

7th SESAR INNOVATION DAYS

28-30 November 2017

Hosted by University of Belgrade, Serbia

Final Programme

Monday, 27 November 2017

ASDA Research Tournament in conjunction with DATASET2050 Workshop (room 128)

13:00-14:00 Light buffet lunch
14:00-16:00 "Door2Door Mobility Workshop" (DATASET2050-Innaxis):
16:00-19:00 "Cyber Security and Transport Optimization Tournament" (ASDA)
19:00-21:00 Dinner

AUTOPACE Workshop (room 214)

14.00 – 18.00 Preliminary Conclusions of Automation Effects on ATC Controller in 2050: New training strategies and potential risks.

Tuesday, 28 November 2017

9:00 – 10:30	Registration, Coffee	
10:30 – 11:00	Welcome and Opening <i>Nebojsa Bojovic, University of Belgrade</i> <i>David Bowen, SESAR Joint Undertaking</i> <i>Dirk Schaefer, EUROCONTROL</i>	
11:00 – 12:00	Keynote: Purposeful Knowledge Discovery: State-of-the-art and the ATM Case <i>Carlos Alvarez Pereira, Innaxis</i>	
12:00 – 12:30	Latest News from SESAR and SESAR Exploratory Research <i>David Bowen, SESAR Joint Undertaking</i>	
12:30 – 13:30	Lunch	
13:30 – 15:15	Economics* (room 125) <i>Chair: Andrew Cook</i> Building a Holistic ATM Model for Future KPI Trade-offs <i>Gérald Gurtner, University of Westminster</i> Ownership Form & Air Navigation Service Provider Performance <i>Eef Delhaye, Transport & Mobility Leuven</i> An Agent-Based Auction Model for the Analysis of the Introduction of Competition in ATM <i>Javier Torres, Nommon</i>	Conflict Detection and Resolution* (room 128) <i>Chair: Fedja Netjasov</i> Probabilistic Aircraft Conflict Detection and Resolution Considering Wind Uncertainty <i>Damián Rivas, Universidad de Sevilla</i> Identification of Spatiotemporal Interdependencies and Complexity Evolution in a Multiple Aircraft Environment <i>Marko Radanovic, UAB</i> Simulated Annealing for Strategic Traffic Deconfliction by Subliminal Speed Control under Wind Uncertainties <i>Manuel Soler Arnedo, UC3M</i>
	15:15 – 15:45 Coffee	
	15:45 – 17:30	Airspace Management* (room 125) <i>Chair: Daniel Delahaye</i> Towards Simplified Optimal Sectorization <i>Leonid Sedov, Linköping University</i> Assessing the Viability of an Occupancy Count Prediction Model <i>Iciar Garcia-Ovies, CRIDA</i> Probabilistic Traffic Models for Occupancy Counting <i>Jean Boucquey, EUROCONTROL</i>
17:30 – 19.00	Posters and Exhibits Session 1, Cocktail	

