







## Research Workshop

# Fragmentation in Air Traffic and its Impact on ATM Performance

### 14-15 May 2019 in Budapest, Hungary

Conference venue: Hungarian Academy of Sciences, Budapest, Széchenyi István square 9, 1051 Hungary

First day, 14 May			
10:30-11:30	Registration and standing brunch		
11:30-12:15	Opening statements	László Palkovics – Hungarian Ministry for Innovation and Technology Eric Perrin – European Commission, DG MOVE, SES Unit Matej Eljon – FAB CE Michiel van Dorst – Chairman FABEC CEO Board, CEO LVNL	
12:15-13:00	Setting the scene: Impact of fragmentation on the ATM system performance	Hartmut Fricke – Technical University of Dresden	
Lunch break			
14:00-15:45	Fragmentation in ATM: relevance and perception	Moderator: Lado Kuljanishvili – National Supervisory Authority Georgia	
	Is fragmentation a sin?	Robert Anton, Niels Lokman, Edouard Pitton, Matthias Whittome – <i>FABEC</i>	
	Network delay optimisation of multiple CASA regulations in fragmented European airspace	Sergio Ruiz, Hamid Kadour, Peter Choroba – <i>EUROCONTROL</i>	
	European airspace complexity and fragmentation correlation research	Zvonomir Rezo, Sanja Steiner – University of Zagreb	
Coffee break			
16:15-18:00	Fragmentation in ATM: the efficiency aspect	Moderator: Adriaan Heerbaart – <i>EUROCONTROL</i>	
	Analysis of the evolution of cost-effectiveness in the provision of air navigation services at functional airspace blocks	Alberto Ansuategi, Ibon Galarraga – University of the Basque Country	
	Efficiency losses through fragmentation? Scale effects in European ANS provision	Frank Fichert – University of Worms Thomas Standfuß – German Aerospace Center Michael Schultz – Technical University of Dresden Petros Stratis – NSA Cyprus	
	FABs and fragmentation - where is the added value?	Claudio Cannavicci – <i>BLUE MED FAB</i> Matej Eljon – <i>FAB CE</i>	
18:00-18:15	Wrap-up 1 <sup>st</sup> day and outlook on 2 <sup>nd</sup> day	Moderator: Jennifer Beechener, ATM Journalist	
18:30	Joint walk to the BUDAPEST boat (5 min)		
End first day			

#### End first day

### **SOCIAL EVENT**

Danube dinner cruise - Departure time from the dock: 19:15 (Luggage can be stored on the boat)









# Research Workshop

# Fragmentation in Air Traffic and its Impact on ATM Performance

# 14-15 May 2019 in Budapest, Hungary

Conference venue: Hungarian Academy of Sciences, Budapest, Széchenyi István square 9, 1051 Hungary

Second day, 15 May			
9:00-9:15	Starting the day	Moderator: Jennifer Beechener, ATM Journalist	
9:15-11:00	Fragmentation in ATM: the operational aspect	Moderator: Maurizio Paggetti – <i>BLUE MED, COO ENAV</i>	
	Military airspaces - genesis of fragmentation (?)	Michael Steinfurth, Igor Kuren, Remus Lacatus – <i>EUROCONTROL</i> Attila Paulov – <i>MoD Hungary</i> Vilmos Somosi – <i>HungaroControl</i>	
	Advanced Flexible Use of Airspace implementation in lower airspace through the modular flexible structures	Ranko Vuica, Željko Savić – <i>Croatia Control</i>	
	Fragmentation in the European upper airspace? A cost-benefit approach to harmonisation	Veselin Stoyanov – BULATSA Frank Fichert – University of Worms	
Coffee break			
11:30-13:15	Fragmentation in ATM: the dynamic aspect	Moderator: Dirk Kügler – German Aerospace Center	
	How ANSP business model developments can contribute to the defragmentation of the European ANS landscape	Sven Buyle, Wouter Dewulf, Franziska Kupfer, Evy Onghena, Hilde Meersman, Eddy Van de Voorde – <i>University of Antwerp</i>	
	Effects of fragmentation on route charges – status quo analysis and potential alternatives	Goran Pavlovic – University of Belgrade Frank Fichert – University of Worms	
	Addressing policy fragmentation in the ATM sector: overcoming the Single European Sky gridlock through innovative ATM and data policies focusing on the public purpose	Ivan Arnold – HungaroControl Matthias Finger – Florence School of Regulation	
Lunch			
14:15-14:30	Wrap-up of the panels	Moderator: Jennifer Beechener, ATM Journalist	
14:30-15:30	Panel session Fragmentation vs. subsidiarity	Kornél Szepessy – FAB CE, HungaroControl CEO Aleksandar Vasilev – FABEC Finance & Performance Committee, MoT Germany Eric Perrin – European Commission, DG MOVE, SES Unit Maurizio Paggetti – BLUE MED, ENAV COO Lado Kuljanishvili – National Supervisory Authority Georgia	
15:30-15:40	Closing remarks	Matthias Finger – Florence School of Regulation	