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WORKING PAPER

ASSEMBLY — 42ND SESSION

EXECUTIVE COMMITTEE

Agenda item 16: Environmental Protection – International Aviation and Climate Change

POSITION OF THE RUSSIAN FEDERATION ON THE ICAO I4F INITIATIVE ON THE ORGANIZATION OF AN INTERNATIONAL DIALOGUE IN THE FIELD OF AERIAL FIREFIGHTING

(Presented by the Russian Federation)

EXECUTIVE SUMMARY

In the task of reducing global CO_2 emissions, one vital solution is to increase the absorption capacity of forests and reduce harmful emissions from wildfires.

The effective use of aircraft in fighting wildfires can significantly reduce the resulting emissions of CO_2 and contribute to the conservation of biodiversity through such means as the earlier detection of fires, the use of high-tech aviation monitoring devices (including uncrewed aerial systems of various sizes and global satellite monitoring), high efficiency in the delivery of the necessary volumes of fire extinguishing agents, a prompt start to the work of extinguishing the fire, and the possibility of fighting wildfires regardless of the actual availability and condition of local access roads.

Nowadays it is entirely justifiable to speak of the globalization of the impact of forest fires around the world in view of the cross-border nature of their consequences, the insufficiency of local resources and, lastly, the overall impact on the ecosphere, climate change and biodiversity.

In aerial firefighting, there is considerable potential for increased efficiency in the use of aircraft. This potential, first of all, is associated with the legal issues hindering the prompt deployment of the aircraft of certain countries to fight fires in other countries, with difficulties in the international recognition and appropriate certification of aerial firefighting equipment and of advanced methods and systems for supporting aerial firefighting, and with ensuring the heightened safety of firefighting aircraft in flight and other issues. It is precisely the International Civil Aviation Organization (ICAO) that is probably best placed to deal with these issues. ICAO could undertake the development of international rules, taking into account national public policy, and could set in place a legal framework for the use of international aviation in fighting wildfires.

Russia actively advocates the development of international cooperation in the field of aerial firefighting and supports the ICAO initiative to organize the ICAO Flying Forest Fire Fighting (I4F) Dialogue.

Action: The Assembly is invited to:

a) agree that the impact of forest fires around the world has become global in scope, in view of the transboundary nature of their consequences, the insufficiency of local resources and, lastly, the overall impact on the ecosphere, climate change and biodiversity;
b) support the ICAO I4F initiative to organize an international dialogue on the aerial fighting of forest fires; and
c) within the framework of the ICAO I4F initiative, and with the participation of the ICAO Secretariat and representatives of interested countries and organizations, to instruct the Council to establish an

[1] Russian version provided by the Russian Federation

initiative coordination group under the auspices of ICAO to prepare working documents on specific proposals for enhancing international dialogue in the field of aerial firefighting, and to organize the first meeting of this group at the 30th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP30), to be held in Belém, Brazil, from 10 to 21 November 2025.	
Strategic Goals:	This working paper relates to Strategic Goal *Aviation is Environmentally Sustainable*
Financial implications:	This will not require additional financial resources.
References:	1. "State of wildfires", in the journal *Earth System Science Data*, vol. 16, No. 8, 2024, pp. 3601–3685, available at https://essd.copernicus.org/articles/16/3601/2024/. 2. Climate Doctrine of the Russian Federation December 2009 (validating Presidential Resolution No. 861-rp), unofficial translation. 3. Paris Agreement, United Nations Framework Convention on Climate Change (UNFCCC), 2015, available at https://unfccc.int/process-and-meetings/the-paris-agreement. 4. Artur Mirzoyan and Konstantin Gongalsky, "Aerial wildfire fighting: Russian experience and a look at the future", *ICAO Environmental Report 2022*: *Innovation for a Green Transition*, available at https://www.icao.int/environmental-protection/Pages/envrep2022.aspx.

