



WORKING PAPER

ASSEMBLY — 40TH SESSION

EXECUTIVE COMMITTEE

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

**IMPACT OF CORSIA IMPELEMENTATION ON THE INCREASE OF CO2 EMISSIONS GROWTH RATES IN THE SECTOR OF INTERNATIONAL CIVIL AVIATION AND ON DECREASE OF THE GLOBAL SAFETY LEVEL.
ALTERNATIVE SCENARIOS OF ICAO CLIMATE ACTION IN THE CONTEXT OF THE SUSTAINABLE DEVELOPMENT GOALS OF THE UNITED NATIONS**

(Presented by the Russian Federation)

EXECUTIVE SUMMARY

Over the last years, the international community strengthens its understanding of futility of offsetting mechanisms use to solve the problem of global reduction of greenhouse gas emissions².

This working paper provides an overall analysis of the negative impacts associated with CORSIA implementation and offers an alternative approach to addressing environmental challenges based on the so-called Clean Development Mechanism (CDM) for International Civil Aviation (ACDM) as a basis for implementing Global Market-based Measures and creation international aviation forces to fighting forest fires and other natural disasters which could fully meet the Sustainable Development Goals of the United Nations (Resolution A/RES/70/1 of the United Nations General Assembly *Transforming our world: the 2030 Agenda for Sustainable Development*).

Action: The Assembly is invited to:

- a) consider the appended alternative ICAO Draft Assembly Resolution, *Consolidated Statement of Continuing ICAO Policies and Practices related to Environmental Protection – Climate Change* which provides for global market-based measures implementation based on the *Clean Development Mechanism for International Civil Aviation*;
- b) request the ICAO Council to examine the possibility of establishing under the auspices of UN of “an aviation’s mobile forces to fight forest fires and other natural disasters” funded under the ICAO International Environment Fund (IEF) that is fully compliant with the sustainable development goals of the United Nations (Resolution A/RES/70/1 of the United Nations General Assembly *Transforming our world: the 2030 Agenda for Sustainable Development*).

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives A – <i>Safety</i> , D – <i>Economic development</i> and E – <i>Environmental protection</i> .
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¹ English, Arabic, Chinese, French, Russian and Spanish versions were provided by the Russian Federation

² (<https://no-redd.com/new-study-adds-urgency-to-end-un-carbon-offsetting-scheme/>)

<i>Financial implications:</i>	Reducing ICAO budgetary expenses related to carrying out Global MBM implementation, as well as mobilizing additional funds for the implementation of ICAO environmental programmes and providing targeted technical assistance to developing States.
<i>References:</i>	<ul style="list-style-type: none"> • A40-WP/59 <i>Consolidated statement of continuing ICAO policies and practices related to environmental protection – The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)</i> • Doc 10075 – <i>Assembly Resolutions in Force</i> (as of 6 October 2016)

1. INTRODUCTION

1.1 There is no doubt that safety is an absolute priority in the ICAO activities. However, persistent attempts to impose unrealistic environmental objectives on the international aviation sector without proper scientific justification and comprehensive economic analysis jeopardize not only the ability of the aviation sector to contribute to the reduction of greenhouse gas emissions at the global level but also create real risks of reducing the global level of safety due to the stagnation of technological development of the industry, especially in developing and emerging countries.

1.2 The working paper of the group ATAG A40-WP/193 “Industry views on CORSIA and the Basket of Measures” notes that the global aviation industry has exceeded the goal of 1.5 % annual improvement of fuel efficiency. It has to be noted that it should be recognized that this result is in no way related to the application of any Global Market-based Measures in the international civil aviation sector but entirely relates to the technological development of the industry that in turn increases their safety against the growing volumes of work air transport in all regions of the world.

2. CORSIA AS A FACTOR CREATING CIRCUMSTANCES FOR UNFAIR COMPETITION IN INTERNATIONAL AIR TRAFFIC MARKET

2.1 The Assembly and the Council of ICAO have repeatedly expressed “...*the concern with the use of international civil aviation as a potential source for the mobilization of revenue for climate finance to the other sectors...*”³. Therewith, CORSIA mechanism suggests purchase of the so-called emissions credits on the open "carbon" markets beyond the international civil aviation sector that clearly contradicts the aforementioned concern of the global aviation community. This is due to the fact that the purchase of emissions credits is not an investment of airline funds in projects aimed at reducing greenhouse gas emissions but in fact is a mechanism for accelerated return on investment in already completed projects implemented in other industrial sectors. Thus, the purchase of emissions credits by air transport operators will only increase profitability of large companies which have implemented such projects and will not contribute in any way to the reduction of CO₂ emissions in the international civil aviation sector as well as at the global level.

