



Aan de Staatssecretaris van Infrastructuur en Milieu
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Betreft: ICAO besluit CO₂-emissiestandaarden voor vliegtuigen
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Geachte mevrouw Dijkma,

Ondanks Europese inspanningen is het bij de klimaatconferentie van Parijs niet gelukt afspraken te maken over CO₂-reductie van luchtvaart en scheepvaart. Eurocommissaris Cañete uitte nadien nog eens de Europese zorg dat CO₂-emissies van luchtvaart niet snel genoeg dalen om binnen de 2 graden doelstelling te blijven – laat staan binnen de 1,5 graad.

Europa heeft nu de kans om hier iets aan te doen. De milieucmissie (CAEP) van luchtvaartorganisatie ICAO komt bijeen om te besluiten over CO₂-emissiestandaarden voor vliegtuigen. Daarin wordt bepaald hoe snel vliegtuigen zuiniger moeten worden.

In bijgaande brief van Europese milieuorganisatie Transport & Environment (T&E) leest u in detail welke kansen bij deze bijeenkomst voorliggen, en aan welke voorwaarden een CAEP voorstel moet voldoen om in lijn te zijn met de afspraken in Parijs. Daarbij gaat het er vooral om dat ICAO's CO₂-standaarden voor vliegtuigen technologie *sturend* moeten worden, in plaats van technologie *volgend* zoals in de huidige voorstellen staat.

Greenpeace, Milieudefensie, Natuur & Milieu en de Werkgroep Toekomst Luchtvaart vragen u de aanbevelingen in bijgaande brief over te nemen en deze in het CAEP voorstel te verwerken.

Hoogachtend,
Natuur & Milieu

Tjerk Wagenaar
Directeur

Milieudefensie

Donald Pols
directeur

Greenpeace

Vries Thijssen
directeur

Werkgroep Toekomst Luchtvaart

Hans Buurma
voorzitter Werkgroep WTL



Brussels, 11 January 2016

Vice President Šefčovič, Commissioner Bulc, Commissioner Arias Cañete
European Commission
Brussels

Dear Vice President Šefčovič, Commissioners Bulc and Arias Cañete,

Europe credibility at stake as ICAO agrees a CO₂ standard.

Europe's role is key when ICAO's environment committee, CAEP, meets to decide a CO₂ standard for new aircraft next month. Agreeing an environmentally effective standard which delivers in-sector emission reductions should be a critical objective; ICAO's development of a global market-based measure is facing major obstacles and, despite Europe's strong efforts, aviation escaped a direct reference in the Paris agreement. However European CAEP members' declared position on the standard's stringency is weak and European ambition is significantly behind the US and probably Canada.

CAEP 10 will decide whether to regulate new aircraft types (NT) only, or also include in-production (inP) aircraft; entry into force dates, and, critically, stringency levels. The US has proposed stringency level SO9 for NT, with European CAEP members proposing at least SO7 while not ruling out agreement at higher levels. Aside from this being a thoroughly questionable negotiating strategy, it leaves open the possibility of agreement at SO7. Such an outcome would render any NT standard completely ineffective - a true greenwash.

99% of the calculated environmental effect of the standard will in fact come from regulating in production (InP) types which will dominate deliveries and emissions for decades. Here again Europe proposes a weak bottom-line, SO6 starting point versus SO8 or 9 from the US. ICSA, the NGO Observer coalition to ICAO, believes SO10 is in fact possible and the best guarantor of an effective standard. Should the negotiations in fact end up at SO6, the result would be a loss of 404Mtonnes in CO₂ reductions between 2020 and 2040 compared to SO9.

The CAEP main analysis shows that additional investment and R&D growth for manufacturers flowing from high CAEP stringencies is put at up to \$110 billion between 2023 and 2040 comprising thousands of high level jobs over this period. Reducing the in-Production stringency to SO6 as Eurocaep says it could live with, would reduce this potential by 75% resulting in the loss of many thousands of additional jobs. Manufacturers such as Airbus and Boeing have everything to gain commercially from ICAO raising the technology bar but industry influence on such key issues as the CAEP members' only decision on 2016 frozen technology, their control of the data and insistence on multiple and compounding conservative assumptions in the analysis, has already put the environmental effectiveness of any standard at grave risk. And now at the 12th hour Airbus is bypassing the ICAO process and raising issues concerning parametric aircraft types which risk both meaningful NT and

potential inP stringency levels – even though throughout the past 6 years manufacturers declined to provide ICAO with any data whatsoever on these aircraft types.

An environmentally effective ICAO CO₂ standard that drives “in-sector” reductions is essential given aviation’s growth profile and declining fleet efficiency improvements. Any ICAO global market based measure, if agreed, will not reduce this alarming growth in emissions – merely offset CO₂ above 2020 levels through carbon reductions in other sectors. So a standard which drives in-sector reductions is a real litmus test of international intentions on aviation. Eurocaep and EU member states must be at the forefront of efforts to ensure this outcome and reject moves by manufacturers and airlines towards a do-nothing outcome. Manufacturers’ SO₂ inP stringency proposal, for example, equates to technology first flown on aircraft in the 1980s.

