57th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

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AGENDA ITEM 7: AVIATION AND ENVIRONMENT

SUPPORTING OPERATIONAL MEASURES FOR GREEN AVIATION

Presented by the Civil Air Navigation Services Organisation (CANSO), the International Federation of Air Traffic Controllers' Associations (IFATCA) and the International Federation of Air Line Pilots' Associations (IFALPA)

SUMMARY

Operational measures for green aviation are not only necessary for sustainability for aviation, but they also help the air transport industry save costs. While there have been various initiatives on green operational measures, it is timely to have a more structured way to recognise such measures. CANSO is rolling out an environmental accreditation programme for ANSPs. This programme will validate individual ANSP's maturity level in climate friendly measures. Green aviation should become mainstream. For this to succeed, we need the support of States, ICAO, IATA and various stakeholders including pilots and ATCOs.

SUPPORTING OPERATIONAL MEASURES FOR GREEN AVIATION

1. INTRODUCTION

- At the global level, ICAO has generated a basket of sustainability initiatives focused on aircraft technology, operational improvements, sustainable aviation fuels, and market-based measures. Whilst a great deal of attention is currently focused on the key market-based measure, the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), and the production of lower carbon sustainable aviation fuels, operational measures are equally important and readily implementable. In addition to addressing sustainability, operational measures have the additional benefit of helping the air transport industry save costs, something much needed as the industry struggles with the economic impact of COVID-19. International organisations like CANSO, IFATCA, IFALPA believe that, while promoting the highest level of aviation safety world-wide, a viable and expanding air transport industry can only be achieved on sustainable grounds. We will contribute to the industry's efforts to minimise the environmental impact of commercial aviation. The aviation industry should be environmentally, economically, and socially sustainable.
- 1.2 In October 2021 the air transport sector raised its ambition with a new collective long-term climate commitment that global civil aviation operations will achieve net-zero carbon emissions by 2050. Continued improvements in efficiency of operations and infrastructure across the system is an important component of that goal. At the 77th IATA AGM, member airlines adopted a resolution with the collective target to achieve net zero carbon emissions by 2050 in support of the Paris Agreement goal. The resolution also encourages all IATA member airlines to continue to improve the efficiency of their operations to achieve sustained in-sector emissions reductions and calls upon governments and air navigation service providers to eliminate inefficiencies in air traffic management and airspace infrastructure.
- 1.3 CANSO launched its new strategic direction in 2021. While the current recovery is a pivotal moment for us, CANSO recognised that we have an instrumental role to play in recalibrating our trajectory towards a more sustainable future for aviation. The CANSO vision centres around three key focus areas: creating a blueprint for future skies, delivering a sustainable future for aviation and raising the bar by connecting the ATM industry. On delivering a sustainable future for aviation, CANSO is developing an environmental accreditation programme for ANSPs called the Green ATM Programme. This programme will provide an objective assessment of individual ANSP's maturity in climate friendly measures. For this Green ATM accreditation programme to work, the support of States and the aviation industry is required.

2. DISCUSSION

- Operational measures for green aviation is not new. ICAO has produced guidance material on operational opportunities to reduce fuel use and emissions, and there have been numerous trials and demonstrations of climate friendly operational measures. Within the region, past trials like the Asia and South Pacific Initiative to Reduce Emissions (ASPIRE) and the Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE) focused on the day-to-day use of measures including flex tracks, User Preferred Routes (UPR), Dynamic Airborne Re-routing Procedure (DARP), Continuous Climb Operations (CCO), and Continuous Descent Operations (CDO).
- 2.2 Many other initiatives have also been reported to APANPIRG and other meetings over recent years, including UPR trials in Indonesia; Free Route Operations (FRTO) trials and/or plans in Singapore and Mongolia; and the expansion of Flexible Use Airspace (FUA) in India and Japan. Various other Asia Pacific States have also trialed or implemented CCO and CDO.

- 2.3 It is timely for a more structured approach to recognise operational measures for green aviation. The future trend is towards disclosure and accreditation of climate measures. Even stock exchanges around the world are requiring listed companies to have mandatory climate related disclosures. This requirement for companies has come from the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).
- 2.4 The CANSO Green ATM accreditation programme will provide ANSPs with an independent, industry endorsed, environmental accreditation scheme. It will recognise their efforts to facilitate airspace users reduced emissions and reduce their own environmental footprint and provide a path to continuous improvement. It is an objective and transparent validation and will enhance the credibility of ANSPs' efforts. It will provide a framework for engagement with stakeholders like airlines and regulators.
- 2.5 This CANSO programme for ANSPs will have five accreditation levels reflecting varying levels of green ATM maturity. The level attained by an ANSP is a weighted average of achievement across four categories. The categories are namely, Governance, Improved ATM, Infrastructure and Utilities, and Others. Improved ATM would cover the degree of implementation of measures such as FUA, PBN, CDM, CCO/CDO, FRA, ATFM, surface movement. Given that Improved ATM would be the category where ANSPs can effect the greatest impact, it has been accorded the highest weightage.
- 2.6 Ideally, green aviation accreditation should become mainstream like aviation safety or cybersecurity accreditations as a means to reduce in-sector carbon footprint. Currently, there is still a gap between the level of acceptance between sustainability and safety, granted efforts to safety improvement have taken many years.
- 2.7 The industry would need the support of States and regulators to work with ANSPs to make green aviation accreditation a norm. ICAO can think of ways to ensure transparency on green aviation measures. For a start, green aviation can be a regular topic for DGCA. IATA can also support green ATM accreditation from the customers' point of view by encouraging ANSPs to be accredited. ANSPs would also need to put in place appropriate tools and training such that ATCOs are well prepared for green aviation measures. Awareness and timely information will be important. Webinars on the CANSO Green ATM accreditation programe and on other aviation sustainability initiatives can be organized. Only with the support of States and the industry, can the CANSO Green ATM accreditation programme and other future green aviation programmes be useful to the aviation sustainability cause.

3. ACTION BY THE CONFERENCE

- 3.1 The Conference is invited to:
 - a) Discuss the need for a more structured way to assess and encourage operational measures for green aviation;
 - b) Note that CANSO will organize a webinar on the CANSO green ATM accreditation programme;
 - c) Discuss ways to support the CANSO Green ATM accreditation programme.