



# Call for Papers: Integration in Air Transport

## 4<sup>th</sup> International Air Transport and Operations Symposium (ATOS)

## 2<sup>nd</sup> International Conference on Interdisciplinary Science for Innovative Air Traffic Management (ISIATM)

## 4<sup>th</sup> Association of Scientific Development of ATM in Europe (ASDA) Seminar

## 2013 ComplexWorld Seminar

Papers are sought on everything from design methods to case studies, from system level down to detailed sub-systems. Topic areas include but are not limited to:



### ISIATM

#### Mathematics and Operations Research for ATM

- Trajectory based operations
- Self-adaptability and resilience
- Simulation and modelling
- Airport and operations security
- Risk assessment
- Trajectory prediction
- Airspace design
- Weather
- Transoceanic operations
- Collaborative decision making

#### Human factors

- Human factors
- Ergonomics
- National/international differences
- Augmented reality
- Education and training

### ASDA

#### Future Air Traffic Management

- Airports as nodes in the future ATM
- New operational concepts and aviation services
- Incentives for transition and legislative measures
- Network congestion management and recovery
- Adaptation of different air vehicle operation, fleet operation and flows

### ATOS

#### Air Transport Integration, Environmental Impact & Technology Innovation

- System modelling & integration methodologies
- Air transport noise management
- Emission Trading Scheme & CO<sub>2</sub> management
- Seamless travel (passengers, cargo, baggage)
- Aircargo— cargo future roadmap
- Aircraft design for operations safety
- Capacity & traffic flow management
- Sustainable innovation and enterprise

#### Engineering Value Analysis, Cost Modeling & Business Innovation

- Value engineering
- Supply chain management
- Lean business processes management
- Outsourcing/in sourcing operations effects
- Supply chain strategies & entrepreneurship
- New business models, business trajectories and e-business
- Open innovation processes

#### Service Support & Life Cycle Analysis

- No-fault-found (NFF)
- Special purpose aircraft (SPA)
- Forecasting maintenance
- Material/parts requirement planning
- Aircraft refurbishment/retrofit
- End-of-life services
- Maintenance of new materials
- Maintenance management & location planning
- Reliability, Availability, Maintainability, Supportability(RAMS)

### Airlines, Airports & ATM

- Optimization of aviation processes
- Sustainable operations of airlines and airports
- Air traffic control (ATC)
- Human machine interfaces
- Small and regional airport development
- Congestion problems at major airports

### ComplexWorld

#### ATM as a complex system

- Non-determinism and uncertainty (trajectory, traffic, network)
- Emergent Behavior
- Complex Data Analysis and innovative roles of aviation data on new operational paradigms
- Non-classical and complex performance metrics
- Resilience: Analysis of disturbance propagation and system stability and agility and characterization of disturbances
- Intermodality complexity: total, seamless integrated transport (Air transport with other means of transport)
- Human influence in the complexity of ATM: interaction between humans and machines

## Call for Abstracts or Draft Papers

Abstract (1,000 words) or draft papers, if already available, can be submitted through e-mail to [ATOS-LR@tudelft.nl](mailto:ATOS-LR@tudelft.nl) or [isiatm@enac.fr](mailto:isiatm@enac.fr). On <http://isiatm.enac.fr> the abstract template can be downloaded. Please fill in the complete template when submitting an abstract or draft paper. Abstracts can be uploaded using the EasyChair Conference System on the website.

**Oral Paper Presentations:** Oral presentations take place in chaired sessions and are 25 minutes in length including question and answer time.

## Call for Poster Presentations

At the conference there will also be space for poster presentations of research projects. These poster presentations will be an integral part of the program and will be displayed during the entire conference. Both separate poster presentations and poster presentations belonging to oral paper presentations (see above) can be submitted.

**Poster Presentations:** Each poster will be allocated an area of 1.5m high x 0.9m wide on a fixed Velcro compatible board. The author(s) of the poster presentations are responsible for the delivery of the posters to the organization.

## Submission

The submission of papers and posters has to contain the following items:

- Your contact details
- Title of your abstract / draft paper
- Preference for congress track
- Keywords/ topics
- Name and organization of all co-presenters and co-authors
- Your completed abstract template, the draft version of your paper, or your completed poster template

Please note the invitation to submit an abstract does not constitute an offer to pay travel, accommodation or registration costs associated with the conference. Similarly, no speaker fee is paid to successful participants. All speakers must register for the conference and forward the appropriate registration fee. In specific cases the organization preserves the right to deviate from the foregoing.

## Full Papers

The abstract will be peer reviewed, and if accepted as a proceedings paper, the authors will be invited to submit a full written paper, for inclusion in the conference proceedings (with ISBN number).

Please note that authors of excellent conference papers

are given the opportunity to submit an augmented manuscript to The Journal of Aerospace Operations (published by IOS Press): world's first journal dedicated to the domain of aerospace operations.

During the conference all presentations will be recorded and will finally be made available at the conference website. Abstracts of the presented papers will be published in the conference abstracts book.

## Abstract Review Notification

Abstract acceptance, program scheduling and your presentation format will be communicated to the corresponding authors email address and symposium website by the organization.

[www.lr.tudelft.nl/atos](http://www.lr.tudelft.nl/atos)

[www.asda.aero](http://www.asda.aero)

<http://isiatm.enac.fr>

## ATOS Technical Committee

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**Andrew Cook**  
University of Westminster

**Marc Bourgois**  
Eurocontrol

## Abstract and Papers Submittal Milestones

**Abstract/Draft Paper Deadline**  
15<sup>th</sup> March 2013

**Author Notification**  
29<sup>th</sup> March 2013

**Registration Deadline**  
11<sup>th</sup> May 2013

**Camera Ready Paper/Poster Submission**  
31<sup>st</sup> May 2013

## ISIATM Scientific Committee

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