

he airline industry has generally welcomed the International Civil Aviation Organization's (ICAO's) new carbon offsetting scheme, which went into effect on January 1, 2019. However, the scheme's Standards and Recommended Practices (the SARPs) impose an immediate compliance obligation on international airlines and raise a number of potential risks for aircraft financiers and lessors.

In October 2019, the 40th Assembly of the ICAO voted to adopt a global market-based measure to control aviation carbon dioxide (CO2) emissions. This scheme is referred to as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). On June 27, 2018, ICAO's Council adopted the First Edition of Annex 16, Volume IV, which details the international Standards and Recommended Practices (SARPs) for CORSIA. Ultimately, all

non-exempted commercial aircraft operators (Operators) worldwide flying international routes will be required to comply with various aspects of the scheme.

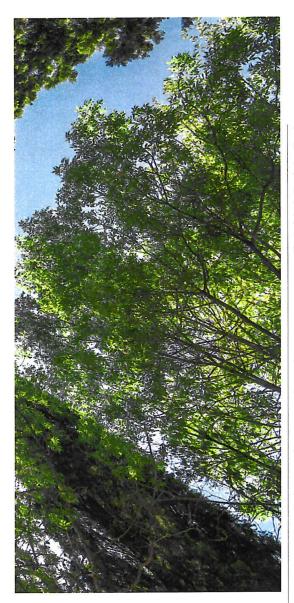
This article first describes the requirements of CORSIA and discusses the process of incorporating those requirements into the national laws of ICAO member states. Next, the article examines risks and challenges for aircraft owners and lessors posed by CORSIA, and particularly, the risks associated with individual national government enforcement of CORSIA. The article concludes that while CORSIA commands widespread aviation industry support, the scheme presents significant risks and uncertainties that have not yet been resolved.

CORSIA'S REQUIREMENTS

Effective January 1, 2019, all Operators not otherwise exempt from CORSIA

with annual emissions exceeding 10,000 metric tons of CO2 are required to record and report emissions data for their international flights on a yearly basis. Operators are also required to submit an emissions monitoring plan. Annual emissions reports and emissions monitoring plans must be submitted by an Operator to its ICAO Contracting State regulator even if the Contracting State has opted not to participate in the voluntary phases of CORSIA. The reported data will form the baseline for calculating compliance requirements during the voluntary and compulsory phases of the scheme, the following for which is as follows:

Under the Monitoring, Reporting and Verification (MRV Only) Phase (2019–2020), all aircraft operators should have submitted an emissions monitoring plan no later than February 28, 2019 and are required to report their 2019 and 2020 emissions to their ICAO state



regulator by May 31, 2020 and May 31, 2021, respectively.

INCORPORATION OF THE SARPS INTO NATIONAL LAW

ICAO expects most of its 193 member states to implement the SARPs into their respective national laws without modification . CORSIA Contracting States were given until October 22, 2018 to file disapproval of the SARPs and were also required to file any differences to ICAO in transcribing the SARPs into their national laws by December 1, 2018. China, India and Brazil filed reservations against adopting the scheme on October 4, 2019 on the perceived basis that ICAO's ambition of carbon neutral growth would harm those countries' developing aviation industries, which considerably decreased effectiveness of the scheme. The EU has yet to adopt CORSIA as the only global market-based measure applying to CO2 emissions from international aviation, in accordance with ICAO Assembly Resolution A40-19. It is unlikely that the EU will agree to replace existing aviation EU ETS directives with CORSIA for intra-EEA flights; however, the EU may consider annexing CORSIA onto existing legislation to cover international flight activities into and out of EEA member States.

RISKS FOR AIRCRAFT OWNERS AND LESSORS

CORSIA raises a number of potential and unforeseen credit, political and reputational risks, not only for Operators but also for aircraft owners and lessors. ICAO has yet to determine the type or vintage of carbon offset units that will be eligible under the scheme and whether grandfathering of existing offsets will be permissible. Any restriction concerning the type or vintage of eligible offsets may increase the cost of compliance and thus create an economic burden for many Operators under CORSIA. The expected bottom-line impact of CORSIA compliance for airlines has attracted the attention of international credit rating agencies such as Moody's, which has stated that "[g]rowing carbon offset costs have the potential to become significant relative to operating profit... carbon costs have the potential to lower operating income by between 4% and 15% by 2025, and by between 7% and 35% by 2030, all else being equal."

CORSIA compliance will present aircraft owners with several commercial and legal risks and challenges. One such challenge is to identify who will be responsible for compliance under the scheme where the operator of a flight has not been identified. The first line of inquiry is the ICAO designator, followed by the aircraft registration mark and holder of an Aircraft Operator Certificate (AOC). If the ICAO designator and AOC holder cannot be readily established, CORSIA compliance will then fall to the judicial aircraft owner identified in the aircraft registration documentation. Should an Operator fail to submit an emissions monitoring plan and annual emissions reports, its CORSIA Contracting State may not be able to identify the operator of an aircraft's international

flight activity or, consequently, the party responsible for its emissions from such activity. Therefore, in such circumstances, CORSIA compliance obligations would automatically be attributed to the aircraft owner. Any such risk may become compounded for aircraft lessors and investors in asset-backed securitisations.

