META-CDM Workshop
Moving towards Total Airport Management and putting the passenger at the heart of CDM

Airport Research in FP7

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AAS: Integrated Airport Apron Safety Fleet Management
(2008-2011, 2.3M€ EU 3.5M€ Total, TSB)

Monitoring and optimising ground vehicle fleets and equipment in the apron area
Landside: Time-Efficiency

ASSET Aeronautic Study on Seamless Transport (2008-2011, CP-FP, 2.3M€ EU 3.6M€ Total, DLR)

TITAN Turnaround Integration in Trajectory and Network (2009-2012, CP-FP 2.8M€ EU, 3.9M€ Total, INECO)

Accessibility

ICARUS Innovative Changes in Air transport Research for Universally designed Services (2012-2014, CSA-SA, 0.56M€ EU, 0.75 M€ Total, ONCE)
Airport Security (AAT)

BEMOSA Behavioural Modelling for Security in Airports
(2009-2012, 3.4M€ EU 4.2M€ Total, Israel Institute of Technology)

ATOM Airport detection and Tracking Of dangerous Materials by passive and active sensors arrays
(2009-2012, 3.5M€ EU 5.2M€ Total, DLR)
Airport Security (SEC)

**COPRA** / Comprehensive European Approach to the Protection of Civil Aviation

**EMILI** / Emergency management in large infrastructures

**SAMURAI** / Suspicious and abnormal behaviour monitoring using a network of cameras & sensors for situation awareness enhancement

**TASS** / Total airport security system

**EFFISEC** / Efficient integrated security checkpoints

**CRISIS** / Critical incident management training system using an interactive simulation environment

**SIAM** / Security Impact Assessment Measures

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Welcome to the SUBITO project web Site

SUBITO is a capability project funded by the EU under Security Topic SEC-2007 and designed to research and further develop automated real time detection of abandoned luggage, fast identification of the individual responsible and his/her subsequent path and current location.

The SUBITO consortium is formed by diverse group of technology and implementation experts from six countries.
Co-Modality

ModAir Co-modal Airport
(2012-2014, 0.599M€ EU 0.80 M€ Total, EADS)

ICT for Transport: most of research is about surface transport modes

ICOA .10. 09 International Conference on Airports
(2008-2010, 0.056M€ EU 0.126M€ Total, Académie de l’Air et de l’Espace)
Beyond 2050?

Resilience 2050 New design principles fostering safety, agility and resilience for ATM
(2012-2015, 2.2M€ EU 2.8M€ Total, Innaxis)

2050AP Airport of the future
(2011-2014, 2M€ EU 2.6M€ Total, NLR)

ENDLESS RUNWAY
(2012-2013, 0.562M€ EU 0.709M€ Total, NLR)
The Regulatory Approach

The Airport Package

Airport policy in the European Union - addressing capacity and quality to promote growth, connectivity and sustainable mobility

**WHAT'S**

- If no action is taken, by 2030 19 European airports will be operating at full capacity all day, every day, and an estimated 10% of demand for air travel will go unmet through lack of airport capacity.

- When you add up the minutes and hours of flight delays in Europe, 70% of the total is linked to aircraft turnaround at airports.

- It is not always clear who is responsible for coordinating groundhandling, which is crucial to airport safety, efficiency and good passenger service – particularly during severe weather.

- Where restrictions on airport noise are necessary, they need to be adopted in a more transparent way and should be proportional to the identified problem.

The ITS Directive

2010/40/EU

Coordinated and coherent deployment and use of Intelligent Transport Systems
The Air Transport System is being optimised in the view of facing the ever increasing capacity problem i.e. to work under optimal conditions under full capacity but what happens if:

2010: a volcano erupts

The closure of the airspace between 15 and 21 April caused an unprecedented disruption of air traffic:

- More than 100,000 flights cancelled
- Cc. 10M pax unable to travel
- Airlines’ revenue loss estimated at 1.7M USD (IATA)
- 313 European airports (75% of the network) totally disabled and airports’ lost revenue was 250M euros (ACI Europe)
Why Crisis Management?

12/2012: Heavy snow falls

- NH closed, Valley witnesses power disruption amid heavy snowfall
- Valley gets season's first snowfall
- Heavy snowfall overnight in Metro Vancouver causing disruptions
- SABC News - Croatia chaos after unusually heavy snowfall
- Heavy snowfall causes transport chaos in Germany
- Heavy snowfall in parts of Kashmir
- NH closed, freak weather till Dec 17

Sunday 9 December 2012 20:00

Reuters

Snow in Croatia and other Balkan states has been unusually high

Heaviest one-day snowfall the city has seen since 1955

Freezing temperatures and heavy snowfall have killed at least six people and caused travel chaos across the Balkans according to the AP Press. Blizzards also hit Slovenia and Bosnia.

Snow blankets Netherlands, disrupting air traffic

Heavy snow and strong winds caused more than 100 flight cancellations at Amsterdam's international airport on Friday. The Dutch Meteorological Institute said 10-15 centimetres of snow was expected in the Netherlands.

Flights were cancelled from the Dutch capital to cities in Britain, Germany, France and Denmark and the Czech Republic. Many other flights were delayed because of the bad weather. Train and bus service was also disrupted, but delays were less serious than authorities had predicted.
Challenge 1: Meeting Societal and Market Needs

Challenge 2: Maintaining and Extending Industrial Leadership

Challenge 3: Protecting the Environment and the Energy Supply

Challenge 4: Ensuring Safety and Security

Challenge 5: Prioritising Research, Testing Capabilities and Education
Next Steps?

- What is the way forward for Airport-CDM?
- What are the technical solutions to develop?
- How to connect with other modes?
- How to set-up projects, in which frame?
- Are there needs for policy actions (e.g. Communication, Directive, Standards)
- How to finance?
META-CDM Crisis Management Airport Collaborative Decision Making 
(2012-2014, 0,593M€ EU 0,665M€ Total, ENAC)