CHALLENGES AHEAD OF THE PUBLIC PROCUREMENT IN THE AREA OF OPTICAL NETWORKING

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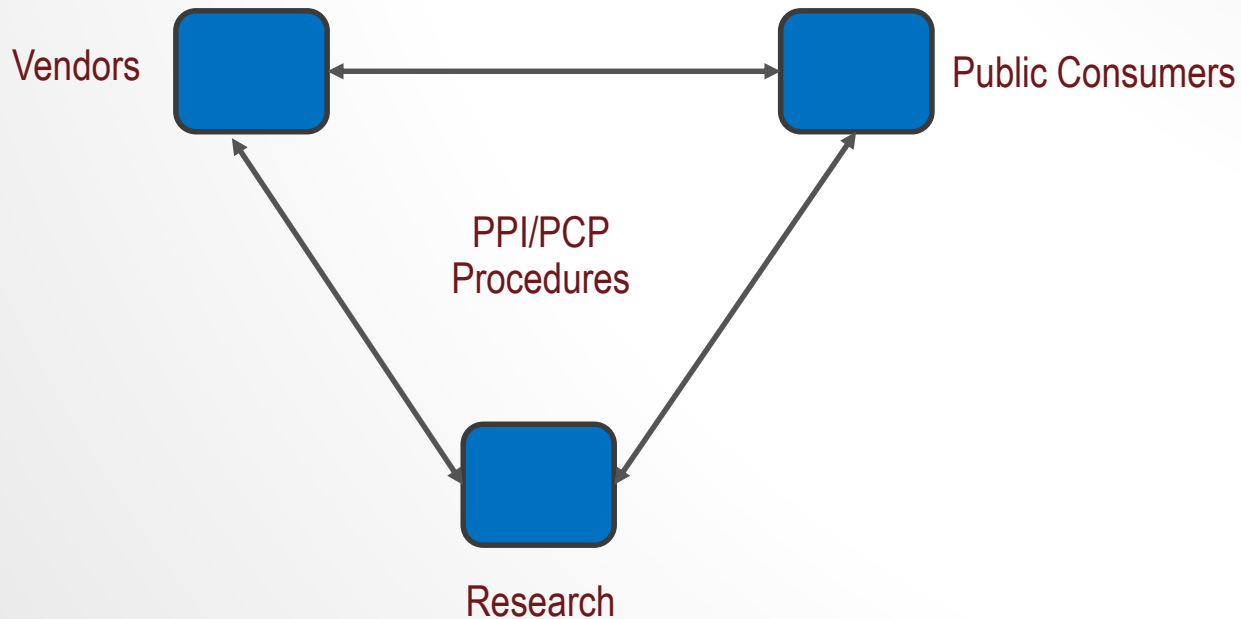
H2020 COMPLETE PROJECT

CHALLENGES IN THE AREA OF OPTICAL TRANSPORT TECHNOLOGIES

- Various consumers generate **increasing amount of data traffic** in computer and telecommunication networks.

- Optical transport networks are the **only solution for current and future advanced and demanding services** that require high speed data exchange and processing.

- Rapid development of optical transport networks delivered **numerous technologies and solutions**.

- Development of advanced optical transport networks resulted in **increasingly complex procurement procedures** especially for public entities that are expected to operate in specific set of changing state regulations.

