

**55th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGION**

*Denarau Island, Nadi, Fiji
22 – 26 October 2018*

AGENDA ITEM 7: AVIATION AND ENVIRONMENT

CHALLENGES WITH CORSIA PREPARATION

Presented by Singapore

SUMMARY

The 39th ICAO Assembly agreed to implement the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) from 2021. The ICAO Council has subsequently approved the First Edition of Annex 16, Volume IV on the CORSIA Standards and Recommended Practices (SARPs) in June 2018. There is urgency for States/Administrations and aeroplane operators to establish the necessary legislation and procedures to allow the Monitoring, Reporting and Verification (MRV) process to commence from 1 January 2019 to meet the timeline in the CORSIA SARPs. This paper shares Singapore's experience in CORSIA MRV preparation, and identifies some possible actions by ICAO to assist States/Administrations.

The Conference is invited to:-

- (i) Encourage States/Administrations to step up efforts to ensure the timely and effective implementation of CORSIA MRV requirements;
- (ii) Encourage States/Administrations to share information on CORSIA MRV preparations;
- (iii) Request ICAO to provide more support to States/Administrations on the drafting of national legislation to operationalise CORSIA as well as the national accreditation of verification bodies; and
- (iv) Request ICAO to provide clear guidance on the CORSIA Implementation Elements which will give certainty and assurance to States/Administrations and industry.

CHALLENGES WITH CORSIA PREPARATION

1. INTRODUCTION

1.1 Since the adoption of Resolution A39-3 at the 39th Session of the ICAO Assembly in 2016 calling for the implementation of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to address annual increases in total CO₂ emissions from international civil aviation above 2020 levels, significant progress has been made to prepare for CORSIA implementation. Notably, the 214th Session of the ICAO Council held in June 2018 had adopted the First Edition of the International Standards and Recommended Practices (SARPs), Environmental Protection —CORSIA (Annex 16, Volume IV) which would be applicable on 1 January 2019.

1.2 In view of the global and transboundary nature of international aviation, a global market-based measure scheme led by ICAO, in the form of CORSIA, is the most appropriate and effective approach in addressing emissions from international aviation. It complements a larger basket of measures including technologies, operational improvements and sustainable aviation fuels.

1.3 While steady progress on CORSIA has been made, there is a short interval between the adoption of Annex 16, Volume IV and the commencement of CORSIA MRV processes in January 2019. This is an ongoing challenge for States/Administrations and industry and one that must be overcome by the international aviation community as timely and effective implementation of the CORSIA MRV requirement is a necessary precondition for the overall success of CORSIA.

2. PREPARATIONS FOR EMISSIONS MRV IN SINGAPORE

2.1 The Civil Aviation Authority of Singapore (CAAS) has identified three essential tasks required to implement the necessary MRV processes from January 2019: (1) establishing a national legislation on emissions reporting; (2) engaging and preparing our State-registered aeroplane operators on MRV requirements and compliance; and (3) engaging and accrediting interested verification bodies.

3. CHALLENGES FACED

3.1 Legislation on emissions reporting

3.1.1 Singapore introduced legislation to include the mitigation of environmental impact from international aviation in February 2018. This provided CAAS with the legal basis to introduce specific subsidiary legislation related to CORSIA implementation.

3.1.2 Whilst reviewing ICAO's Annex 16, Volume IV, Singapore noted that for the purposes of MRV implementation for the CORSIA baseline years (i.e. 2019-2020), only Chapter 1 (Administration) and a majority of standards in Chapter 2 (MRV of aeroplane operator annual CO₂ emissions) had to be translated into domestic legislation. The remaining Chapters on offsetting requirements and reduction of emissions, including Chapter 2 standards relating to the reporting and verification of emissions unit cancellations, would only be applicable after 2021 when offsetting requirements come into effect. As such, domestic legislation for these issues could be introduced in a second phase, which would be a more effective option given the tight timeline for CORSIA MRV, the pending issuance of the complete 'CORSIA Package' addressing emissions offsetting and reduction by ICAO, as well as internal resource considerations.

3.1.3 Another key implementation issue was how Annex 16, Volume IV had implied that aeroplane operators were already monitoring and reporting their CO₂ emissions prior to CORSIA. From the CO₂ emissions monitoring and reporting perspective, CAAS and the aeroplane operators attributed to it had no prior regulatory relationship. This meant that these aeroplane operators had no

legal obligation to monitor or report their emissions in 2018 for CAAS to use it as a proxy to determine their eligibility for CORSIA from January 2019 onwards, as suggested in the Environmental Technical Manual Volume IV. While it would be expedient to rely on pre-existing regulatory relationships established for safety (reflected in the issuance of air operator certificates pursuant to national legislation in conformance with Annex 6 Part I), Singapore assessed that this approach was not appropriate as CORSIA is not a safety-related scheme.