ENFORCEMENT OF CORSIA

ICAO lacks legal authority to enforce the CORSIA SARPs. This creates a risk that local governments and regulators may hold an aircraft owner responsible for CORSIA non-compliance. Each Contracting State is individual responsible for transcribing CORSIA into its domestic law. While it remains unclear how (if at all) and when each Contracting State will do so, states could pass laws allowing relevant government entities to impose a lien on, and seize and potentially sell, an aircraft pending cancellation of sufficient emissions offsets for the operator's entire fleet -- notwithstanding the rights of the aircraft owner or mortgagee. Such a law could be similar to the Eurocontrol fleet lien and applicable regulations in certain jurisdictions under the European Union's Emissions Trading Scheme (EU ETS). In addition, legal and financial consequences may arise should an Operator fail to cancel a sufficient quantity of eligible emissions offset units to cover its existing obligations following an insolvency declaration.

Furthermore, current lease and loan documentation practices need to be reconsidered in light of the differences between compliance under EU ETS and CORSIA. EU ETS is subject to an annual reporting and emissions allowance surrender cycle. In contrast, while CORSIA will have an annual emissions reporting cycle, cancellation of emissions unit offsets, with effect from 1 January 2021, will be subject to a three-year compliance cycle. This longer cycle is likely to cause aircraft owners to accumulate much greater credit risk exposure. Requiring an Operator, as a condition precedent under a lease or loan agreement, to deliver a CORSIA "Letter of Authority" permitting the relevant regulator to disclose the Operator's emissions obligations as a means for a lessor or mortgagee to monitor this credit exposure will likely have little if any effect. It is presently unknown to what extent, if any, Contracting State regulators will honor such letters of authority, as CORSIA allows aircraft Operators to request regulators to keep commercially sensitive emissions data confidential. Moreover, until the three-year compliance cycle expires, the CORSIA regulator will not be able or willing to confirm the level of an Operator's compliance and financial liability, by which time the damage (and potential exposure for the lessor or mortgagee) may be irreversible. Also, the price of eligible emissions units under CORSIA (measuring the cost of compliance) will not be known until the time of purchase by the Operator, unless an Operator hedges its CORSIA exposure through a forward contract with a carbon broker or exchange.

Should the EU decide to transcribe CORSIA as an annex to EU ETS, then the existing enforcement measures for non-compliance, which currently consist of a statutory penalty of EUR 100 per ton of CO2 plus additional local fees, penalties and the rights of aircraft seizure, detention and sale may apply. Meanwhile, the United Kingdom (UK) is (at the time of writing) scheduled to exit the EU ETS in 2020 and is currently considering its options, including whether to seek to negotiate with the EU to opt back into EU ETS, or alternatively set up its own ETS or UK aviation carbon offset scheme for domestic and intra-European Economic Area (EEA) flights. The UK remains fully committed to CORSIA for international flights outside the EEA. Meanwhile, the uncertainties surrounding CORSIA could create challenges in disclosing climate change-related risks, trends or factors in publicly listed leasing and finance company annual financial reports and offering memoranda for securitization transactions that require a credit rating. Disclosing and modelling environmental, social and governance compliance risk into aircraft asset-based securitization and portfolio transaction is becoming increasingly important, given growing investor skepticism of transactions that lack full climate change risk reporting disclosure and appropriate



risk modelling by credit rating agencies. In addition to preserving investor appetite and confidence, demonstrating compliance with CORSIA and EU ETS also helps reduce the risk of rental rate and residual value discrepancies in midlife aircraft leased by compliant and non-compliant operators.

A related consideration for the international commercial aviation industry is the potential tension between the need to address and mitigate these credit and legal risks in lease and loan documentation, on the one hand, and the aim and spirit of the forthcoming Global Aircraft Trading System (GATS), currently scheduled to go live in Spring 2020, on the other. GATS is designed to simplify and streamline lease novation and assignment transactions. While participation in GATS is voluntary, it is reasonable to foresee operators favoring its use (as a condition to consenting to the underlying transfer) in order to minimize the inconvenience and expenditure of time and resources typically associated with lease novations (for which the lessee usually reaps little or no benefit) and, more critically, to ensure that the lessee does not take on any greater obligations purely as a result of the novation or assignment of an existing lease. Given the potential cost and time reduction benefit to lessees and financiers alike, future practice under GATS merits close monitoring alongside the credit and legal risks described in this article.

CONCLUSION

The importance of addressing and curtailing aviation CO2 emissions has never been greater. In 2020, more than 150 airlines across the globe will fly more than 24,000 aircraft (a number



that Airbus projects to double by 2038) , burning 100 billion gallons of fuel and emitting more than 1 billion metric tons of CO2 into the atmosphere. Meanwhile, according to the International Council on Clean Transportation global CO2 emissions from commercial aviation are growing at a pace 70% more rapidly than ICAO forecasts---which forecasts already anticipate a tripling of such emissions by 2050. Given the plethora of potential risks and uncertainties under CORSIA, coupled with the anticipated industry trend toward standardization and simplification of the lease novation process, it is important that aircraft owners and financiers understand the basic functions of the scheme, monitor the evolving landscape of requirements and consequences of non-compliance, and consult with both legal counsel and CORSIA specialists to integrate risk mitigation measures (in the form of appropriate deliverables, covenants and defaults) into lease and loan documentation. While there is considerable momentum for commencing and implementing CORSIA as a global system for reducing aviation emissions, the scheme still presents many weaknesses, uncertainties and risks, but few clear solutions.

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