



Workshop on Achievements in Systems of Systems Research and Innovation

Thursday, May 28th, 2015 – Florence/Italy

Venue: Auditorium Al Duomo

Room: Vasari – Address: Via de' Cerretani, 54/R - 50123 Florence - Italy

The Workshop is organized by the Cluster of European Projects on Systems of Systems that includes the projects AMADEOS, CPSOS, DYMASOS and LOCAL4GLOBAL. The purpose of the workshop is to highlight the results that were obtained during the first 18 months and the achievements of the finished EU-funded projects in the area of Cyber-physical Systems and Systems of Systems, and to exchange ideas on the research challenges in the area of systems of systems and on steps towards innovation.

Agenda

08h30-09h00 *Arrival of participants, registration & networking*

Opening

09h00-09h10 **Welcome from the organisers**

09h10-09h30 **Welcome from the European Commission**

Roadmap on Cyber-physical Systems

09h30-10h00 **CyPhERS – Cyber-Physical European Roadmap and Strategy**
Saddek Bensalem (Université Joseph Fourier and Verimag, Grenoble)

Technical Session 1: Systems of Systems Dynamics, Management and Control

Presentation from **LOCAL4GLOBAL**

10h00-10h30 **Acting Locally for Optimizing Globally**
Elias Kosmatopoulos (CERTH - Centre for Research and Technology Hellas), Iakovos Michailidis (CERTH), Angelos Gerghiou (ETH Zurich), John Lygeros (ETH Zurich)

10h30-11h00 *Coffee break*

Presentation from **DYMASOS**

11h00-11h30 **A population control approach for large-scale electricity demand coordination**
Sergio Grammatico (ETH Zurich), Basilio Gentile (ETH Zurich), Francesca Parise (ETH Zurich), John Lygeros (ETH Zurich)

11h30-12h00 Presentation from **AMADEOS**
Complexity Management in Cyber-physical Systems-of-Systems
Hermann Kopetz (TU Vienna)



Technical Session 2: Models and Tools for Systems of Systems Engineering

12h00-12h30	Presentation from COMPASS Model-based Engineering for Systems of Systems Claire Ingram (Newcastle University)
12h30-13h00	Presentation from DANSE Designing for adaptability and evolution in system of systems engineering Valerio Senni (ALES S.r.l. – United Technology Systems and Control Engineering)
13h00-14h30	<i>Lunch break</i>
14h30-15h00	Presentation from AMADEOS The AMADEOS SYSML Profile for Cyber-physical Systems-of-Systems Paolo Lollini (University of Firenze)
15h00-15h30	Presentation from DYMASOS Integrated design, validation, and deployment of CPSoS control architectures <u>Christian Sonntag</u> (euTeXoo), Shaghayegh Nazari, Sebastian Engell (TU Dortmund)
15h30-16h00	<i>Coffee break</i>
Towards a European Roadmap on Cyber-physical Systems of Systems	
16h00-16h30	Presentation from CPSoS and Discussion Core Research and Innovation Areas in Cyber-physical Systems of Systems Sebastian Engell (TU Dortmund)
Future plans of the on-going projects and steps towards innovation	
16h30-17h15	Presentations by AMADEOS, DYMASOS, and LOCAL4GLOBAL and discussion
17h15-18h00	General Discussion: Joint activities, dissemination and innovation
18h00	<i>End of the workshop</i>