**Request for participation in IP mPlane as Collaborating Institution**

**A - Name: partner description** *[Provide a short (less than one page) description of your institution: what is your role, expertise, past experience in projects.]*

As a Collaborating Institution in mPlane, Name will contribute with its expertise in *[briefly list the expertise that you can bring in the mPlane project – one paragraph].*

**B - Role in mPlane** *[detail the activities that you will participate following the mPlane project structure – list what you consider interesting for you – state the estimate manpower in PM. Please, refer to* [*https://www.ict-mplane.eu/public/work-packages*](https://www.ict-mplane.eu/public/work-packages) *for detailed description of WPs and Tasks.]*

Name will be mainly involved in the following WPs:

• WP1 - Use Cases, Requirements and Architecture:

Estimation of the allocated effort: approximately X PM

• WP2 - Programmable Probes:

Estimation of the allocated effort: approximately X PM

• WP3 - Large-scale data analysis:

Estimation of the allocated effort: approximately X PM

• WP4: mPlane Supervisor: Iterative and Adaptive Analysis:

Estimation of the allocated effort: approximately X PM

• WP5: Integration, Deployment, Data Collection, and Evaluation:

Estimation of the allocated effort: approximately X PM

• WP6: Demonstration:

Estimation of the allocated effort: approximately X PM

**C - Key Personnel [***Provide a brief CV of the person that will be involved. No more than 3 persons, no more than one page in total.]*

EXAMPLE OF REQUEST

**A - Politecnico di Torino - partner description** – Politecnico di Torino (http://www.polito.it/) is a public university offering degrees in Engineering and Architecture, with an outstanding international reputation in technical and scientific teaching and research. It is a research university interested in the balanced development of both theoretical and applied research. Due to the participation in many international projects, Politecnico di Torino exhibits a significant experience in both scientific and administrative project management. Within the 6th Framework Programme, Politecnico di Torino was involved in 95 European research projects, while under the 7th Framework Programme 137 projects have been funded up to now, of which 22 coordinated. POLITO participates to the mPlane project through the research group “Telecommunication Networks Group” (TNG) affiliated to the Electronic and Telecommumication Department. TNG (http://www.tlc-networks.polito.it) has been active for a long time in several areas related with telecommunication networks, including wireless, optical, TCP/IP and peer-to-peer networks, with a strong expertise on performance evaluation, modelling and analysis, traffic measurements. The group has a long experience in European and national projects, and an internationally recognized expertise in the fields covered by the mPlane project. The TNG has been active in several European projects. As Networks of Excellence: TREND (coordinated), "e-Photon/ONe" (coordinated) and "e-Photon/ONe+" (coordinated), BONE, Euro-NF, Euro-NGI and Euro-FGI, NewCom and NewCom++. As Integrated Projects, the TNG is participating in FIGARO, ECONET and STRONGEST, and has participated into FEDERICA and NOBEL2. TNG has led the FP7 STREP NAPA-WiNe (coordinated), and is participating in the FET STAMINA. It was active in the Cost Actions: 257, 273, IC0703.

As a Collaborating Institution in mPlane, POLITO will contribute with its expertise in developing and deploying monitoring probes such Tstat. The ten-years long experience on traffic monitoring and traffic classification algorithm design guarantees an excellent background and domain knowledge. Prof. Elena Baralis guarantees to augment the competence about the design of machine learning algorithm and database creation suitable for traffic analysis;

**B - Role in mPlane:** POLITO will be mainly involved in the following WPs:

• WP1 - Use Cases, Requirements and Architecture: POLITO will follow the activities related to the definition of the mPlane architecture, in particular considering the definition of interfaces offered by mPlane probes within the Task 1.2.

Estimation of the allocated effort: approximately 2 PM

• WP2 - Programmable Probes: POLITO will participate in the development of passive probes within the T2.2. In particular, POLITO will integrate their current passive sniffer tool “tstat” withing the mPlane framework.

Estimation of the allocated effort: approximately 3 PM

• WP5: Integration, Deployment, Data Collection, Evaluation: POLITO plan to install the software developed within mPlane in their campus network, and to provide access to part of the data that will be collected to partners within the project (Task T5.2)

Estimation of the allocated effort: approximately 3 PM

**C - Key Personnel:**

**Prof. Marco Mellia** received his Ph.D in Telecommunications Engineering in 2001 from Politecnico di Torino where he is now assistant professor in the Electronic Department (DELEN). He has co-authored over 180 papers published in international journals (IEEE TON, IEEE TIT, JSAC, Journal of the ACM) and leading conferences (ACM Sigcomm, ACM IMC, ACM Sigmetrics, IEEE Infocom). His H-index is 24. His research interests are in the fields of Internet traffic measurement, classification, characterization and modelling, design and performance evaluation of distributed systems. In 1999 he was with the CS Department at CMU, Pittsburgh, PA. In 2002 he visited the Sprint Laboratories in Burlingame, CA, working at the IP Monitoring Project. In 2011 he was with Narus inc., Sunnyvale, CA, working on Advanced Traffic Classification. He has participated to 9 European projects, including the FP7 Strep NAPA-WINE where he was Work-Package Coordinator. He is Italian MC representative for COST IC0703 “Traffic Monitoring and Analysis”. He is/was responsible for several research contracts with leading industries (Alcatel France, Cisco System US, Fastweb Italia, Narus Inc. US, Telecom Italia, Vodafone Italia). Prof. Marco Mellia is a Senior Member of IEEE.

**Prof. Elena Baralis** is full professor in Computer Science Department (DAUIN) of the Politecnico di Torino. Her current research interests are in the field of database systems and data mining, more specifically on mining algorithms for very large databases and sensor/stream data analysis. She has published over 80 papers in international journals (IEEE TKDE, ACM TODS, ACM TOIS) and conference proceedings (IEEE ICDE, IEEE ICDM, VLDB). In 1993 she visited IBM Almaden Research Labs (California) and in 1994, 1995, 1996 and 1998 Stanford Computer Science Department. She has participated to several national and European research projects focused on her research topics (e.g., PRIN Data-X, FP4 MIETTA, FP6 KDNet).