



UNIVERSITÀ DEGLI STUDI DI L'AQUILA



DEWS International Advisory Board Meeting



DEWS-GSSI Workshop

May 14th, 2014

Aula Magna GSSI – Viale Francesco Crispi, 7 – L'Aquila

Cyber Physical Systems: Revolution or Evolution?

A Cyber-Physical System (CPS) consists of computation, communication and control components tightly combined with physical processes of different nature e.g., mechanical, electrical, and chemical. The core technical issue is managing dynamics, time, and concurrency in networked, distributed computational and physical systems. CPS are at the center of the research agenda in the US. In Germany, CPS are at the core of the ACATECH research agenda. The European Community is launching several calls in this domain. The workshop is intended to give a broad perspective on the research challenges and on the relevance of CPS. The speakers are renowned experts in the field.

9:00 Welcome

9:15 – 12:30 Presentations by

- Clas Jacobson, Chief Scientist, United Technologies Systems & Controls Engineering: "Systems Engineering: Industrial Status, Needs, Barriers, Enablers and Opportunities"
- Karl H. Johansson, Director of KTH ACCESS Linnaeus Centre and Professor at the School of Electrical Engineering, Royal Institute of Technology, Sweden: "Cyber-physical goods transportation"
- Alberto Sangiovanni Vincentelli, the Edgar L. and Harold H. Buttner Chair of EECS, University of California at Berkeley: "Let's get Physical: Adding a Physical Dimension to the Cyber World"
- Adam Wolisz, chaired Professor of Electrical Engineering and Computer Science at the Technische Universität Berlin, Executive Director of the Institute for Telecommunication Systems: "Networking for making CPS reality - CPS for improving the Networking"