* including 15 min poster teaser session

Wednesday, 29 November 2017

9:00 – 9:45	Keynote: Vehicle Automation: Challenges and Potential for Future Mobility <i>Thomas Helmer, BMW</i>	
9:45 – 10:00	Artistic Interlude <i>Youth Philharmonic Orchestra "Borislav Pascan"</i>	
10:00 – 11:00	Flow Management (room 125) <i>Chair: Radosav Jovanovic</i>	Demand Capacity Balancing (room 128) <i>Chair: Lorenzo Castelli</i>
	Combining Visual Analytics and Machine Learning for Route Choice Prediction <i>Rodrigo Marcos, Nommon</i>	Optimal Delay Allocation under High Flexibility Conditions during Demand-Capacity Imbalance <i>Sergio Ruiz, EUROCONTROL</i>
	A Trajectory Clustering Framework to Analyse Air Traffic Flows <i>Luis Basora, ONERA</i>	Coordinated Capacity and Demand Management in a Redesigned ATM Value Chain <i>Frank Fichert, UAS Worms</i>
11:00 – 11:30	Coffee	
11:30 – 13:00	Trajectory Prediction (room 125) <i>Chair: Pierre Andribet</i>	Big Data and Liability (room 128) <i>Chair: Marc Bourgois</i>
	Effects of Reducing Wind-Induced Trajectory Uncertainty on Sector Demand <i>Alfonso Valenzuela, Universidad de Sevilla</i>	Autonomous Systems in Aviation: Between Product Liability and Innovation <i>Ivo Emanuilov, KU Leuven</i>
	Short-term 4D Trajectory Prediction Using Machine Learning Methods <i>Man Liang, ENAC</i>	New Data Sources to Study Airport Competition <i>Riccardo Gallotti, IFISC</i>
	DART: A Machine-Learning Approach to Trajectory Prediction and Demand-Capacity Balancing <i>Pablo Costas, Boeing R&T Europe</i>	Understanding Door-to-Door Travel Times from Opportunistically Collected Mobile Phone Records: A Case Study of Spanish Airports <i>Pedro García-Albertos, Nommon</i>
13:00 – 14:30	Lunch	
14:30 – 16:30	Modelling and Simulation (room 125) <i>Chair: Peter Hecker</i>	TUTORIAL (room 128)
	Simulating the Risk of Bird Strikes <i>Isabel Metz, DLR</i>	Participatory architectural change management in Air Traffic Management system organised by the PACAS Project
	A Novel Framework to Assess the Wake Vortex Hazards Risk Supported by Aircraft in En-Route Operations <i>Marc Melgosa Farrés, Universitat Politècnica de Catalunya</i>	
	Assessing ATM Performance with Simulation and Optimisation Tools: The APACHE Project <i>Xavier Prats, Universitat Politècnica de Catalunya</i>	
16:30 – 17:30	Posters and Exhibits Session 2, Coffee	
19:30	Networking Event (Dinner at Belgrade Fortress) Participant contribution 30€ to be paid at conference desk	

Thursday, 30 November 2017

9:00 – 10:30	Airports (room 125) <i>Chair: Dirk Schaefer</i> Stakeholder Cooperation for Improved Predictability and Lower Cost Remote Services <i>Christiane Schmidt, Linköping University</i>	Meteo & Environment I (room 128) <i>Chair: Damian Rivas</i> Ground-based Wind Field Construction from Mode-S and ADS-B Data with a Novel Gas Particle Model <i>Junzi Sun, TU Delft</i>
	DMAN-SMAN-AMAN Optimization at Milano Linate Airport <i>Giovanni Pavese, Politecnico di Milano</i>	Fuel Saving by Gradual Climb Procedure <i>Ryota Mori, ENRI</i>
	Cooperation under Guidelines - How Guidelines for Cooperation Affect Interaction Behavior of Airport Experts <i>Anne Papenfuss, DLR</i>	Probability of Snow Nowcasting for Airports <i>Rudolf Kaltenboeck, Austrocontrol</i>
10:30 – 11:00	Coffee	
11:00 – 12:00	Performance (room 125) <i>Chair: Tanja Bolic</i> User-centric Cost-based Flight Efficiency and Equity Indicators <i>Javier López-Leonés, Boeing R&T Europe</i>	Meteo & Environment II (room 128) <i>Chair: Joost Ellerbroek</i> Improving Snow Nowcasts for Airports <i>Elena Saltikoff, Finnish Meteorological Institute</i>
	Initial Implementation of Reference Trajectories for Performance Review <i>Enrico Spinielli, EUROCONTROL</i>	Multi-criteria environmental impact assessment and optimisation of aircraft trajectories <i>Sigrun Matthes, DLR</i>
12:00 – 12:30	SESAR Young Scientist Award Ceremony <i>European Commission</i> <i>David Bowen, SJU</i>	
12:30 – 13:00	Closing plenary Close	
13:00	Lunch	