- **Public and Government Institutions, Bodies, Organizations and Agencies** require innovation and development of advanced optical transport networks. In this area PCP/PPI mechanisms provide solution.
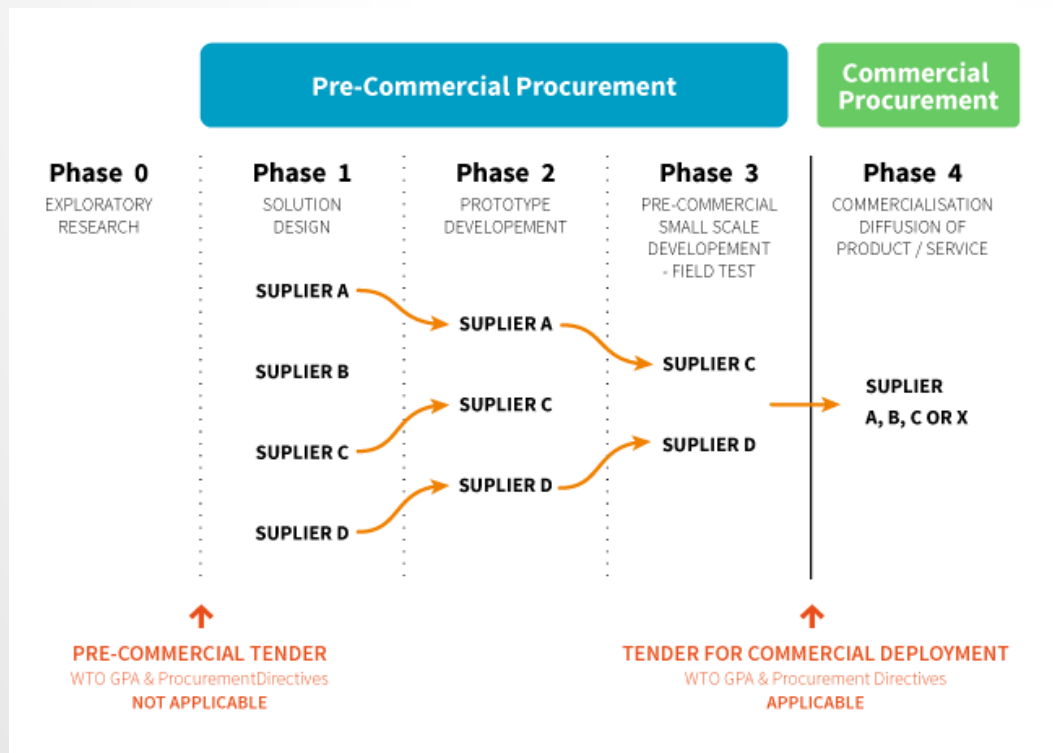
PUBLIC PROCUREMENT

- **Public procurement** in general has about 19% of gross domestic product (GDP) of the EU market (source: www.innovation-procurement.org)

- **Public procurement of innovation** (PPI) occurs when public authorities act as a launch customer for innovative goods or services. These are typically not yet available on a large-scale commercial basis and may include conformance testing.

- **Pre-commercial procurement** (PCP) is an approach within the public procurement of innovation, developed specifically for the procurement of R&D services rather than actual goods and services; if the goods or services developed during the R&D phase are to be procured, this would need to be based on a separate procurement process.

- **PPI and PCP deliver:**
  - **economic growth** through research and development and investments optimization
  - Increasingly better, **advanced products and services**
  - **Solutions to the challenges** faced by the Information Society

- Using PPI and PCP mechanisms public buyers can **influence the market towards innovative and desired solutions**.

PROCUREMENT CYCLE

Vendors

Public Consumers

PPI/PCP
Procedures

Research

- PPI and PCP procedures **regulate and optimze cooperation** between entities in procurement

- PPI and PCP procedures allow for **greater innovation** in public sector especially for entities that have specific requirements and lack of relevant technical knowledge.

PROCUREMENT CYCLE

Source: www.decipherpcp.eu

PUBLIC BODIES

- Public and Government Institutions, Bodies, Organizations and Agencies benefit from the PPI/PCP procedures and activities.

- Currently **difficult trade-offs** and **lack of sufficient communication** between procurers and framework programs are observed.

- Examples of future technologies in the area of optical networking that require PPI/PCP are: 100G, 400G, 1T transmission equipment, SDN, flexgrid, flexrate. These technologies are considered to be **base for the advanced services for the Information Society and Innovative Economies**.

- National Research and Education Networks are the best example **of fast developing large public bodies** which can heavily benefit from the PPI/PCP activities. NRENs cordinate and **participate in large, complex projects** (also public) that require high data transmission services and big data high performance computing.

