

***6<sup>th</sup> International Conference***  
**COMPLEX SYSTEMS DESIGN**  
**AND MANAGEMENT 2015**

***Call for papers***

The management of large-scale complex industrial systems has a considerable strategic importance for an important number of enterprises (most notably in Europe and North America). This spawned the relatively new academic field of "systems architecture & engineering", producing a body of research that allows engineers to manage the increasing complexity of the technical systems they design. By its very nature, this field is at the interface between industry and academia, and requires its practitioners to be well versed in industrial application-related as well as theoretical knowledge. The ambition of the CSD&M conference is to be the meeting point of reference for the industrial and academic environments working in the design and management of complex industrial systems.

Our wish is to give to all academics and industrialists interested in complex systems the opportunity to present their work, studies or experiences. Selected papers will be accepted for a 30-minute talk (and published in conference proceedings) or for the poster workshop (with possibilities of publishing the abstract in conference proceedings). One full day of contributed talks and 2-hour poster workshop will be dedicated to all selected authors during the conference.

**Important dates**

- Abstract submission (optional) : March 26, 2015
- Paper submission: April 16, 2015
- Results announcement: June 3, 2015
- Final versions for publications: July 3, 2015
- Conference: November 23-25, 2015
- "Best papers" awards: November 23, 2015

**Submission Process**

- **Scientific submissions (scientific category)**

Scientific contributions should present innovative methodological, technical or scientific results. These consist in a PDF (Word or LaTeX) of 12 pages maximum. Scientific contributions can be accepted either for a 30-minute talk or for a poster workshop.

The scientific contributions accepted for a 30-minute talk or for the poster workshop will be published in the conference proceedings (full article for 30-minute talk authors and abstract for poster authors). At this stage, the document must necessarily be re-submitted according to specific SpringerVerlag style (if not done yet), which means a zip with a 12-page LaTeX file and images apart or a 12-page Word file including images (*see more details here below*).

- **Industrial submissions (industrial category)**

The aim of industrial contributions is to present good practices, feedbacks and case studies. An industrial submission consists in a 12-page (maximum) Latex or Word in PDF or in a 15-slide (maximum) PowerPoint presentation in PDF. Industrial contributions can be accepted either for a 30-minute talk or for a poster workshop.

Accepted PPT industrial submissions will be made available on the conference website and on flash drives given to all participants with authors' agreements. They can also be part of the conference proceedings (full article for 30-minute talk authors and abstract for poster authors) under the condition to be transformed into a 12-page Word or Latex article for full paper or Word or Latex abstract for poster authors as requested by Springer Verlag.

More details can be found on the [submission procedure section](#)

### **Best papers awards**

The Program Committee will award the best papers in academic/industrial and student categories (The best student paper shall have student authors in majority). The winners will receive their award during the farewell ceremony that will take place at December 4, 2015.

- **Awards (sponsored by CESAMES - Center of Excellence on Systems Architecture, Management, Economy & Strategy)**
  - Best academic or industrial paper: 2.000€
  - Best student paper: 1.000€

### **Proceedings and publications**

The conference proceedings will be published in a dedicated book edited by [Springer-Verlag](#) (Science and Engineering).

### **Topics**

- **Industrial domains**
  - Aeronautic & Aerospace
  - Constructors and operators of transportation systems
  - Defense and security
  - Electronics and robotics
  - Energy and environment
  - Health and welfare services
  - Media and communications
  - Software and e-services
- **Scientific and technical topics**
  - Systems fundamentals (algorithmics & complexity, control theory, communications, mathematical programming, semantics, systemics, information technology, signal processing)
  - Systems architecture (needs capture, requirements development, systems modelling, simulating, optimization, sizing and specification, architectural frameworks)

- Systems engineering (design, industrialization, integration, verification, validation, qualification, deployment, maintenance, dismantling)
  - Industrial projects (innovation management, systems project management, agile methods, test oriented methods, project office)
  - Systems metrics (architectural metrics, complexity measures, cost & delay evaluation, key performance indicators, quality of service)
  - Systems quality (analysis and covering of risks, availability, maintainability, operability, reliability, security, safety and usability analyses, tests)
  - Systemic tools (configuration management, formal verification, system behaviour analysis tools, modelling & simulating tools, test management)
- **Systems types**
    - Embedded systems (electronics, health, telecoms, transport, etc.)
    - Transportation systems (aerospace, automobile, railways, ships, etc.)
    - Software systems (Internet applications, networks, operating systems, parallel and distributed systems, etc.)
    - Information systems (command, control & communication systems, enterprise information systems (BI, CRM, EII, ERP, SCM), industrial information systems (SCADA, PLM, etc.), supervision systems, etc.)
    - Systems of systems (air traffic management, management of financial systems, network centric warfare, travel reservation systems, etc.)
    - Artificial eco-systems (city planning & engineering, integrated hubs, etc.)