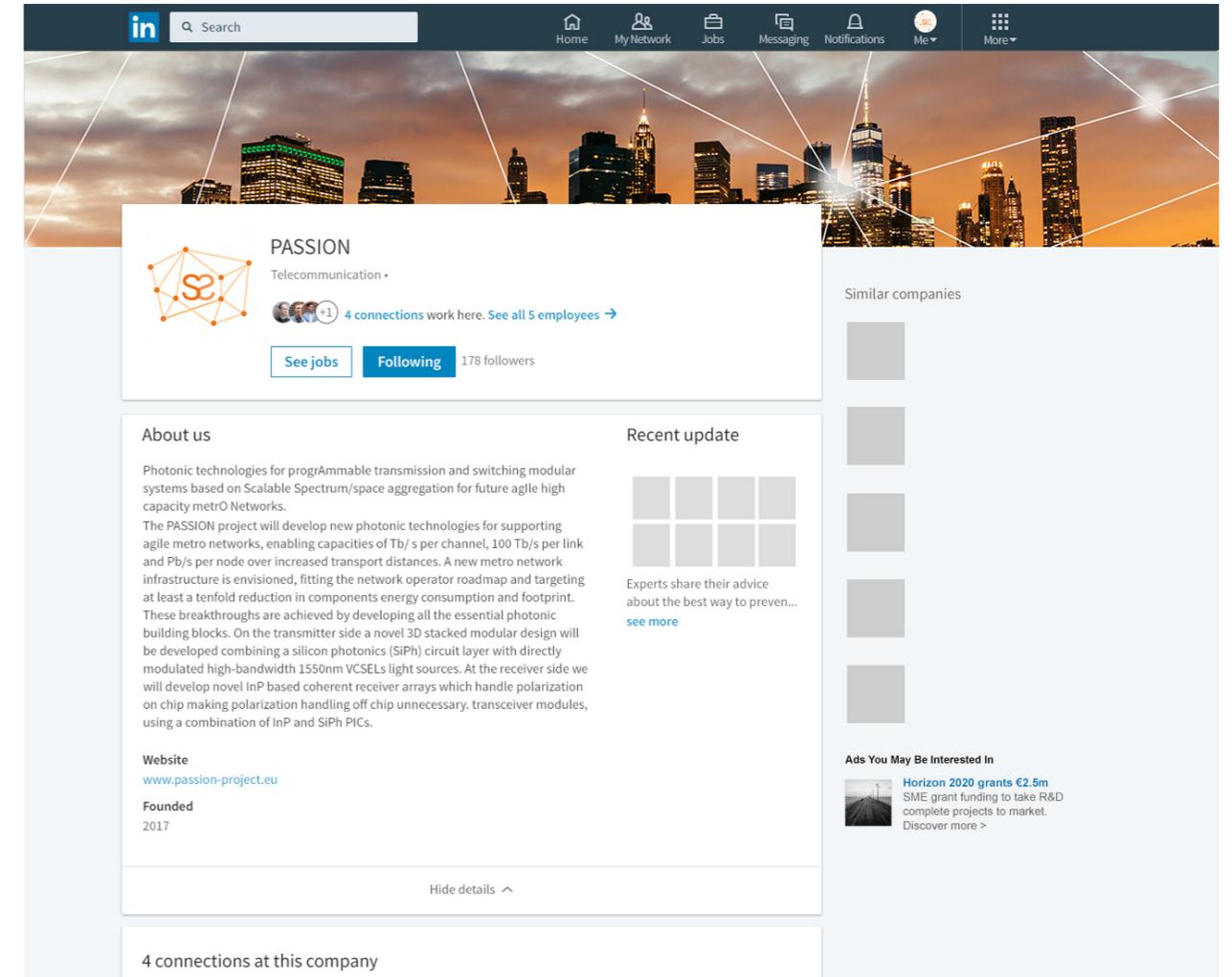
SOCIAL MEDIA

Facebook





LinkedIn



HORIZON2020



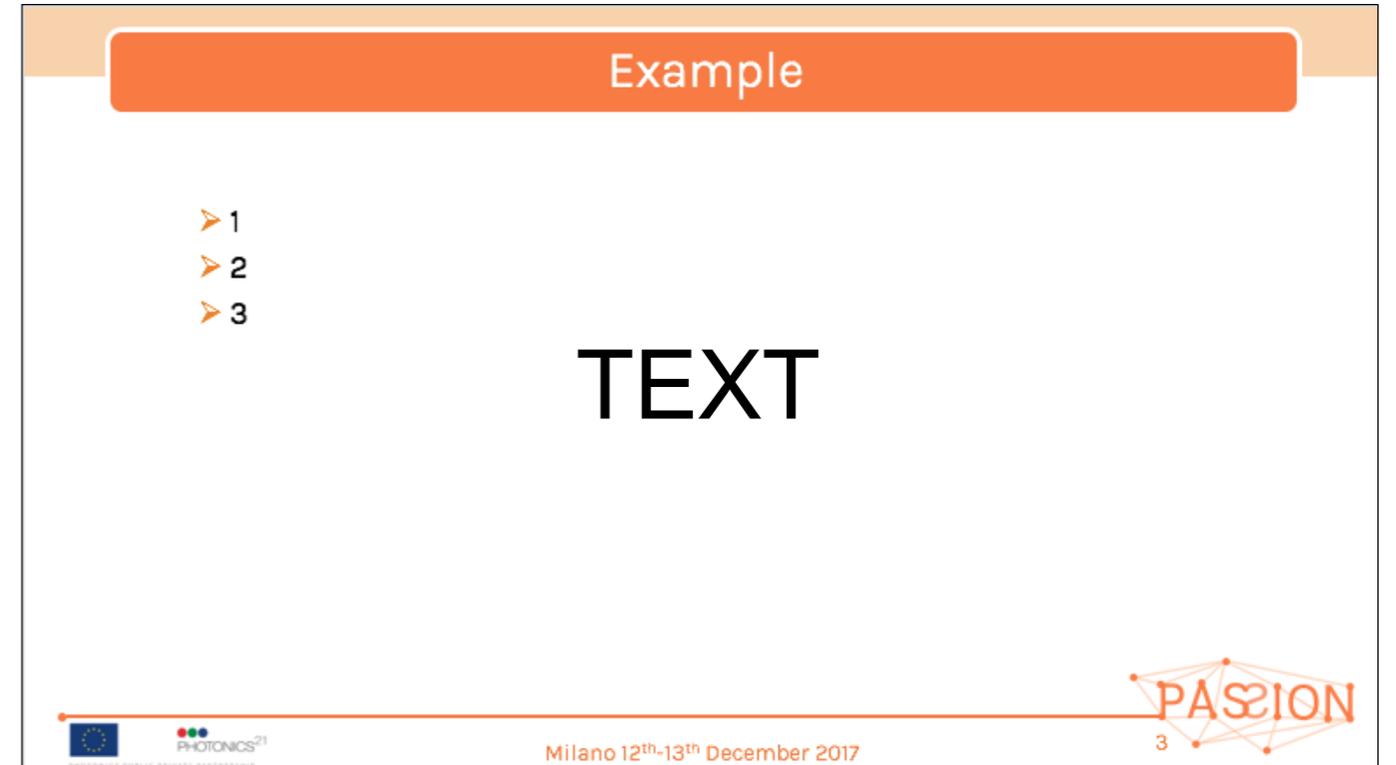
PHOTONICS PUBLIC PRIVATE PARTNERSHIP

PASSION

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc ante quam, malesuada et commodo nec, aliquam id ipsum. Etiam in enim massa. Integer elementum augue nec sollicitudin ullamcorper. Morbi sodales rutrum dui a ultricies. Morbi molestie nisi viverra nunc sagittis maximus. Fusce vel feugiat libero, et finibus dui. Vestibulum lacus lorem, scelerisque ornare mi at, rhoncus dictum enim. Praesent faucibus nisl eu purus vehicula posuere.

1





11.

LOGO OVER PHOTOGRAPHS

2017

Over photographs



WRONG APPLICATIONS

Wrong applications

- Do not change or replace the colors
- Typography can not be modified or changed
- Do not stretch the logo
- Mantain proportions
- Do not alter logo structure
- Do not rotate the logo
- Do not alter graphic elements



YES



NO



NO