2.2 According to the principles of non-discrimination of Resolving Clause of Resolution 10 *Consolidated statement of continuing ICAO policies and practices related to environmental protection – The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)* it is established that “*that the CORSIA shall apply to all aircraft operators on the same routes between States....*” Taking into account the fact that airlines from developing and emerging countries have to operate older aircraft with lower fuel efficiency and the profitability of their commercial operations is much lower compared to the profitability of airlines in developed countries, it is obvious that the relative cost of emissions credits for the great majority of airlines from developing and emerging countries will be 5-10 times higher than for

³ 14th preambular paragraph of ICAO Assembly Resolution A39-3 *Consolidated statement of continuing ICAO policies and practices related to environmental protection – The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*

their partners from developed countries. In practice, this means that routes actively operated by their partners from developed countries will be closed for airlines in developing and emerging countries on economic grounds. Therefore, CORSIA implementation creates a favourable basis for unfair competition under the slogan of principle of non-discrimination. Since 2027, when the participation of ICAO Member States in the CORSIA project becomes mandatory there will be a further squeeze-out of airlines from developing and emerging countries even when flying in their national airspace⁴.

3. IMPACT OF CORSIA IMPELEMENTATION ON THE INCREASE OF CO₂ EMISSIONS GROWTH RATES IN THE SECTOR OF INTERNATIONAL CIVIL AVIATION AND ON DECREASE OF THE GLOBAL SAFETY LEVEL

3.1 It is expected that the CORSIA project can generate demand at the level of 1.6-3.7 billion tons of emission units in the period between 2021 – 2035 that according to the ATAG group will lead to an outflow of about 40 billion dollars from the industry that obviously does not take into account the cost of system administration of CORSIA elements. Even such an outflow of financial resources from the aviation industry will significantly reduce its potential for further technological development including the renewal of the aircraft fleet, the introduction of new performance-based procedures and other programmes aimed at improving safety and efficiency of the global air transport system in general. It is important to note that the global nature of air transport predetermines the negative impact of technological backwardness in some regions of the world on the possibility of implementing technological advantages within the entire system of international air transport.

3.2 Amid growing global demand for air transport, the airlines of developing and emerging countries deprived of financial opportunities for further technological development will be forced to extend the operation of older and obviously less fuel-efficient aircraft that in turn will be a factor of increasing CO₂ emissions in the sector as well as to restrain the widespread introduction of new performance-based procedures, the development of civil aviation infrastructure.

3.3 It is also clear that the outflow of financial resources from the industry is reducing the capacity of the international community to provide technical assistance to developing and emerging States to improve safety and ensure the sustainable development of their national civil aviation.

4. OVERALL FINDINGS REGARDING CORSIA IMPLEMENTATION IMPACTS

4.1 For the aforementioned reasons, the following four perfectly obvious findings can be made regarding CORSIA implementation:

- a) it will have an extremely negative impact on the implementation of the main ICAO strategic objective – "Safety», as well as for the strategic objective "Economic Development of Air Transport";
- b) it contradicts the ICAO strategic objective on "Environmental Protection" and the efforts of ICAO Member States aimed at reducing CO₂ emissions from the international civil aviation sector;
- c) it will be a tool for using international civil aviation as one of the potential sources for mobilizing revenue to fund climate-related activities of other industrial sectors;
- d) it will lead to serious distortions in market relations resulting from the suppression of fast- growing airlines in developing and emerging countries and countries with economies in transition, by promoting unfair competition, which obviously contradicts the spirit and letter of the Convention on International Civil Aviation, as well as the Sustainable Development Goals of the United Nations.

4.2 The above findings cast doubt on the possibility for a global implementation of CORSIA due to the absence of any obvious environmental benefits both at the global level and at the level of the

⁴ In the aviation market in Africa, only about 20 % of the total volume of air transport work is carried out by national airlines.

industrial sector of international civil aviation. At the same time, the impacts of project implementation are contradicting the goals of the industry sustainable development and improving safety as well as the spirit and letter of the Convention on International Civil Aviation.

5. THE CLEAN DEVELOPMENT MECHANISM FOR INTERNATIONAL CIVIL AVIATION AS A REASONABLE ALTERNATIVE TO CORSIA IMPLEMENTATION

5.1 During the 11th Meeting of the ICAO Council's Environment Advisory Group (EAG) (26 to 27 May 2014), working paper EAG/11-WP/3 was presented on behalf of the Delegations of India, China and Russia, which conceptually outlined the principles of the "Clean Development Mechanism for International Civil Aviation"(ACDM), considered as a reasonable alternative to CORSIA implementation.

