

Research Workshop

Climate change and the role of air traffic control

22-23 September 2021 in Vilnius, Lithuania

Conference venue: Vilnius Gediminas Technical University, Saulėtekio al. 11, 10223 Vilnius

1st day – 22 September

Moderation: Prof Frank Fichert, Hochschule Worms; Roland Beran, FABEC Communication

9:30-10:30

Registration and welcome

10:30-11:15

Opening statements

Virginijus Sinkevičius – *European Commissioner for the Environment, Oceans and Fisheries*
Julius Skačkauskas – *Deputy Minister of Transport and Communications of the Republic of Lithuania*
John Santurbano – *Vice-Chairman ASB/CEO Champion Environment, Director Maastricht UAC*
Saulius Batavičius – *CEO Oro Navigacija*
Prof Dr Habil Antanas Čenys – *Vilnius Gediminas Technical University (VILNIUS TECH)/Vice-Rector for Research and Innovation*

11:15-12:00

Setting the scene: Climate change and its impact on air traffic control

David Lee – *University of Manchester*

Lunch break

13:00-14:30

Panel discussion 1: Effects of climate change on aviation (present and future)

Moderator: Justas Kažys, Vilnius University

Enabling air traffic control to support carbon neutral growth and reduce effects on global warming. Role and Requirements

Heinz-Michael Kraft, Peter Oelsner, Ivar Mägi – *DFS Deutsche Flugsicherung*

How and to what extent will climate change impact European aviation?

Rachel Burbidge – *Eurocontrol*

Climate-induced meandering jet stream and its influence on air distance

Björn-Rüdiger Beckmann, Andreas Walter, Alexander Lau, Majed Swaid – *German Aerospace Center/DLR, German Meteorological Service/DWD*

15:00-16:30

Panel discussion 2: Options for reducing CO₂ emissions

Moderator: John Santurbano, Eurocontrol

Real-time thunderstorm information enables fuel savings for long-haul flights

Caroline Forster, Alexander Lau, Benjamin Lührs, Andreas Petzold, Martin Gallagher, and Thomas Gerz – *WxFusion, German Aerospace Center/DLR, Technische Universität Hamburg, Forschungszentrum Jülich, University of Manchester*

Mitigating the climate impact of non-CO₂ emissions: EUROCONTROL MUAC Live Trial 2021

Rüdiger Ehrmanntraut, Ilona Sitova, Kacper Walczak, Anja Burrige-Diesing, Milena Bowman, Nick Miller – *Eurocontrol*

Multi-aircraft environmentally-scored weather-resilient optimised 4D-trajectories

Nick van den Dungen, Kinanthi Sutopo – *Royal Netherlands Aerospace Centre (NLR)*

16:30-16:45

Wrap-up Day 1 and outlook

Frank Fichert

Social Event 19:00

Greeting and opening by Janusz Janiszewski, Acting President of PANSAs (Baltic FAB)

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2nd day – 23 September

9:00-9:15	Starting the day	Frank Fichert
9:15-10:45	Panel discussion 3: Reducing CO2 emissions – Interdependencies and potential trade-offs <i>Moderator – Vidmantas Kairys, Vilnius Gediminas Technical University</i>	
	Toward novel environmental assessments for ANSPs using machine learning	Gabriel Jarry – <i>DSNA</i>
	Reducing Europe's impact on climate change using enriched air traffic forecasts and improved efficiency benchmarks	Hartmut Fricke, Markus Vogel, Thomas Standfuß – <i>Technische Universität Dresden, GfL Gesellschaft für Luftverkehrsforschung</i>
	Towards limited impact on environment	Jean-Michel Edard, Ilona Sitova – <i>FABEC, MUAC/Eurocontrol</i>

Coffee break

11:30-13:15	Panel discussion 4: Holistic view on policy options <i>Moderator: Frank Fichert, Hochschule Worms</i>	
	Economic estimates of the climate costs of the aviation sector due to air management: Insights for 2018 and 2019	Ibon Galarraga, Dr Herbert Pümpel, Luis M ^a Abadie, Itziar Ruiz-Gauna, Nestor Goicoechea – <i>BC3, WMO, World Bank, Metroeconomica, University of Basque Country</i>
	Policy aspects of the sustainability of the aviation sector, with a special focus on a potential new role for ATM	Iván Arnold, Mira Bognár, Péter Székács, György Lovas and Vilmos Somosi – <i>Hungarocontrol</i>
	Destination 2050	Thijs Boonekamp, Bram Peerlings – <i>SEO Amsterdam Economics, Royal Netherlands Aerospace Centre/NLR</i>

Lunch break

14:15-15:15	Final panel: Key messages on climate change and the role of air traffic control <i>Moderator: Roland Beran</i>	Saulius Batavičius – <i>CEO Oro Navigacija</i> Marcel Zuckschwerdt – <i>Director General Civil Aviation Switzerland, FABEC</i> András Hujber – <i>European Commission</i> Magdalena Javorska – <i>Performance Review Body</i> Justas Nugaras – <i>Antanas Gustaitis' Aviation Institute</i>
15:15-15:30	Wrap-up of the workshop	Frank Fichert
15:30-15:40	Closing remarks	Saulius Batavičius – <i>CEO Oro Navigacija</i>

