

Twinning Activities Report

1. *Personal Information:*

Mr./Ms. **Krzysztof Walkowiak**, faculty member of **Wrocław University of Technology** visited
(name of sending institution, country)

in the period from **12.12.2015** to **15.12.2015** in **Politecnico di Milano, Department of
Electronics and Information, Milan, Italy**

(name of the visited institution, country)

order to carry out research and training activities in the field of **computer network
optimization.**

(give the area)

2. *Information about Seminar*

On **15.12.2015** Krzysztof Walkowiak participated in a PhD public defense as a member of
PhD dissertation committee of two PhD students:

- Anna Buttaboni „*Strategies for the Efficient Management of the Capacity in Fixed-Mobile Converged Networks*” (Krzysztof Walkowiak was a reviewer of this thesis).
- Marco Brunero „*Optical transmitter based on self-seeded architectures for passive WDM networks*”.

3. *Description of scientific activity in details*

(Please describe value added to the ENGINE project i.e. new knowledge, new skills with respect to the objectives of the project, the assigned common area of future cooperation with the partner, plans for common research, projects, publications and how it could be used in the scope of ENGINE)

During my stay in Politecnico di Milano I had many talks and discussions with prof Tornatore and other researchers from Politecnico di Milano including Prof. Achille Pattavina, Prof. Guido Maier, Anna Butaboni, prof. Mario Martinelli, Marco Brunero as well as with prof. Roberto Gaudino from Politecnico di Torino on optical networks, access network, optimization issues. During these talks I learned a new knowledge related to:

- Optimization of computer networks, with a special focus on elastic optical networks.
- Information on access network and mobile networks.
- Recent trends in Space Division Multiplexing technology and research on SDM.
- Current offer of telecoms in terms of new services such as lambda as demand, dynamic routing.
- Research projects currently realized in the Broadband Optical Networks, Security & Advanced Internet Lab (Bonsai Group).
- Organization of PhD studies and PhD procedure in Politecnico di Milano.

Moreover, we discussed with prof. Massimo Tornatore plans for 2016 regarding our cooperation in the ENGINE project.

4. *Information referring to the intellectual property:* the generally binding law in this area in the visited country and procedures of patenting;

N/A

5. *Description of the procedure of cooperation between universities and SME in visited country:* how it is organized, the sources of funding, the opinions about drawbacks and strengths of existing solution.

N/A

6. Please send this report, a program of the visit and the seminar presentation in electronic version to Scientific Coordinator halina.kwasnicka@pwr.wroc.pl, and to the Project Office engine@pwr.wroc.pl
In this report please respond to the points 1-5 for outgoing visit and points 1-3 for incoming visit.