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EXECUTIVE COMMITTEE

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

IATA SUPPORT FOR THE IMPLEMENTATION OF CORSIA THROUGH FRED+

(Presented by the International Air Transport Association (IATA))

EXECUTIVE SUMMARY

To support the successful implementation of CORSIA, the International Air Transport Association (IATA) has developed FRED+, a system to facilitate the reporting of emissions and minimize the associated administrative burden and costs for both aeroplane operators and administrating authorities. The design and development of FRED+ benefitted from airline and State feedback to ensure the platform accommodates the diverse information systems and varying capabilities of aeroplane operators and administrating authorities. FRED+ is available at no cost to all interested aeroplane operators and authorities.

Strategic Objectives:	This working paper relates to Strategic Objective E – Environmental Protection
Financial implications:	Not applicable
References:	

1. INTRODUCTION

1.1 IATA views CORSIA as a critical element of the industry's strategy to mitigate its impact on climate change and has supported its development in ICAO. The successful implementation of CORSIA is a priority for IATA and significant resources have been dedicated to assist airlines in their preparations and facilitate compliance.

1.2 Given its scope, CORSIA calls for rules and capacity support that is adapted for a wide range of aeroplane operators, each with varying capabilities, resources, and levels of information system sophistication. Aeroplane operators subject to CORSIA will range from commercial airlines with a fleet

[1] English, Arabic, Chinese, French, Russian and Spanish versions provided by IATA.

of several hundreds of aircraft to operators with a handful of regional aircraft. Some aeroplane operators have extensive experience with mandatory emissions reporting requirements, while others have none. Furthermore, the extensive amount of business-sensitive information which will need to be managed to comply with the scheme benefits from robust mechanisms to ensure processing integrity, data quality and confidentiality. Finally, while some aeroplane operators have invested in advanced systems to handle their fuel data even prior to the adoption of CORSIA, others may only have very simple tools to manage fuel data and may therefore face a greater risk of data gaps and errors.

1.3 To address these challenges and minimize the administrative burden associated with compliance under CORSIA, IATA decided to develop "FRED+", a tool dedicated to support the reporting of emissions under the scheme. The tool can also be used by authorities to administer CORSIA and facilitate the secure communication of information between aeroplane operators and their administrating authority.

1.4 FRED+ is available at no cost to all interested aeroplane operators and administering authorities. It is naturally built on the basis of the requirements of Annex 16, Volume IV, in full compatibility with the Monitoring, Reporting and Verification (MRV) requirements developed by ICAO.

1.5 The design and development of FRED+ benefitted from airline and State feedback to ensure the platform accommodates the diverse information systems and varying capabilities of aeroplane operators and administrating authorities. Future enhancements and iterative releases will incorporate this input to ensure the platform evolves to continue meeting user's expectations.

2. PLATFORM FOR THE MANAGEMENT OF DATA

2.1 The core function of FRED+ is the secure storage and processing of the large datasets required under CORSIA.

2.2 To ensure FRED+ can accommodate the variety of aeroplane operators subject to CORSIA, a core design principle integrated throughout the system is flexibility. For example, aeroplane operators can submit data manually, but also as batch uploads in different data formats. In addition, FRED+ can also be coupled with an aeroplane operator's fuel management system or flight management information system to enable the automatic transmission of data. This would, for example, allow daily recording of flight information and consequently mitigate the risk of data errors or data loss.

2.3 FRED+ also enables users to analyse the data uploaded in the system. The system notably includes a functionality to detect outliers and represent them visually, which will assist operators in identifying potentially erroneous data to improve data quality. FRED+ also integrates the ICAO CO_2 Estimation Models to enable aeroplane operators to easily fill data gaps or use FRED+ if they are eligible for simplified monitoring procedures, in accordance with Annex 16, Volume IV.

2.4 Beyond the core functionalities and workflows associated with compiling and transmitting verified emissions reports from aeroplane operators to administrating authorities, FRED+ also offers several additional features including user-defined dashboards and analytics.

3. EXCHANGE OF DATA AND INTERACTION WITH ADMINISTRATING AUTHORITIES AND VERIFIERS

3.1 FRED+ automatically pairs aeroplane operators with their administrating authorities in accordance with Annex 16, Volume IV. Standardized reporting and workflow engines ensure complete emissions information is transmitted between an aircraft operator, its verification body and its administrating authority in the correct format and manner prescribed by Annex 16, Volume IV.

3.2 To maintain the confidentiality of data, users from administrating authorities are provided access to a dedicated and segregated area within FRED+, containing only information from operators within their jurisdiction and required to be reported under Annex 16, Volume IV (e.g. verified emissions reports, emissions monitoring plans and supporting documentation). Aeroplane operators are also able to invite their verification bodies to FRED+ to remotely review the raw data used to compile an emission report and subsequently upload verification reports and statements to finalize the verification process.

3.3 FRED+ can also be used by operators independently of their administering authority to compile their emissions report, undergo the verification processes, and export the verified emissions report and supporting documentation for submission to their administrating authority.

3.4 Given the sensitivity of information contained in FRED+, data security and confidentiality has been a primary consideration throughout the development process. As a result each log-on requires multi-factor authentication alongside a system-wide audit table that enables FRED+ to track every action to an individual user at a specific time, device and location.

4. PARTICIPATION IN FRED+

4.1 Over 120 aeroplane operators have registered to use FRED+. The participating aeroplane operators range from small operators with a small fleet and limited experience in emissions reporting to some of the world’s largest airlines. There are numerous aeroplane operators which are not members of IATA, including business jet operators and corporate fleet managers.

4.2 Several administering authorities have also expressed their interest in using the system to manage operator emissions monitoring plans and verified emissions reports.

4.3 IATA is naturally providing support and training to new or existing users; and further information is available at www.iata.org/FRED.

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