1. INTRODUCTION

1.1 According to scientists from the University of East Anglia, the United Kingdom Centre for Ecology and Hydrology, the Met Office of the United Kingdom and the European Centre for Medium-Range Weather Forecasts, global annual carbon emissions from wildfires in the 2023–2024 season amounted to 8.6 billion metric tons of CO_2. This represents almost 25 per cent of the total annual emissions of CO_2 from fossil fuel combustion in 2023. Every year, millions of hectares of forests are ravaged by wildfires, human lives are endangered and flora and fauna are destroyed.

1.2 In addition, the damage from wildfires is estimated at billions of dollars. In Russia alone, according to the Ministry of the Russian Federation for Civil Defence, Emergencies and Elimination of the Consequences of Natural Disasters, the total cost of damage from forest fires over 11 months of 2024 amounted to 16 billion rubles.

1.3 Forests are of great importance for the climate policy of the Russian Federation. From 1990 to 2023, forests in the Russian Federation absorbed about 60 per cent of all anthropogenic emissions of greenhouse gases over that period. In 2020, the Russian Federation, as a party to the Paris Agreement, assumed voluntary commitments reflected in its nationally determined contribution, pursuant to which the Russian Federation will ensure a reduction of up to 70 per cent in its greenhouse gas emissions by 2030 compared to the 1990 level. Achievement of this target is conditional on taking into account the maximum possible absorption capacity of forests and other ecosystems. The key long-term goal of the climate policy of the Russian Federation in accordance with the Climate Doctrine of the Russian Federation is to achieve a balance between anthropogenic emissions of greenhouse gases and their absorption by no later than 2060.

1.4 A significant increase in the efficiency of measures to boost the absorption capacity of forests, to reduce CO_2 emissions from wildfires and to conserve biodiversity can be achieved through integrated wildfire management, including planning and the prevention, early detection, suppression and mitigating the negative consequences of fires. Today, the most vital element of this integrated approach to combating wildfires is the sensible use of the capabilities of modern aviation.

1.5 In aerial firefighting, there is considerable potential for increased efficiency in the use of aircraft. This potential, first of all, is associated with the legal issues hindering the prompt deployment of the aircraft

of certain countries to fight fires in other countries, with difficulties in the international recognition and appropriate certification of aerial firefighting equipment and of advanced methods and support systems for aerial firefighting, and with ensuring the heightened safety of firefighting aircraft in flight and other issues. It is precisely ICAO that is probably best placed to deal with these issues. ICAO could ensure the timely development of international rules, taking into account national public policy, and could undertake the formation of a legal framework for the use of international aviation in fighting wildfires across the world.

2. AVIATION, WILDFIRES AND BIODIVERSITY

2.1 Wildfires have serious consequences for biodiversity and biogeochemical cycles. While on a global scale they generate huge emissions of CO_2, on a local scale they cause significant changes in biodiversity and the loss of nutrients and carbon from the soil through smoke and the subsequent leaching of compounds contained in the ash.

2.2 Given the projected increase in the frequency of global wildfires over the next century, it is likely that fire will pose a major threat to forest ecosystems worldwide.

2.3 The effective use of aviation in fighting wildfires can significantly reduce their CO_2 emissions and contribute to the conservation of biodiversity through the earlier detection of fires, the use of high-tech aviation monitoring devices (including uncrewed aerial systems and global satellite monitoring), high efficiency in the delivery of the necessary volumes of fire extinguishing agents, a prompt start to the work of extinguishing the fire, and the possibility of fighting wildfires regardless of the actual availability and condition of local access roads.

3. EXPERIENCE OF RUSSIA

3.1 Forests make up almost half of the area of Russia (46 per cent), and 90 per cent of these are boreal (taiga) forests, the most prone to fires (often the fires in these forests are far from settlements and roads). The use of firefighting aircraft in such forests, which are remote from settlements and provide the habitats of many species of animals and plants, is an effective approach to the suppression of wildfires.

