

Research Workshop

Single European Sky and Resilience in ATM

15-16 September 2022 in Sofia/Bulgaria

Call for Papers



Single European Sky and Resilience in ATM

DANUBE FAB and FABEC are pleased to invite you to a research workshop entitled “Single European Sky and Resilience in European ATM” which will be hosted in Sofia on 15/16 September 2022. The conference is organised in partnership with the German Aviation Research Society (G.A.R.S.).

Aim of the Workshop

Resilience is understood as the ability of a system to return to its former shape after being put under extreme pressure. In ATM this has usually been looked at from an operational, technical, safety and security point of view; accompanied by the development of fall-back plans. In broad terms, the COVID-19 pandemic showed that European ATM can meet the challenge of securing ongoing operations and maintain critical infrastructure. However, the unprecedented fall in traffic might not be just the consequence of dramatic changes in the aviation industry, but also of economic and social changes more global in nature. Given this, is it useful to plan for recovery and resilience aiming for the “good old days” of aviation? Or would it be wise to develop a common picture of how aviation – and hence ATM – might look and how it will serve the public and the economy going forward? Taking this idea as a starting point, the discussion on resilience will investigate how to shape ATM to successfully manage pressure in the future and to fulfil its mission as a critical infrastructure.

The European way of financing ATM services is said to lead to procyclical charges, meaning that when the sector is in crisis ATM charges increase and when the sector is on a growth path charges decrease. Are there other solutions and what kind of experience could be gained from outside Europe or from other industries?

Current issues need to be considered, such as high uncertainty of recovery and increasing traffic volatility, which make it almost impossible to plan for the upcoming years. The consequences for ATM are most severe in the financial area where states and air

navigation service providers (ANSPs) operate within a EU Performance and Charging Scheme that does not seem to be built to accommodate external shocks or volatility – including additional requirements such as the Green Deal.

The workshop will focus on questions such as:

- What are the guiding principles to establish resilient air traffic management?
- How can we reduce the vulnerability of ATM given that it is critical infrastructure?
- What uncertainties does a resilient ATM system have to manage? Which of these are new, and which are already covered by current processes?
- Does the current EU Performance Scheme deliver sufficient resilience for European ATM? How can the Performance and Charging Scheme, and ATM in general, adapt to the Green Deal, or other disruptive external as well as local factors?
- Acknowledging the inherent uncertainty of the future – how can forecasting be improved for instance by integrating other indices such as the number of air traffic controllers or expected emissions?
- Do we need to distinguish between external shocks and organic development such as the increasing importance of the environment or a possible disconnection between traffic growth and ANSP cost?
- The current financing of ATM is based on the number of controlled flights, their distance and maximum take-off weight. Which other criteria may be useful to become more independent from external factors?
- Which mechanisms – for instance total economic value models – would aid decision-making?
- The focus of “ATM Resilience” centres around financial viability – should operational (e.g. staffing) or technical aspects (e.g. cybersecurity) be more seriously addressed – or are they already sufficiently covered?
- Should Resilience be another Key Performance Area or would it be a governing principle? How would it be defined and which Key Performance Indicators would be recommended? Would there be an interdependency to other KPAs?

The research workshop aims at bringing together academics and practitioners, providing a forum for mutual exchange. The workshop is open to all topics in the field of aviation, economics and management that focus on how to build resilience into European ATM, particularly in the light of the Covid-19 pandemic. Interdisciplinary research is encouraged. We welcome theoretical and empirical papers as well as practice-oriented contributions, e.g. case studies or best practice approaches (including other industries). Moreover, we also invite Bachelor, Masters, Diploma or PhD students to present their work. As research is always work in progress, we encourage scholars to present their work at any stage. In addition to the presentation of submitted papers, keynote speakers will provide insight into the topic. The workshop is free of charge and organisers will not cover travel or accommodation costs. However, for students, limited funding for travel costs might be available. Please indicate in your submission, whether you require assistance.

Call for Papers

You are invited to submit an abstract (not more than one page) that contains author(s), research question, data gathering, analysis methodology and expected results as PDF or Word file to Matthias.Whittome@fabec.eu. Further updates are to be found at www.fabec.eu, <http://www.danubefab.eu> and www.garsonline.de

Important Dates

- 11.03.22** Submission deadline for abstracts (max one page)
- 01.04.22** Notification of acceptance
- 01.05.22** Opening of registration
- 12.08.22** Submission deadline for full papers (max eight pages)

Contact

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