



**Politecnico
di Torino**

PRESS RELEASE

MOREandLESS: towards the future of civil supersonic aviation

The International project coordinated by Politecnico di Torino will assess the environmental sustainability of future supersonic civil transport aircraft through an holistic approach

Turin, June 30th 2021

Could we imagine **going back to supersonic civil aviation**? Recently, the need of developing a faster and safer, but also more sustainable civil aviation system challenges aerospace industries to design a new generation of supersonic aircraft.

The International Project [**MOREandLESS - MDO and REgulations for Low-boom and Environmentally Sustainable Supersonic aviation**](#) has been funded by the European Commission under the framework of Horizon 2020. The project is coordinated by **Professor Nicole Viola, from the Aerospace Systems at the Mechanical and Aerospace Engineering Department-DIMEAS at Politecnico di Torino**. The objective of the project is to contribute to define, in Europe and together with a larger international community, **new standards for supersonic aviation that is expected to be environmentally sustainable**, for what concerns noise, pollutant and greenhouse gases emissions.

A multidisciplinary analysis will include **aerodynamics, propulsion systems, emissions and climate impact sciences**, with the aim of developing **guidelines for the European Union and the international community**, represented in the project by two American collaborators (Boom Technology and Boeing).

MOREandLESS will dialogue with European Union and international regulatory bodies. The study will advance further **low environmental impact high-speed aircraft concepts** in Europe ([Stratofly project](#)). New types of fuel such as biofuel and liquid hydrogen will be tested. New generations of students, scientists, engineers will be involved in the project, thus contributing to **train professionals with the competence needed to design the future** environmentally sustainable supersonic aviation.

The project will contribute to maintain a high environmental protection level, comparable to the standards guaranteed by the **future subsonic aviation**, while developing supersonic civil aviation, for what concerns climate change, air quality and noise. MOREandLESS gathers competences of Universities, Research Centers, Industries, Small and Medium Enterprises, Associations, to conceive standards and regulations useful for regulatory bodies, policy makers and civil aviation sector industries.

*“Aviation, as many other engineering fields, is standing at crucial turning point. Aviation is expected to complete a complex ecological transition to meet the European Green Deal. – **Nicole Viola** comments – I am honoured to coordinate H2020 MORE&LESS, which perfectly fits this challenging context. The project has the ambitious goal to cooperate to the*

definition of new standards for an environmentally sustainable civil supersonic aviation, by adopting an holistic approach which includes a rigorous”.

MORE&LESS Partners: Politecnico di Torino, Boom Technology e The Boeing Company (USA), Centro Italiano Ricerche Aerospaziali (Italy), Centre National de la Recherche Scientifique and ENVISA SAS (France), Deutsches Zentrum für Luft- und Raumfahrt and Technische Universität Hamburg-TUHH (Germany), Institut Franco-Allemand De Recherches de Saint Louis-ISL (France-Germany), ECATS International Association AISBL and Institut Von Karman de Dynamique des Fluides (Belgium), Fundación de Ingeniería Civil de Galicia (Spain), Institutul National De Cercetare-Dezvoltare Aerospatiale “Elie Carafoli” (Romania), Lunds Universitet-LUND (Sweden), Delft University of Technology-TU Delft (Netherlands).