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HLM-LTAG

INTERNATIONAL CIVIL AVIATION ORGANIZATION

**REPORT OF THE HIGH-LEVEL MEETING ON  
THE FEASIBILITY OF A LONG-TERM ASPIRATIONAL GOAL  
FOR INTERNATIONAL AVIATION CO<sub>2</sub> EMISSIONS REDUCTIONS**

**(HLM-LTAG)**



**MONTRÉAL,  
19-22 JULY 2022**

**International Civil Aviation Organization**

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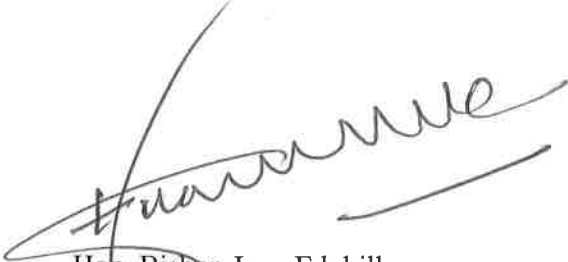
**Montréal, 19-22 July 2022**

## LETTER OF TRANSMITTAL

To: President of the Council

From: Chairman, High-level Meeting on the feasibility of a Long-Term Aspirational Goal for international aviation CO<sub>2</sub> emissions reductions (HLM-LTAG)

I have the honour to submit the Report on the work of the High-level Meeting on the feasibility of a Long-Term Aspirational Goal for international aviation CO<sub>2</sub> emissions reductions (HLM-LTAG), held at ICAO Headquarters in Montréal from 19 to 22 July 2022.



Hon. Bishop Juan Edghill  
Chairman

Montréal, 22 July 2022



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## INTRODUCTION

### Site and duration of the High-level Meeting

1. The High-level Meeting on the feasibility of a Long-Term Aspirational Goal for international aviation CO<sub>2</sub> emissions reductions (HLM-LTAG) was convened at the Assembly Hall of the Headquarters of the International Civil Aviation Organization (ICAO) in Montréal, Canada from 19 to 22 July 2022, as a hybrid event with in-person and virtual participation.

### Attendance

2. The following 104 Member States of ICAO attended the Meeting:

|                                  |                             |                      |
|----------------------------------|-----------------------------|----------------------|
| Argentina                        | France                      | Panama               |
| Australia                        | Gabon                       | Papua New Guinea     |
| Austria                          | Germany                     | Paraguay             |
| Azerbaijan                       | Ghana                       | Peru                 |
| Bahamas                          | Greece                      | Philippines          |
| Bangladesh                       | Guatemala                   | Poland               |
| Benin                            | Guyana                      | Portugal             |
| Bolivia (Plurinational State of) | Hungary                     | Qatar                |
| Bosnia and Herzegovina           | Iceland                     | Republic of Korea    |
| Brazil                           | India                       | Republic of Moldova  |
| Bulgaria                         | Indonesia                   | Romania              |
| Cabo Verde                       | Iran, (Islamic Republic of) | Russian Federation   |
| Cambodia                         | Ireland                     | Rwanda               |
| Cameroon                         | Israel                      | Saudi Arabia         |
| Canada                           | Italy                       | Senegal              |
| Chile                            | Jamaica                     | Serbia               |
| China                            | Japan                       | Sierra Leone         |
| Colombia                         | Jordan                      | Singapore            |
| Costa Rica                       | Kazakhstan                  | Slovakia             |
| Côte d'Ivoire                    | Kenya                       | South Africa         |
| Cuba                             | Malaysia                    | Spain                |
| Cyprus                           | Maldives                    | Sri Lanka            |
| Czechia                          | Malta                       | Sudan                |
| Democratic Republic of the Congo | Mauritania                  | Suriname             |
| Denmark                          | Mauritius                   | Sweden               |
| Dominican Republic               | Mexico                      | Switzerland          |
| Ecuador                          | Nepal                       | Thailand             |
| Egypt                            | Netherlands                 | Trinidad and Tobago  |
| Equatorial Guinea                | New Zealand                 | Türkiye              |
| Ethiopia                         | Nigeria                     | Ukraine              |
| Fiji                             | North Macedonia             | United Arab Emirates |
| Finland                          | Norway                      | United Kingdom       |
|                                  | Oman                        | United States        |
|                                  | Pakistan                    | Uruguay              |

Venezuela (Bolivarian  
Republic of)

Viet Nam  
Zambia

Zimbabwe

3. The following 15 International Organizations attended the Meeting:

African Civil Aviation Commission (AFCAC)  
 Agency for Air Navigation Safety in Africa and Madagascar (ASECNA)  
 Air Transport Action Group (ATAG)  
 Airports Council International (ACI)  
 Arab Civil Aviation Organization (ACAO)  
 Civil Air Navigation Services Organisation (CANSO)  
 European Civil Aviation Conference (ECAC)  
 European Union (EU)  
 International Air Transport Association (IATA)  
 International Business Aviation Council (IBAC)  
 International Coalition for Sustainable Aviation (ICSA)  
 International Coordinating Council of Aerospace Industries Associations (ICCAIA)  
 International Partners for Aviation Development, Innovation and Sustainability (iPADIS)  
 Latin American Civil Aviation Commission (LACAC)  
 Royal Aeronautical Society (RaeS)

4. A list of participants to the HLM-LTAG is provided in Appendix A to this report.

## Background

5. The Assembly of the ICAO, at its 40th Session (Montréal, 4 September to 4 October 2019), adopted Resolution A40-18: *Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change*, which requested the Council to explore the feasibility of a long-term global aspirational goal (LTAG) for international aviation, and for the progress of the work to be presented to the 41st Session of the ICAO Assembly (40-18, paragraph 9 refers).

