



# Smart Mitigation of flow-induced Acoustic Radiation and Transmission for reduced Aircraft, surface traNSport, Workplaces and wind enERgy noise

## About SmartAnswer

A step change in our noise mitigation strategies is required in order to meet the environmental targets set for a number of sectors of activity affecting people through noise exposure. Besides being a hindrance to our daily life and subject to regulations, noise emission is also a competitive issue in today's global market. To address these issues, new technologies have been emerging recently, based on radically new concepts for flow and acoustic control, such as micro-electro-mechanical devices (MEMs), meta-materials, porous treatment of airframe surfaces, airfoil leading-edge or trailing-edge serrations, micro-jets, plasma actuation, ...

Some of these new ideas appear nowadays promising, but it now appears to this consortium that the development and maturation of novel noise reduction technologies is hindered by an insufficient understanding of the physical mechanisms responsible for the alteration of the flow or acoustic fields, the tight constraints imposed to any novel noise mitigation strategy for the full-scale industrial application, and the insufficient knowledge about the possibilities that are nowadays offered by new materials and new manufacturing processes.

With this project, we intend to setup a research and training platform, focused on innovative flow and noise control approaches. It has the following objectives: i) fostering a training-through-research network of young researchers, who will investigate promising emerging technologies and will be trained with the inter-disciplinary skills required in an innovation process, and ii) bringing in a coordinated research environment industrial stakeholders from the aeronautical, automotive, wind turbine and cooling/ventilation sectors.

20/02  
2019

## MID-TERM WORKSHOP

09:00	Welcome coffee
09:30	Overview of the SmartAnswer project - C. Schram & J. Christophe (VKI)
10:15	Coffee break
10:45	Noise reduction through flow control (ESRs)
12:00	Lunch
13:30	Acoustic control and materials (ESRs)
14:45	Coffee break
15:15	Modeling techniques (ESRs)
16:30	Open discussions



**REGISTRATION:** <https://h2020-smartanswer.eu/index.php/events>



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