- NRENs are state created and funded entities that connect and deliver services to the scientific and education community and not only (for example public health and administration sectors). **Actively coordinate and participate in projects** for the advancement of the Information Society and Innovative Economy.
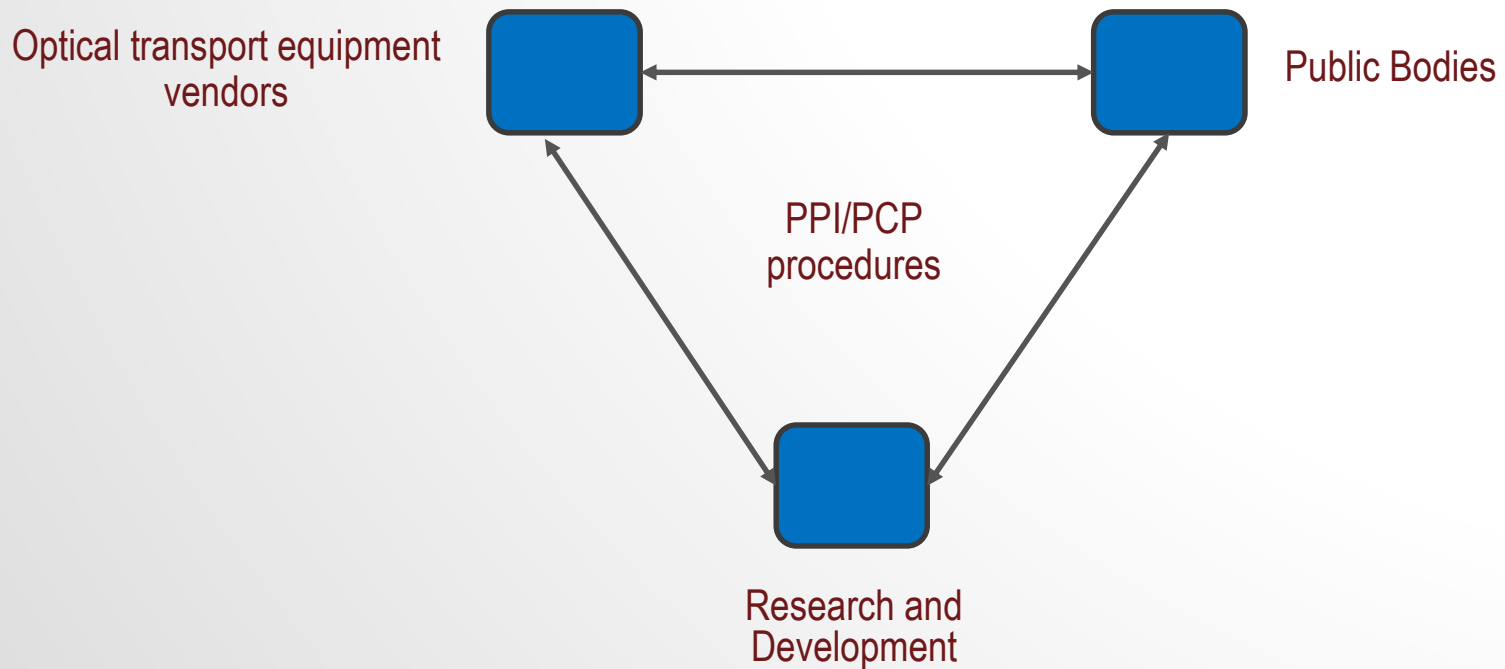
COMPLETE PROJECT

- **COMPLETE project delivers solutions** to the challenges ahead of Information Society and Innovative Economy advancement, especially procurement in the area of optical networking.

- The COMPLETE project – proposal submitted in 1st HORIZON 2020 program call ICT 35

- Project partners: CESNET, GRNET and PSNC (coordinator)

- Project duration: 36 months starting from 01.01.2015

- Project budget: 707k EUR

COMPLETE PROJECT

- Project main concept is to **create support and communications platform** (Procurers Platform) in the area of PPI/PCP procedures for Public and Government Institutions, Bodies, Organizations and Agencies.