Paris agreed ambitious and legally binding emissions reduction efforts where all sectors must contribute and the 1.5 degree objective permits of no delay. A weak/ineffective ICAO CO₂ standard will delay action for decades from the sector with the fastest growing source of emissions. Europe’s current approach risks doing enormous damage to European and ICAO credibility on climate action.

We call on you urgently to ensure that Europe works to agree a stringency level of SO₉ for NT and SO₉ for inP aircraft as well as a CAEP agreement to begin a new standard-setting process at CAEP 12 given the multiple flaws and shortcomings in the current process.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Jos Dings', written in a cursive style.

Jos Dings on behalf of

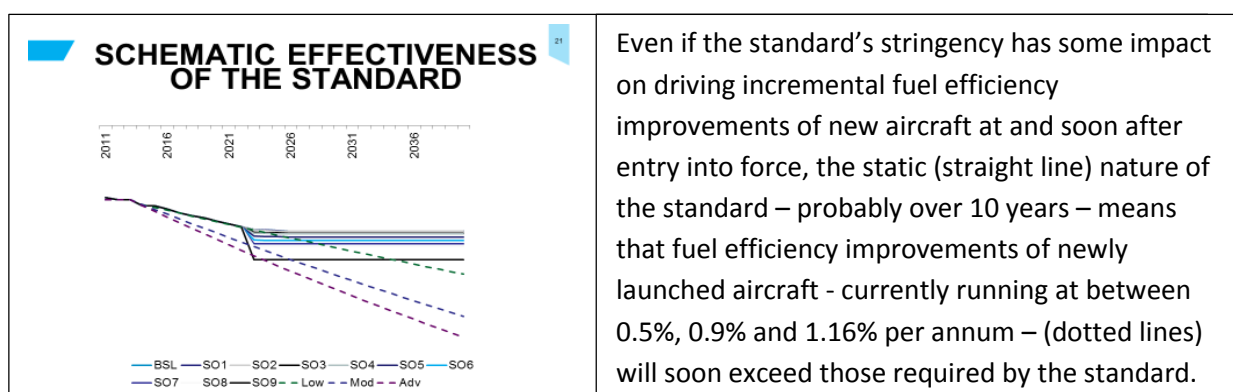
Aviation Environment Federation

Carbon Market Watch

Transport & Environment

ANNEX

New Types (NT). The US proposal, stringency level SO9 for NT, reflects concern that the ICAO standard be environmentally effective, lest a poor outcome result in the US EPA moving to introduce its own standard as provided for under domestic legislation (Clean Air Act). The US also points out that NT aircraft introduced post 2020 will in fact be able to exceed SO9. European ICSA members agree. And since CAEP stringencies only require 2016 technology whereas the first certified NT will not fly before 2024, a technology gap of at least 8 years is already built in. Annual average improvements in aircraft fuel efficiency currently range between 0.5% and 1.16%. ICSA believes the highest stringency level SO10 should be agreed for NT. A new standard-setting cycle should commence at CAEP 12 given the multiple flaws and shortcomings in the whole process not the least because the standard will represent a static line regulating a dynamic parameter.



Even if the standard's stringency has some impact on driving incremental fuel efficiency improvements of new aircraft at and soon after entry into force, the static (straight line) nature of the standard – probably over 10 years – means that fuel efficiency improvements of newly launched aircraft - currently running at between 0.5%, 0.9% and 1.16% per annum – (dotted lines) will soon exceed those required by the standard.

For the main airliners (all >60t and some just below 60t) there will be no market for those failing SO7 as they would be between 10 and 15% less fuel efficient than the B777-9, B787-10 and -9 and the A330NEO, which all exceed SO10, sometimes with a comfortable margin. Moreover any new types developed over the next decade will, almost surely, comply with SO10, because of the commercial need for new aircraft to significantly outperform their predecessors. NT aircraft at SO7 or SO8 after 2025 will simply not perform commercially.

In Production (InP). The US proposes SO8 or SO9 for inP aircraft while Eurocaep's starting point is SO6. If CAEP agrees SO6, the emission reductions loss as compared to SO8 is 29% and versus SO7, 12%. When compared to SO9, these losses are 48% (SO6) and 35% (SO7). ICSA stresses that more than 90% of all emissions come from aircraft over 60t so it is imperative that the stringency set for these inP aircraft be robust – ie at least SO9.

CAEP shows that high stringency levels will save significantly more in fuel costs than resources needed to invest in better fuel burn technology; ie resources shift from airlines buying kerosene to manufacturers investing in high level engineering and innovation. Additional work and investment in R&D will accrue to Airbus, Dassault, ATR, Rolls Royce and others and EU oil imports will reduce.

Airbus argues that future derivative aircraft such as the A350 neo and A380 neo might in fact be treated by regulators as new types and fail SO9. No data has been submitted by Airbus to Eurocaep let alone ICAO to support such a contention which should be ignored.

Dassault has also asserted that their aircraft are disadvantaged by the MV definition, specifically those with very high MTOM to allow for very long range. ICSA has difficulty understanding their assertions and our analysis comes to the complete reverse conclusion regarding disadvantages of the metric.