



ASSEMBLY — 40TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 16: Environmental Protection – International Aviation and Climate Change — Policy and Standardization

Agenda Item 17: Environmental Protection – Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)

PERSPECTIVES ON SUSTAINABLE AVIATION

(Presented by Finland on behalf of the European Union and its Member States¹
and the other Member States of the European Civil Aviation Conference²)

EXECUTIVE SUMMARY

Underlining the importance of mitigating the climate impacts of international aviation, Europe strongly supports the ICAO basket of measures including CORSA and acknowledges achievements already made.

It is crucial that all States and regions effectively implement CORSA and participate in CORSA offsetting requirements from the pilot phase to achieve ICAO's goal of Carbon Neutral Growth from 2020 onwards, also recalling the essential role of sustainable aviation fuels in that endeavour.

Action: The Assembly is invited to:

- a) support the development of a broad range of policy measures under the ICAO basket of measures to support States with practical ways of effectively addressing climate impacts from the aviation sector;
- b) request Member States to build on the work of ICAO by taking action to ensure that CORSA is implemented comprehensively, early and worldwide, putting in place the necessary national policies and regulatory frameworks be established for the compliance and enforcement of CORSA;
- c) note the remaining challenges in turning sustainable aviation fuels into an operational reality, and invite ICAO and States to develop more ambitious measures to support their uptake in line with the 2050 ICAO Vision for Sustainable Aviation Fuels;
- d) support work on a long-term emissions reduction goal for international aviation, in the light of the recent reports and developments for example within UNGA, IPCC, UNFCCC, IMO building on the commitments from the industry and the technical possibilities; and
- e) note Europe's commitment to building capacity for environmental protection with a view to ICAO's 'No Country Left Behind' initiative.

¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

² Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Moldova, Monaco, Montenegro, North Macedonia, Norway, San Marino, Serbia, Switzerland, Turkey and Ukraine.

<i>Strategic Objectives:</i>	This working paper relates to the following Strategic Objective of Environmental Protection.
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken subject to the resources available in the 2020-2022 Regular Programme Budget and/or from extra budgetary contributions.
<i>References:</i>	Chicago Convention and its Annex 16 Resolutions A39-2 and A39-3

1. CNG2020 AND THE BASKET OF MEASURES

1.1 The adoption of the CORSIA SARPs and its agreed Implementation Elements demonstrated a shared commitment to implement the 2016 agreement by the ICAO Assembly to stabilise aviation emissions at 2020 levels. This is an initial step towards reaching the objectives of the Paris Agreement, in particular to limit the global temperature increase to well below 2°C, while pursuing efforts to limit the increase to 1.5°C.

1.2 The latest ICAO CAEP Environmental Trends Assessment shows an increase in fuel burn and CO₂ emissions by a factor of 2.2 to 3.1 between 2015 and 2045. In the most likely scenario, the number of flights departing from airports in the ECAC region is expected to grow from 5.2 million in 2016 to 8.4 million in 2040, whilst fuel consumption is expected to increase from 46.2 Mt in 2016 to 67.5 Mt in 2040. Despite on-going fuel efficiency improvements, emissions are forecast to increase whilst the special report of the Intergovernmental Panel on Climate Change (IPCC) on meeting the 1.5°C temperature goal³ warned that without significant reductions in global emissions, we might reach 1.5°C of global warming as early as 2030. This reaffirms the urgent need to achieve the goal of Carbon Neutral Growth from 2020 onwards (CNG2020), and to strive for further emissions reductions.

1.3 The States presenting this paper strongly support the ICAO basket of measures including CORSIA as the key means to achieve ICAO's CNG2020 target. These States and the aviation sector have taken action on all elements of the basket of measures, as reported in the 2019 European Aviation and Environment Report (EAER)⁴ and in action plans submitted to ICAO by ECAC Member States. According to the EAER, a 24% decrease in fuel consumption per passenger kilometre was achieved between 2005 and 2017 and average fuel burn per passenger kilometre is expected to further decrease by 12-22% by 2040.

1.4 Like many other states around the globe, ECAC Member States have also started implementing the CORSIA SARPs, which illustrates their commitment to the scheme and to a robust and legally-binding implementation in their jurisdictions. All 44 ECAC Member States have volunteered to participate, right from the beginning, in the voluntary pilot phase of CORSIA, as expressed in the 2016 Bratislava Declaration, and are fully engaged and mutually supportive in CORSIA implementation.

1.5 The States presenting this paper support the operationalization of CORSIA with robust rules and governance to be adopted and implemented, backed by the broadest possible participation and domestic implementation. It is crucial that all States and operators commit to CNG2020 and to implement CORSIA effectively. A high level of participation is key to ensure a positive climate impact through a global scheme. The CORSIA-eligible emission units, including mechanisms to secure appropriate supply and additionality, and the sustainability framework for eligible fuels will be of crucial importance for CORSIA's effectiveness and credibility. To the same end, CORSIA shall take into account developments under the Paris Agreement and operationalize the prevention of double counting.