5.2 The intent of the proposal was to establish a mechanism for mobilizing the resources available to international civil aviation in order to fund environmentally efficient aviation projects in developing and emerging States. As a source of funding, the establishment of an environmental fee from States was proposed in an amount calculated as a flat charge rate per tonne of aviation fuel used for international flights. The responsibility for establishing the charge rate's amount would fall upon the ICAO Assembly. It is important to note that, as in the Paris Agreement, ACDM provides for the principle of voluntary participation of States on the understanding that the provision of assistance to developing and emerging countries is a condition for their participation in the ACDM programme as is the availability of their national emissions reduction plan.

5.3 Claims that the aforementioned environmental fee would be another form of taxation on civil aviation are absolutely incorrect. Unlike taxes, such a fee can be deposited into a special account within a financial institution, selected by the State, for its subsequent annual transfer to an ICAO International Environment Fund (IEF).

5.4 It is important to note that unlike the CORSIA, ACDM establishes a direct correlation between the amount of the environmental fees introduced by States and real actions aimed at reducing CO2 emissions in the sector. In terms of emissions trading, such a direct relationship between the cost of "emission units" and the result of reducing CO2 emissions is absent by definition.

5.5 ACDM implementation will not require the establishment of any costly bureaucratic superstructures. The only action for the ICAO Assembly is to call upon Member States to provide ICAO on a regular basis standard statistical data, including the statistical Form M "*Fuel Consumption and Traffic - International and Total Services, Commercial Air Carriers*"⁵

5.6 In order to control the integrity of the data provided, similar statistical data generated by ICAO's main partners, the International Air Transport Association (IATA) and the Airports Council International (ACI) can be used. For these reasons, it can be concluded that ACDM meets the requirements for ease of administration and cost effectiveness. Moreover, overhead costs for ACDM operation will be close to zero.

5.7 Unlike CORSIA, The Clean Development Mechanism for Aviation is characterized by complete predictability and transparency. However, it cannot affect in any way the existing balance in economic relations within the global air transport market. Full consideration is also given to the following principles of non-discrimination; the "Common But Differentiated Responsibilities" (CBDR) and the "Special Circumstances and Respective Capabilities of Developing Countries" (SCRCDC). It is expected that the environmental fee, included in the price of aviation fuel within each international airport of States participating in ACDM, will be equal for all operators, regardless of the nation to which they belong.

⁵ <http://www.icao.int/sustainability/pages/eap-sta-excel.aspx>

5.8 The voluntary participation principle, combined with the assistance of the aviation community to developing and emerging countries that have expressed their political will by providing to ICAO their national emission reduction plans, is fully in line with the CBDR principle. At the same time, improvements in the infrastructure of these countries will obviously have a positive impact on the global flight safety level, which will also contribute to the sustainable development of civil aviation in all ICAO Member States without exception.

5.9 The amount of the environmental fee is expected to be approved by the ICAO Assembly on a triennium basis, taking into account the projected scope of funding required for environmental projects in aviation, approved by the ICAO Council and adopted by the ICAO Assembly. For instance, if in 2020, the price for one tonne of aviation fuel included an environmental fee of one USD, the ICAO environmental programme budget size would amount to approximately \$300 million USD, increasing by almost three times the size of the annual budget of the ICAO regular programme. The ICAO Technical Cooperation Bureau would implement the environmental projects within the States through the ICAO Technical Assistance Programme, giving a real meaning to the ICAO slogan, "No country left behind" (NCLB) in full compliance with the Sustainable Development Goals of the United Nations.

5.10 ACDM also takes full account of the efforts of airlines that have already invested in improving the fuel efficiency of their aircraft fleet, as well as other earlier actions by airlines (prior to ACDM introduction), including those of their aviation administrations aimed at reducing CO₂ emissions.

5.11 The idea of establishing international funds under the auspices of ICAO is not new. In 1998, the 32nd Session of the ICAO Assembly addressed the matter of establishing an "ICAO International Monetary Fund" for the purposes of funding the implementation of CNS/ATM components and other safety-related projects at the global level. However, unlike CORSIA, the need for implementing that initiative then was not dictated by the global challenges affecting the security and sustainable development of all countries, without exception.

