

INVITED SESSION PROPOSAL
FOR THE
IFAC Conference on Manufacturing Modelling, Management, and Control
MIM 2013

Towards Modeling, Management, Control of SENSING and GREEN ENTERPRISE
as Complex Adaptive System of Systems

Proposed by:

Prof.dr.eng Ioan Dumitrache, University Politehnica of Bucharest, RO

Prof.dr.eng Aurelian Mihai Stanescu, University Politehnica of Bucharest, RO

Prof.dr.eng Ricardo Jardim Goncalves, UNINOVA at New of Lisbon, PT

Prof.dr.eng Herve Panetto, University of Lorraine, Nancy, FR

Key words: Product –Service Innovative Business Ecosystem, Cyber Physical Systems, Sustainable Interoperability, Semantic Interoperability, Model Driven Analysis & Design, Future Internet Enabling Technology, Multy Agent Systems

Abstract:

Future Internet Enterprise Systems (FIeS) is relatively a new paradigm shift that describes the great challenge of exploiting the full potential of Future Internet involving a mix of Internet of Things, Internet of Services, Internet of Knowledge, Internet of Socialization, Internet of Trust.

The Position Paper of the DG2 Unit FIeS as well as Interop V-Lab Multipoles Association have just identify the following 9 Key-Qualities/ Properties of Being for FIeS: Inventive, Humanistic, Cognitive, Community-Oriented, Liquid, Agile, SENSING, Glocal, GREEN, Sustainable.

But, the Cyber Physical Systems scientific paradigm is the great challenge for Future Enterprise in Intelligent Manufacturing.

According to multi scopes that have been included in the IFAC – MIM 2013 call for papers, the above mentioned special track is targeted the Complex Adaptive System of Systems (CASoS), but also complementary issues like Discrete Event, Architectures for IMS and Quality Management for Product-Services Dynamic Business Ecosystems, which support the x-abilities to respond in a sustainable way to evolving interoperable requirement of new category of next generation of competitive manufacturing enterprise within global dynamic turbulent market.

The papers will be provided by research teams from France, Portugal, Romania, Greece. The joint coordination effort coming from IFAC, T.C. 5.2., T.C. 5.3., DG – Connect FInES Unit Interop V-Lab aims at a efficient forum of ideas, information exchange, but also knowledge sharing and best practices that have been captured by furniture manufacturing, car manufacturing, in EU countries like Portugal, Romania.