- Created under the project communication and suport platform will **deliver information regarding latest and future solutions in the area of optical networking**. The project will create a single database which will contain comparable information about lateest solutions in optical networking form leading vendors. Procurers will have the opprtunity to access those solutions and influence innovation directions.

- Under the project, **cooperation will be established** between Public and Government Institutions, Bodies, Organizations and Agencies in Europe.

- Participants on the communication platform (Procurers Platform) will **share and exploit gained experience** in public PCP/PPI procedures and activities.

- NDA agreements managements will be required to access COMPLETE database. Project partners and vendors will be required to sign appropriate NDA agreements.

PROCUREMENT CYCLE EXAMPLE

COMPLETE PROJECT

The main goals of the project will help to address PPI/PCP procedures challenges in the area of optical networking:

- **Establish relationship** between Public and Government Institutions, Bodies, Organizations and Agencies

- **Establish a database** of the latest various solutions in optical transport systems and networking accessible on the Procurers Platform

- **Synchronization of procurers requirements and expectations**

- **Engage into an open dialogue** with Public and Government Institutions, Bodies, Organizations, Agencies and Vendors

COMPLETE PROJECT

- **Current Horizon 2020 program activities** for research, innovation and entrepreneurship are linked with the COMPLETE project activities.

- COMPLETE Project results can be useful for the following H2020 ICT calls:

  - **ICT-27-2015: Photonics KET**

  - **ICT-36-2015: Pre-commercial procurement open to all areas of public interest requiring new ICT solutions**

COMPLETE PROJECT

ICT-27-2015: Photonics KET

Scope:

- Pilot deployment of software-defined optics in backbone networks (Software Defined Optical Networking technologies), from component level to system and network level

- Hardware and software to transport high traffic volumes to demanding customers in a dynamic way.

COMPLETE Project results provide:

- Platform for analysing the state of the art technologies

- Possibility to share the costs of procuring high-tech R&D equipment.

- Help to roll-out and deploy faster and wider software defined optical networking technologies as well as value-added services and applications in Europe

COMPLETE PROJECT

ICT-36-2015: Pre-commercial procurement open to all areas of public interest requiring new ICT solutions

Scope:

- Pre-commercial procurement open to all areas of public interest requiring new ICT solutions.
- To bring radical improvements to the quality and efficiency of public services by encouraging development and validation of breakthrough solutions through Pre-Commercial Procurement
- Consortia of procurers with similar procurement needs can share the costs of procuring high-tech R&D equipment.
- The promising research results can reach the market quicker.
- Joint specifications, wide publication of results, contribution to standardisation, regulation or certification will help removing barriers for introduction of PCP innovations into the market.
- Procurement platform in the COMPLETE project will allow forward looking R&D procurement strategies that will modernize the provision of public services faster yet at the same time creating opportunities for industry and researchers across Europe to become international leaders in new markets.
- Reduce fragmentation of demand for innovative solutions by enabling public procurers to collectively implement PCPs in areas, which they cannot address independently as well as fields which due to their nature are better tackled jointly.

COMPLETE PROJECT

Assumed and expected COMPLETE Project Impact:

- **Directly help public procurers** to improve the quality of their procurement outcomes and enable entities that were previously unable to undertake decisions to take ones

- **COMPLETE project platform** will be operational on the European scale an supported in the long term perspective

- **COMPLETE project platform** will be promoted by project partners during workshops (also dedicated), conferences and meetings

- **COMPLETE project platform will establish long term process** for efficient public procurement procedures with respect to public bodies.

- **Case studies** will be created to show the benefit of joint procurement actions using easy-to-understand metrics.

THANK YOU FOR YOUR ATTENTION

COOPERATION OPPORTUNITIES ARE WELCOMED

Poznan Supercomputing and Networking Center