



18 Square de Meeûs
1050 Brussels
Belgium
May 4th 2018

Dear European Ministers for Climate and Transport,

Aviation entrepreneurs, assisted by NASA, are in the process of developing a new generation of supersonic business jets for launch early in the next decade. This will require the establishment of new environmental certification requirements, including those covering noise and CO2 emissions, as past regulations have lapsed and the subsonic CO2 standard is not applicable. The exact noise impacts of such aircraft remain unclear but close attention will be needed by European regulators to ensure that the trend to reduce aircraft noise is maintained especially as a few daily movements of Concorde, the last supersonic aircraft in commercial operation, had a large and disproportionate impact on airport noise.

The excessive environmental and climate implications of supersonic flight are beyond doubt. For this reason we call on you to make clear that Europe's commitment to meeting the goals of the Paris Agreement will require the environmental performance of all new supersonic aircraft to at least meet existing and future environmental standards applicable to subsonic aircraft and so avoid any deterioration in aircraft environmental impacts.

While some of the media coverage has raised the noise issue resulting from the supersonic boom, there has been little coverage of the impact of these aircraft on air quality and climate. The climate impacts of supersonic aircraft are clearly substantially higher due to the greatly increased fuel burn requirements of operating at cruising speeds over Mach 1 and because operating at the required altitudes of 60,000 feet vastly magnifies non-CO2 climate effects. Overall, the climate impact of supersonic aircraft is likely to be, on a per passenger basis, five to ten times that of subsonic aircraft.

On airport noise alone, these aircraft may create similar noise levels on take-off as regular aircraft yet carry only one quarter the passengers. There is also pressure to allow supersonic flight over land, exposing communities to sonic boom. It would be unacceptable if, while other sectors are committing to pathways to decarbonisation, European regulators were to consider certifying aircraft that will so massively increase aviation's climate impact. Scientific findings on these impacts have been clearly presented to European regulators by civil society. Europe must be to the fore in pressing for effective environmental regulation of these aircraft.

Regulatory developments are underway at the UN's International Civil Aviation Organisation (ICAO), whose Committee on Aviation Environmental Protection (CAEP) is considering what certification requirements will be needed for supersonic commercial operations. A June meeting of the CAEP Steering Group will consider the regulation of these aircraft, and we call on European CAEP members to adapt an environmentally robust position.

ICAO Assembly Resolution 39-1 (2016) states that policies covering supersonic aircraft must *reduce* the noise impact in communities. That Resolution also contains a "public acceptability test" for supersonic flight which European members of CAEP have rightly interpreted as meaning that there can be no backsliding in emissions requirements or community impacts. To achieve these objectives, European member states should ensure that current and future noise, NOx and CO2 certification requirements apply equally to supersonic aircraft. Europe can do this immediately by setting European standards through the European Aviation Safety Authority (EASA) which has received broader environmental certification powers under recently agreed reforms to the agency. In parallel, Europe should work to ensure that similar action is agreed at ICAO level and avoid at all cost a situation where a delay in setting effective standards leads to industry presenting regulators with a fait accompli. Europe constitutes 10 of the 24 members of CAEP, and therefore can play an influential role in the ICAO process.

Europe should draw on independent research on the environmental and climate impact of supersonic operations - not rely simply on industry data - and weigh against the claimed social and economic benefits. Modest gains in flying time to be enjoyed by a very privileged few will be far outweighed by the increased environmental impact of supersonic flight to the extent that they could endanger meeting the goals of the Paris Agreement. Given aviation's already considerable environmental impact and the clear environmental risks outlined above, it is imperative that Europe's regulators act firmly and without delay to protect European citizens.

Signed,



William Todts
Executive Director, Transport & Environment



Tim Johnson
Director, Aviation Environment Federation



Eva Filzmoser
Director, Carbon Market Watch