6. POTENTIAL CONTRIBUTION OF THE INTERNATIONAL AVIATION COMMUNITY TO REAL REDUCTION OF GREENHOUSE GAS EMISSIONS AT THE GLOBAL LEVEL

6.1 According to the United Nations Economic Commission for Europe (UNECE), the World Wildlife Fund (WWF) and other organizations, about three million hectares of forest land are destroyed by fire each year. In addition to the serious social impacts of large forest fires associated with the destruction of human settlements, the mass loss of animals there is a decrease of the regenerative potential of CO₂ absorption by forests, millions of kilowatts of heat energy are allocated and there is an annual simulation of up to 700 million tons of CO₂ that is comparable to the expected global level of emissions from international civil aviation in 2020.

6.2 In this regard, the Assembly is invited to consider as a reasonable alternative to CORSIA implementation the possibility of initiating the creation under the auspices of the UN mobile aviation forces to fight forest fires and other natural disasters that could fully meet the sustainable development goals of the United Nations (similar to the United Nations Peacekeeping forces) that can be considered as an indisputable and significant contribution of international civil aviation to the prevention of catastrophic impacts of climate change and the implementation of the sustainable development goals of the United Nations (Resolution A/RES/70/1 of the United Nations General Assembly *Transforming our world: the 2030 Agenda for Sustainable Development*). The activities of these mobile forces could be funded under inter alia funds of the previously mentioned ICAO International Environment Fund (IEF).

APPENDIX

RESOLUTION A40-XX. CONSOLIDATED STATEMENT OF CONTINUING ICAO POLICIES AND PRACTICES RELATED TO ENVIRONMENTAL PROTECTION – CLEAN DEVELOPMENT MECHANISM FOR INTERNATIONAL CIVIL AVIATION.

The Assembly:

Recognizing that ICAO is the appropriate forum to address emissions from international aviation;

Noting the support of the aviation industry for a single global carbon offsetting scheme, as opposed to a patchwork of State and regional MBMs, as a cost-effective measure to complement a broader package of measures including technology, operations and infrastructure measures;

Recognizing that MBMs should not be duplicative and international aviation CO₂ emissions should be accounted for only once;

Reaffirming the concern with the use of international civil aviation as a potential source for the mobilization of revenue for climate finance to the other sectors, and that MBMs should ensure the fair treatment of the international aviation sector in relation to other sectors;

Recalling the UNFCCC and the Paris Agreement and acknowledging its principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances;

Also acknowledging the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Convention on International Civil Aviation;

Welcoming the adoption of the Paris Agreement under the UNFCCC and *recognizing* that the work related to a global MBM scheme for international aviation and its implementation will contribute to the achievement of the goals set out in the Paris Agreement;

Whereas the UNFCCC and the Paris Agreement provide for mechanisms, such as the Clean Development Mechanism (CDM) and a new market mechanism under the Paris Agreement, to contribute to the mitigation of GHG emissions to support sustainable development, which benefit developing and emerging States in particular;

Welcoming the cooperation between the United Nations Framework Convention on Climate Change (UNFCCC) and ICAO on the development of CDM methodologies for aviation;

Recognizing that this Resolution does not set a precedent for or prejudice the outcome of negotiations under the UNFCCC, the Paris Agreement, or other international agreements, nor represent the position of the Parties to the UNFCCC, the Paris Agreement, or other international agreements;

1. *Resolves* that this Resolution, together with Resolution A40-X: *Consolidated statement of continuing ICAO policies and practices related to environmental protection - General provisions, noise and local air quality* and Resolution A40-Y: *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*, supersede Resolutions A39-1, A39-2 and A39-3 and constitute the consolidated statement of continuing ICAO policies and practices related to environmental protection;

2. *Acknowledges* the progress achieved on all elements of the basket of measures available to address CO₂ emissions from international aviation, including aircraft technologies, operational improvements, sustainable alternative fuels and a GMBM scheme and any other measures, and *affirms*

the preference for the use of aircraft technologies, operational improvements and sustainable alternative fuels that provide the environmental benefits within the aviation sector;

3. *Also acknowledges* that, despite this progress, the environmental benefits from aircraft technologies, operational improvements and sustainable alternative fuels may not deliver sufficient CO₂ emissions reductions to address the growth of international air traffic, in time to achieve the global aspirational goal of keeping the global net CO₂ emissions from international aviation from 2020 at the same level;

4. *Resolves*, that in the absence of any scientific foundation, to exclude from further consideration the CNG 2020 global aspirational goal as inconsistent with the sector's real possibilities, and to focus efforts on reaching the ambitious global aspirational goal of a two per cent annual increase in fuel efficiency, without excluding the possibility of a more ambitious increase of this rate based on new technological developments in the field of aviation in the foreseeable future;

5. *Emphasizes* the role of a GMBM scheme to complement a broader package of measures to achieve the global aspirational goal, without imposing inappropriate economic burden on international aviation;