3.2 At present, Russia has some of the world's strongest, most varied and well-equipped aerial firefighting equipment. Among these aircraft, those which have been most effective are the multi-purpose aircraft in the Antonov An-2/3 family, the Beriev Be-200ES flying boat, the Ilyushin Il-76 airlifter, the Mil Mi-8 and Kamov Ka-32A helicopters, and also the Mil Mi-26T heavy transport helicopter. They are being successfully used not only in Russia, but also abroad (for example, on the Balkan peninsula, in Abkhazia, Armenia, Chile, Israel, Indonesia, Portugal, Serbia, Türkiye and many other countries).

4. ROLE OF ICAO IN INTERNATIONAL COOPERATION IN AERIAL FIREFIGHTING

4.1 Nowadays it is entirely justifiable to speak of the globalization of the impact of forest fires around the world, in view of the cross-border nature of their consequences, the insufficiency of local resources and, lastly, the overall impact on the ecosphere, climate change and biodiversity.

4.2 At present, there are a large number of international organizations engaged in international cooperation in the fields of natural disaster response, aerial firefighting, global fire monitoring and others.

4.3 At the same time, it is precisely in aerial firefighting that a perceptible shortcoming may be observed in the effective use of aircraft in the suppression of wildfires and the preservation of biodiversity. This shortcoming is associated with the wide range of legal issues hampering the prompt and effective deployment of the aircraft of certain countries to fight fires in other countries, including difficulties in the international recognition and appropriate certification of aerial firefighting equipment and of advanced methods and support systems for aerial firefighting, and ensuring the heightened safety of firefighting aircraft in flight and many other issues.

4.4 It is precisely ICAO that is probably best placed to deal with these issues. ICAO could ensure the timely development of international rules, taking into account national public policy, and could undertake the formation of a legal framework for the use of international aviation in fighting wildfires.

4.5 In response to the need to strengthen international cooperation among States and other stakeholders in the field of aerial fighting of wildfires, the I4F initiative was launched under the auspices of ICAO to create a global platform for the exchange of knowledge and best practices related to aerial firefighting of the world's wildfires.

4.6 Within the framework of the I4F initiative, a wide-ranging discussion and dialogue on legal issues of international cooperation aimed at enhancing the effectiveness of the use of aircraft in fighting wildfires around the world could be initiated on the platform of ICAO.

4.7 It would be make good sense, with the participation of the ICAO Secretariat and representatives of interested countries and organizations, to set up an initiative coordination group under the auspices of ICAO to prepare working documents on proposals for expanding international dialogue in the field of aerial firefighting. The first meeting of this group could be held at the forthcoming COP30, which will be taking place in Belém, Brazil, from 10 to 21 November 2025.

4.8 ICAO could genuinely help the forest sector, to which humanity owes a great debt, to become more resilient to global wildfires, to remain the world's main carbon sink, and thereby to influence global emissions of CO_2 and the conservation of biodiversity.

5. CONCLUSION

5.1 The use of aircraft for the more effective suppression of wildfires worldwide is now of vital importance for reducing global emissions of CO_2, in view of the need to boost the absorption capacity of forests and to reduce emissions from the fires themselves.

5.2 Given the increasingly serious impacts of wildfires on biodiversity conservation and biogeochemical cycles, aviation has a unique role to play in mitigating these impacts.

5.3 Taking into account the extensive successful experience of using the powerful Russian fleet of firefighting aircraft and equipment both in Russia and abroad, Russia actively supports the ICAO I4F initiative to organize an international dialogue in the field of aerial firefighting.

5.4 Development of the I4F initiative on the platform of ICAO, with the involvement of interested States in a broad international cooperative venture in the aerial control of wildfires, will, with time, enable significant reductions in the impact of global wildfires on global emissions of CO_2 and on biodiversity conservation.

5.5 Taking into account the need to expand and invigorate the international dialogue in the field of aerial firefighting within the framework of the ICAO I4F initiative, it would make good sense, with the participation of the ICAO Secretariat and representatives of interested countries and organizations, to set up an initiative coordination group under the auspices of ICAO to prepare draft working documents with specific proposals in this area. The first working meeting of this initiative group could be held at the forthcoming COP30, which will take place in Belém, Brazil, from 10 to 21 November 2025.

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