**EASA position paper for**

**Meeting with NL Tweede Kamer (House of Representatives) round table meeting on future perspectives of sustainable aviation,**

**The Hague, 15 November 2018**

*Which are the measures government can take to stimulate sustainable aviation?*

**EASA: EASA is responsible for approving aircraft types for operation in Europe or by European carriers. EASA is practically bound by ICAO standards for type certification of aircraft (ref: Reg. (EU) 2018/1139, art 9.2 first paragraph). So the Netherlands should promote more stringent environmental standards in the ICAO arena, primarily in the Committee on Aviation Environmental Protection. In particular it should resist backsliding developments, like standards that would allow introduction of supersonic aircraft with much higher noise levels than contemporary subsonic aircraft.**

*Which measures should pre-eminently be taken by government and which by airlines themselves?*

**EASA: Not really for us to say. However it is logical that certain measure (e.g. operational restrictions) should be taken at government level, as airlines are unlikely to take those by themselves and a level playing field needs to be maintained. Operational restrictions will indirectly influence airline’s choices when buying aircraft or decisions on which aircraft to operate on where, on which airports.**

*Which governmental instruments offer best possibilities, nationally and internationally?*

**EASA: Nationally: operating restrictions (eg night curfews, emission related charges), operational procedures (minimum noise routes) and land-use planning. Internationally: aircraft type certification requirements for noise, emissions and CO2 (already happening through ICAO). Ensure intra-European level playing field for instance in standardisation of noise contour modelling (EASA already tasked with verifying aircraft noise data for use in noise contour calculation, ref: REG (EU) 598/2014 art 7.5). Today there is no prohibition of supersonic flight over EU 28 territory. A prohibition of supersonic flight could be considered at both national and European level**

*Which impediments are there to make aviation sustainable****?***

**EASA: Technically the low hanging fruit has been picked, and also the somewhat higher fruit. See figure 2.3 of the European Aviation Environmental Report (**[**https://www.easa.europa.eu/eaer/topics/technology-and-design/aircraft-noise**](https://www.easa.europa.eu/eaer/topics/technology-and-design/aircraft-noise)**) 2016. In general, growth seems to outpace technological improvements. Disruptive changes are not readily available, likely come at great costs and have the burden of proving at least equal safety to well established conventional aviation technology.**

*Which mechanisms have a negative influence on the effectivity of new technologies and governmental actions?*

**EASA: Aircraft have a long economic life (25 to 40 years) which means that the effect of introducing new technology takes long to become noticeable. Governments are limited in their freedom of setting more (or less) stringent standards than those based on the Convention of International Civil Aviation as agreed in the International Civil Aviation Organisation (ICAO).**

*Speaking of governmental measures, which best practices can be realised in the Netherlands?*

**EASA: In terms of aircraft as a source of noise and emissions (including CO2) the government should promote setting standards in ICAO that would make new designs as quiet and clean as possible and prevent any backsliding. It should also support research (preferably in coordination with other governments) in new technology to mitigate environmental impacts. EASA invites the Dutch authorities and NLR to (1) join forces with EASA and (2) earmark resources to European research activities in the aviation environmental domain. On the operational side it is important to do proper land use planning, implement operating restrictions where needed and promote optimal operational procedures such as continuous climb and descent procedures. Last but not least, open and fair communication on environmental impacts, in particular on noise, is considered by many to help mitigating annoyance.**

*Which developments can be seen at a national, European and international level (e.g. EASA and ICAO) to stimulate the aviation sector to become more sustainable?*

**EASA: In most domains ICAO is instrumental in setting standards for environmental type approval of aircraft and engines. ICAO being a global organisation strives for unanimous decisions, which will necessary lead to compromises from the perspective of countries like the Netherlands with high population density and which consider climate change mitigation a high priority. EASA provides significant technical support to Europe’s input in the ICAO arena, taking leading roles in the technical working groups of the Committee on Aviation Environmental Protection, but in the end is bound by law to apply the ICAO standards.**

*Which legal instruments and limitations are there, nationally and internationally, to enforce measures to increase the sustainability of aviation?*

**EASA: in most areas EASA is bound to apply the ICAO standards for aircraft type certification. Only in areas where ICAO has no standards (yet, like supersonic noise and some drones) EASA can set standards that should ensure that designs are as quiet and clean as possible (ref: Reg. (EU) 2018/1139, art 9.2 second paragraph). As said before, nationally there are options to apply operating restrictions where needed. These often have an indirect effect of driving improvement of sustainability of aviation.**