6. *Determines* that in the spirit of the Paris Agreement on the Climate, the Clean Development Mechanism for International Civil Aviation (ACDM) is to be the only market-based measure applying to CO₂ emissions from international aviation;

7. *Requests* the Council of ICAO to develop as soon as possible a Global Market-based Measure (GMBM) scheme as a Clean Development Mechanism for International Civil Aviation (ACDM) in order to achieve the best possible results in reducing CO₂ emissions from international civil aviation through economic incentives for implementing energy-saving technologies and the provision of targeted assistance in the implementation of environmentally efficient projects to developing and emerging States that voluntarily decide to participate in ACDM-based GMBM;

8. *Requests* the Council of ICAO to develop as soon as possible a position on the ICAO International Environment Fund (IEF) in order to accumulate environmental fees from States participating in ACDM on a voluntary basis, and the appropriate guidance material to ensure that those States develop and implement the appropriate provisions into national laws, providing for the procedure to establish the environmental fees and for their transfer to the ICAO IEF;

9. *Resolves* to hold in 2020 a high-level meeting on environmental protection to assess the preparedness of ICAO and Member States to implement ACDM-based GMBM in 2021;

10. *Urges* Member States to make every effort to fulfil their obligations under the Convention and Assembly Resolutions, to support the Organization's work in the air transport field, and in particular, to present as expeditiously as possible the most comprehensive statistical and other data, including information on Fuel Consumption and Traffic – International and Total Services, Commercial Air Carriers (reporting form M3), required by the Organization for its work in the air transport field;

11. *Requests* the Council to continue to ensure all efforts to make further progress on aircraft technologies, operational improvements and sustainable alternative fuels be taken by Member States and reflected in their action plans to address CO₂ emissions from international aviation, which are the basis for the provision of targeted technical assistance within the ACDM framework, and to monitor and report the progress on the implementation of action plans, and that a methodology be developed under the scheme to assess the reduction of emissions by an operator in a given year through the use of all the available elements from the basket of measures, including sustainable alternative fuels;

12. *Acknowledges* special circumstances and respective capabilities of States, in particular developing and emerging States, in terms of vulnerability to the impacts of climate change, economic development levels, and contributions to international aviation emissions, among other things, while prioritizing the provision of technical assistance to them within the ACDM framework;

13. *Calls upon* all States to take a decision as soon as possible on joining the ACDM and to officially inform the Council of ICAO of their intention;

14. *Notes* the work of the Council, with the technical contribution of CAEP, on the monitoring, reporting and verification (MRV) system and *requests* the Council, with the technical contribution of CAEP, to develop as soon as possible an emissions tracking system based on the statistical data provided by States on a regular basis and to ensure its verification based on statistical data generated by IATA and ACI so as to enable the full implementation of ACDM from 2021;

15. *Decides* that a periodic review of the effectiveness of ACDM implementation is carried out in order to assess the actual reduction in CO₂ emissions resulting from the implementation of projects within the ACDM framework in order to contribute to the sustainable development of the international aviation sector and the effectiveness of the scheme, for consideration by the Assembly. This will involve, inter alia:

- a) assessment of progress towards achieving the ICAO's global aspirational goal; the scheme's market and cost impact on States and aircraft operators and on international aviation; and the functioning of the scheme's design elements;
- b) consideration of the scheme's improvements that would support the purpose of the Paris Agreement; and update the scheme's design elements to improve implementation, and increase effectiveness, taking into account the consequential impact of changing the scheme's design elements, e.g., to MRV requirements; and
- c) oversight by the Council of the functioning of ACDM, with support provided by the standing technical advisory body and CAEP as needed;
- d) Member States taking the necessary action to ensure that the appropriate national policies and regulatory framework be established for the purposes of voluntary participation in ACDM;
- e) Member States to build partnerships among themselves to cooperate on the implementation of the MRV system;

16. *Decides* that ICAO and Member States take all necessary actions in providing the capacity building and assistance and building partnerships for ACDM implementation from 2020;

17. *Recommends* Member States to develop local environmentally efficient projects in the field of aviation and to direct them to ICAO for assessment to ensure their inclusion in the ACDM programme;

18. *Requests* the ICAO Council to identify projects within the States funded under ACDM, with a view to implementing them by 2030, and to prepare proposals for prioritizing their approval during the 40th Session of the ICAO Assembly in 2022;

19. *Requests* the Council to explore the further development of aviation-related methodologies for use in CO₂ reduction programmes, including mechanisms or other programmes under the UNFCCC, and encourages Member States to use such methodologies in taking actions to reduce aviation CO₂ emissions, without double-counting.