

EU Aviation Research Policy on Noise

16-17th of January 2018,

COV2 25/SDR1 "Auditorium Nowotny" Covent Garden Brussels

Noise annoyance and health impacts of aviation have been identified by the latest update of ACARE Strategic Research and Innovation Agenda as additional trigger factors, towards achieving the ambitious goals of Flightpath 2050. In 2015 the ACARE working group on energy and environment estimated that technical solutions showed a potential reduction of 37% in perceived noise has been achieved against a goal of 50% by 2020. Despite the significant progress, R&I efforts should be further pursued towards achieving the 2020 and 2050 goals. At international level, the amendments to ICAO Annex 16 Volume I address technical implementation issues with noise certification standards and have been approved by the ICAO Committee on Aviation Environmental Protection (CAEP) Steering Group at its third meeting of the CAEP/10 cycle in July 2015.

The European Commission, Clean Sky and the Innovation and Networks Executive Agency (INEA) took the initiative to organise a two-day workshop on EU Aviation Research Policy on Noise, towards linking noise research and technological developments with certification and regulatory issues at EASA and ICAO level. This workshop builds upon the last successful workshop organised by the FP7 X-Noise project on "Future Trends in Aviation Noise Research", held in Brussels on 1-2/10/2014.

The objectives of the workshop are fourfold:

1. provide an overview of the current aviation noise related challenges, both arising from the ever-increasing traffic operations and from the prevailing regulatory framework
2. present an overview of the current EU aviation noise research strategy and a snapshot of progress in research at European, National and International levels ,including the relevant as well as airport initiatives
3. identify gaps between needs and current responses and gather recommendations on specific topics which should be addressed in the short medium- and long-term, including aspects such as:
 - a. The research topics considered in ACARE Challenge 1 and 3:technology for noise reduction at source
 - b. Advanced noise procedures and monitoring systems, including noise spreading/concentrating traffic patterns techniques, land use planning and transparent communication means with neighbouring communities
 - c. Noise optimisation techniques for en route operations (open rotor, hypersonic vehicles, RPAS at low altitude in urban areas...)
 - d. Noise targets and noise annoyance indicators
 - e. Acceptability criteria for new aircraft architectures (including open rotor) incorporating the findings of psychoacoustic research
4. initiate a reflection in the whole aviation community on an advanced research roadmap on how to best deliver the goals for noise put forward by ACARE.

It is expected that participants will contribute to a roadmap of actions as well as a report on future EU research policy on noise technologies, certification, abatement and standards.

Day 1 'Technical day'

8:30-9:00 Arrival

9:00-9:15 Welcome by DG RTD H (Clara de la Torre/Sebastiano Fumero)

9:15-13:00 Overview and developments after X-Noise – Keynote Speaker D. Collin

Session 1 – Noise abatement procedures, operations & land-use planning

Chaired by CLEAN SKY's PO

- ANIMA
- Clean Sky 2 related projects (PO in charge)

Session 2 - Reduction of noise at the source

Chaired by INEA's PO

- ARTEM
- IMAGE
- AERIALIST
- Clean Sky 2 related projects (PO in charge)

13:00-14:00 Lunch

14:00 – 17:30

Session 3 - More silent propulsion systems

Chaired by INEA's PO

- TURBONOISE BB
- Clean Sky 2 related projects (PO in charge)

Session 4 – Low sonic boom

Chaired by DG.RTD.H3

- RUMBLE

Session 5 – Computational Aeroacoustics and Research Infrastructures

Chaired by DG.RTD.H3

- TILDA
- RINGO
- Clean Sky 2 related projects (PO in charge)

17:30 – 17:40 Conclusion of Day 1

Day 2 'Policy day'

8:30-9:00 Arrival

9:00-9:15 Welcome (DG-RTD H3)

9:15-9:45 Aviation Noise Policy (DG-RTD H3)
What is planned ?

Chaired by
ACARE

Funding opportunities in Work Programme 2018-2020 (DG RTD H3) and Clean Sky 2, Cfp08, 9 and 10 + thematic topics

9:45-11:10	Needs, gaps and barriers in aviation noise policy - DG ENV - Health implications of aircraft noise in the EU - DG MOVE - EASA - Implementation of the CAEP/10 amendments on climate change, emissions and noise - Opinion No 09/2017 - presentation by industry & EREA - presentation by airport operator	Chaired by ACARE
11:00-11:15	Coffee break	
11:15-12:45	Discussion (on stage one representative for industry, airport operators, member state's ministry, research centre, university) <i>Panel discussion. Pre-defined questions, 3' statement per participant, Then debate with audience</i>	Chaired by Commission (eg H3)
12:45-13:00	Conclusion	DG RTD H3 + MOVE+ENV
12:45-13:45	Lunch	