Reducing Aviation Environmental Impact: The Key Role of Networks

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The emergence of dedicated network structures has played a significant role in the elaboration and successful implementation of large, ambitious national and regional research programmes initiated to support technology breakthroughs aimed at reducing aviation environmental impact within the frame of an operational context. Such structures have then been used to develop and consolidate detailed research strategies addressing the high level goals set by national and regional research frameworks, establishing the conditions for a more active and coordinated research covering all areas related to the ICAO Balanced Approach. As lasting organizations beyond the limited timeframe of individual projects, the research networks ensure a much needed continuity aimed at longer term strategies. In linking together, they also play a key role in addressing wider issues such as the understanding of noise-emissions interdependencies and the development of international cooperation opportunities.

Dominique Collin has worked for 30 years at Snecma, covering various aspects of research and development activities in noise engineering applied to aircraft engines. He is currently Head of Acoustics for the SAFRAN Group, which includes companies such as Snecma, Turbomeca, Messier-Dowty and Aircelle. D. Collin graduated from Université de Technologie de Compiègne in 1978 with a degree in Mechanical Engineering and a masters in Noise and Vibration. After joining Snecma in 1980 as a noise test engineer, he has been in charge of CFM56 noise engineering and head of the Acoustics Department at Snecma. Involved since 1991 in ICAO CAEP activities. Dominique Collin is currently Technology Focal Point within the ICAO CAEP Working Group 1 (Noise), in charge of its Technology Task Group. In this capacity, he has co-chaired the CAEP Noise Technology Independent Experts Review performed in 2008. Since 1998, Dominique Collin is the coordinator of the X-Noise network, an EU funded Coordination Action overlooking European aviation noise research. The X-Noise network which includes all major European industry and research organizations involved in aircraft noise reduction has been instrumental in developing and implementing the current ACARE Strategic Research Agenda (SRA) in the noise area.