3.1.4 To address this issue, Singapore is considering a process which will require Singapore operators holding an operating certificate, and operating at least one aeroplane with MCTOM greater than 5,700kg on international flights, to be registered for CORSIA. The registered aeroplane operator would be required to monitor and report CO₂ emissions from January of the year of registration (i.e. 2019) using simplified means. Once they exceed the 10,000 tonnes CO₂ emissions threshold, the registered Singapore operator would be deemed as CORSIA-eligible. This tailored approach took into account the need to establish a legal obligation for aeroplane operators in emissions MRV where there had been none before, and is aligned with other environment-related regulatory frameworks in Singapore.

3.1.5 Singapore notes that ICAO will be conducting training for States/Administrations on MRV and national regulatory frameworks, starting from 3rd Quarter 2018, and is developing template CORSIA regulations which States/Administrations can adapt for their local context. Singapore supports ICAO's initiatives to assist States/Administrations and urges ICAO to provide the relevant training and materials at the earliest possible opportunity to facilitate the implementation of CORSIA from January 2019.

3.2 **Accreditation process for verification bodies**

3.2.1 Annex 16, Volume IV requires the aeroplane operator to engage an accredited verification body to verify its annual emissions report. The first submission of the list of verification bodies accredited in the State to ICAO is 30 April 2019. To meet this requirement, CAAS is working together with the Singapore Accreditation Council on an accreditation programme for verification bodies. In order for a verification body to be accredited, it must first demonstrate its competency in verifying an aeroplane operator's draft emissions report. However, the first such report is not due to be submitted by aeroplane operators until 2020 hence interested verification bodies will not be able to demonstrate such competency by the first deadline of 30 April 2019. A solution in this respect could be for national accreditation bodies to base their accreditation on the verification of the emissions monitoring plan instead. The assessment on their competency to verify actual emissions reports could then be done as part of continual assessment of the accredited verification body.

3.2.2 Singapore understands that the ICAO and the International Accreditation Forum are developing training on this subject for both verification bodies and national accreditation bodies. As some States/Administrations, including Singapore, have already started work with their national accreditation agencies to meet the CORSIA timeline, it will be important for ICAO to take note of the work done by these States/Administrations and also provide more support to States/Administrations to ensure international harmonisation of accreditation processes on CORSIA-specific requirements for verification bodies.

3.3 **Engagement with Singapore aeroplane operators**

3.3.1 CAAS established a working group in December 2017 comprising all Singapore aeroplane operators to engage them on CORSIA as well as to foster better alignment with industry concerns and needs for the timely implementation of CORSIA MRV. Regular updates on CORSIA developments and implementation requirements are provided through this platform, and CAAS is also planning to consult operators on the draft domestic legislation and guidance material on emissions MRV once it is ready. Timely engagement is critical to instill greater certainty and confidence over the various CORSIA MRV processes and procedures for the operators to be ready for CORSIA MRV.

3.4 **The ‘CORSIA Package’**

3.4.1 Annex 16, Volume IV makes references to the ICAO CORSIA Implementation Elements, which comprises a set of ICAO documents essential for the implementation of CORSIA (CORSIA States for Chapter 3 State Pairs, ICAO CORSIA CO₂ Estimation and Reporting Tool, CORSIA Eligible Fuels, CORSIA Eligible Emissions Units, CORSIA Central Registry). The 214th Session of the ICAO Council had adopted two of these documents (ICAO CORSIA CO₂ Estimation and Reporting Tool and CORSIA Central Registry). However, there is no firm date as to when the rest of the ICAO CORSIA Implementation Elements will be available, particularly for CORSIA eligible fuels and CORSIA eligible emissions units. In the absence of this guidance material, it would be difficult for States/Administrations to draft any corresponding legislation on carbon offsetting and reductions as well as for aeroplane operators to make their business decisions. It is critical that ICAO sets out clarity on the availability of the rest of the CORSIA Implementation Elements, which will provide more certainty and assurance to the processes in CORSIA to States/Administrations and the industry.

4. **BENEFITS FROM INFORMATION SHARING**

4.1 Preparations for CORSIA MRV implementation present a wide range of challenges for States/Administrations: be it in the drafting of legislation, preparing aeroplane operators or in the accreditation of verification bodies especially given the tight timeline. These are issues that could be common to many States/Administrations. There are benefits to be gained from the exchanges of experiences such as greater confidence in each State’s CORSIA MRV preparations and the exchange of learning points from CORSIA MRV preparation. As such, Singapore encourages States/Administrations to share their experience from CORSIA MRV preparation when opportune, in order to tap on potential synergy as we prepare for CORSIA globally.

5. **ACTION BY THE CONFERENCE**

5.1 The Conference is invited to:

- a) Encourage States/Administrations to step up efforts to ensure the timely and effective implementation of CORSIA MRV requirements;
- b) Encourage States/Administrations to share information on CORSIA MRV preparation to facilitate its implementation from January 2019;
- c) Request ICAO to provide more support to States/Administrations on the drafting of national legislation to operationalise CORSIA as well as the national accreditation of verification bodies; and
- d) Request ICAO to provide clear guidance on the CORSIA Implementation Elements to give certainty and assurance to States/Administrations and industry.

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