³ <https://www.ipcc.ch/sr15/>

⁴ The core aim of the report is to provide an objective, clear and accurate source of information on the environmental performance of the aviation sector at the European level. <https://www.easa.europa.eu/eaer/>

2. SUSTAINABLE AVIATION FUELS (SAF)

2.1 Given the sector's expected growth and its limited energy alternatives in the short term, as already recognized by ICAO, the use of SAF, possibly completed with the emergence of fully electric and hybrid electric aircraft, has the potential to be one of the key measures to significantly reduce aviation's climate footprint, while bringing additional socio-economic and other environmental benefits. The States presenting this paper acknowledge the leading role of ICAO in SAF promotion and the significant progress achieved so far, especially in developing global standards for its use and demonstrating its safety and technical feasibility. They also welcome the progress made at the Second ICAO Conference on Aviation and Alternative Fuels (CAAF2) and the first ICAO Stocktaking Seminar and encourage the ICAO Assembly to take steps towards updating the 2050 ICAO Vision to include an aspirational quantified proportion of CAF to be substituted with SAF by 2050, as agreed by CAAF/2.

2.2 At the same time, there are still significant remaining challenges in turning SAF into an operational reality for aviation, among them: (i) the price of SAF relative to fossil-based kerosene; (ii) existing policy incentives driving primarily investments for the use of bioenergy in ground transport and resulting in low availability of SAF; (iii) the use of sustainable aviation fuels does not necessarily reduce aviation carbon emissions unless accompanied by robust sustainability certification.

2.3 The 2050 ICAO Vision for Sustainable Aviation Fuels calls on States, industry and stakeholders, in particular airlines, to proactively and concertedly aim for a significant proportion of conventional aviation fuels to be substituted with SAF by 2050. Whereas current policies have resulted in only minimal volumes being available in the short term, ICAO and its Member States should consider taking stronger policy actions to incentivize investments and contribute to the development of a cost-competitive SAF market, including synthetic fuels produced from additional renewable electrical energy. Balanced supply objectives established through dialogue between regulators and stakeholders can be an effective means for States to promote higher SAF production and use.

2.4 ICAO has a unique role to play in the global harmonization of sustainability requirements for SAF in aviation by establishing a robust set of criteria including key environmental principles and also ensuring that the use of SAF contributes to wider UN Sustainable Development Goals.

3. LONG TERM GOAL

3.1 Achievement of the global commitment to CNG2020 by international aviation remains an essential contribution to the long-term temperature goal of the Paris Agreement. Since CNG2020 was adopted, ICAO has made substantial progress in implementing measures to meet this goal. ICAO Member States should be proud of these achievements, which illustrate that effective action can be achieved when States act together on a global basis to address global challenges. For international aviation to keep up with other sectors' levels of ambition in efforts to mitigate climate change, a longer-term emissions reduction trajectory for the global aviation sector needs to be considered. By providing certainty in the long term, this will incentivise investment in innovation in technologies within the sector.

3.2 The 2015 Paris Agreement sets clear goals to limit the global temperature increase, encompassing all anthropogenic greenhouse gas emissions. Achieving these goals requires peaking global emissions as soon as possible and reaching a net zero global economy in the second half of the century.

3.3 As mentioned in paragraph 1.2, the IPCC Special Report on meeting the 1.5°C temperature goal highlights not only the unprecedented scale of the action that is needed, but also the urgency with which it is required. It also illustrates that CO₂ emissions reduction pathways that could meet the temperature goal of 1.5°C would involve global CO₂ emissions reductions across all human activities by about 45% from 2010 levels by 2030 and reach net zero by 2050.

3.4 While not covered by most States' Nationally Determined Contributions (NDCs) under the Paris Agreement, international shipping, through the International Maritime Organisation (IMO), has defined an emissions reduction pathway whereby its emissions should peak "as soon as possible" and be reduced by "at least 50% by 2050 compared to 2008". For over a decade now, the international aviation industry has been committed to a very similar long-term goal that aims to reduce its net emissions by 50% by 2050 compared to 2005 levels.

3.5 The States presenting this paper underline the importance of addressing the impact of international aviation on climate change with an ambitious long-term perspective and call for ICAO to agree on a long-term goal for international aviation, consistent with the 1,5°C temperature goal of the Paris Agreement.

3.6 As with CNG2020, any long-term goal would need to take into account the principle of special circumstances and respective capabilities (Resolution A39-2, para. 6) by not placing specific obligations on individual States.

3.7 CAEP has been given a mandate on this topic pursuant to Resolution A39-2 Paragraph 9, in which the 39th Assembly requested the Council to explore the feasibility of a long-term global aspirational goal for international aviation. CAEP continues this work under the proposed CAEP/12 work programme.

3.8 To facilitate the above request for a long-term goal for international aviation, the States presenting this paper believe that an evaluation of options on how international aviation can fit into the global carbon reduction pathways described above is now necessary. This important information will allow ICAO to make an informed decision as soon as possible on a long-term goal to reduce CO₂ emissions from international aviation, building on the commitments from the industry and on the technical possibilities.

4. CAPACITY BUILDING

4.1 In 2018, ECAC Member States participated in the first phase of the ICAO ACT-CORSIA buddy partnership programme. This initiative, together with other projects funded by the European Union (EU) provided assistance in the form of expert training and necessary follow-up support to recipient States, including in Africa, the Caribbean, and the ASEAN Member States⁵. This covers the ability to implement CORSIA from the start of its voluntary phase in 2021, or at the earliest possible time, and the promotion of the rest of the basket of measures, including the preparation or update to their State Action Plans that tracks, manages and reports on their aviation emissions.

4.2 The projects, deployed in full cooperation with ICAO, will promote the most effective implementation of ICAO standards and best practises across these regions. They illustrate the wider European commitment encompassed in the Bratislava Declaration signed in 2016 by all ECAC Member States, and in the Declaration of Intent signed in 2016 between the EU and ICAO in the margin of the 39th General Assembly.

– END –

⁵ Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.