## Opening of the Meeting

6. The High-level Meeting began with an inspirational video<sup>1</sup> on the LTAG process, highlighting the urgency to deal with the climate impact of aviation and this was followed by the opening from Mr. Salvatore Sciacchitano, President of the ICAO Council. In his opening address, the President welcomed the Delegations and encouraged them to demonstrate collective determination to build a sustainable future for international aviation, and to show strong political will on the part of States to work together through ICAO, with each other, and with the aviation industry to deliver outcomes for an ambitious LTAG. The President highlighted the technical work of the ICAO Committee on Aviation Environmental Protection (CAEP) on the LTAG Report, which outlined three integrated aviation in-sector CO<sub>2</sub> emissions reduction scenarios for an LTAG, covering a range of readiness, attainability, and ambition. This report had been agreed by consensus in the CAEP and was published by the Council in March 2022. The President also underscored that an LTAG must be delivered together with concrete and practical means of support

<sup>1</sup> [https://youtu.be/8fCvQ\\_Htmqo](https://youtu.be/8fCvQ_Htmqo)



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for implementation and monitoring progress, as the agreement of a “balanced package” for all, under the leadership of ICAO in a post-COVID world.

### **Keynote address**

7. Dr. Bertrand Piccard, Initiator and Chairman, Solar Impulse Foundation, provided a keynote address to the Meeting.

### **Election of the Chairperson and Vice-Chairperson of the Meeting**

8. On the nomination of Singapore, seconded by Greece and Colombia, the Honourable Bishop Juan Edghill, Minister of Public Works of Guyana was elected Chairperson of the Meeting. Her Excellency Ms. Aishath Nahula, Minister of Transport and Civil Aviation of Maldives, was elected first Vice-Chairperson, and Ms. Charity Musila, Alternate Permanent Representative of Kenya to ICAO was elected second Vice-Chairperson of the Meeting.

### **Secretariat**

9. The Meeting noted that Mr. J.C. Salazar, Secretary General of ICAO, would be Secretary of the Meeting, advised by Mr. M.K. Rahma, Director, Air Transport Bureau (ATB), and Ms. J. Hupe, Deputy Director, Environment, ATB. A number of senior staff would also participate and the full resources of the Secretariat were at the disposal of the Meeting.

### **Setting of the scene presentation on an LTAG**

10. The Meeting noted the setting of the scene presentation on an LTAG made by Ms. J. Hupe, Deputy Director, Environment, ATB, which provided the context and basis by which the various Agenda items for the Meeting had been set out.

### **High-level statements by States and International Organizations**

11. Oral Statements were delivered by high-level representatives of 27 Member States (Argentina, Brazil, Cabo Verde, Canada, Chile, China, Czechia, France, Greece, India, Indonesia, Japan, Malaysia, Maldives, Netherlands, New Zealand, Oman, Qatar, Republic of Korea, Russian Federation, Rwanda, Saudi Arabia, Singapore, Spain, United Arab Emirates, United Kingdom, and the United States), as well as three International Organizations (Airports Council International, Air Transport Action Group, and European Union). In addition, Guatemala and Peru also provided their views on an LTAG. The written oral statements submitted to the ICAO Secretariat are available on the HLM-LTAG website<sup>2</sup>.

### **Administrative arrangements and agenda**

12. Delegates were informed that the Meeting would be conducted under the ICAO's *Standing Rules of Procedure for Meetings in the Air Transport Field* (Doc 8683). The Meeting agreed on the working

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<sup>2</sup> <https://www.icao.int/Meetings/HLM-LTAG/Pages/Statements.aspx>

hours, and the timetable as described in HLM-LTAG-WP/1. In response to HLM-LTAG-WP/23 presented by Brazil, China, India and Russian Federation, which requested amendments to the Agenda items contained in WP/1, the Meeting noted that the Agenda items had already been approved by the ICAO Council, and the proposed topics raised in WP/23 regarding the principle of common but differentiated responsibilities (CBDR) and the means of implementation would be accommodated during the discussion of the Agenda items.

### **Documentation**

13. A list of the documentation associated with the work of the HLM-LTAG is presented in Appendix B. The 30 Working Papers and 12 Information Papers prepared and submitted by the ICAO Secretariat as well as by States and International Organizations are available on the HLM-LTAG website<sup>3</sup>.

14. In addition to the Working Papers and Information Papers, four documents were prepared by the ICAO Secretariat under the guidance of the Chairperson (i.e., HLM-LTAG-SD/1, HLM-LTAG-SD/2, HLM-LTAG-SD/3, and HLM-LTAG-SD/4 and its Revisions 1 and 2) containing summaries of the discussions and conclusions arrived at through discussions during the HLM-LTAG, as agreed by HLM-LTAG participants.

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<sup>3</sup> <https://www.icao.int/Meetings/HLM-LTAG/Pages/Documentation.aspx>

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**Agenda Item 1: CO<sub>2</sub> emissions reduction scenarios and options for a long-term global aspirational goal for international aviation****1.1. Documentation**

1.1.1 The Meeting considered four Working Papers by the Secretariat, and 11 Working Papers from States and International Organizations. A summary of these papers are detailed below.

1.1.2 HLM-LTAG-WP/2 presented by the Secretariat provided the overview of ICAO's work on the feasibility of an LTAG, and explained the six LTAG Building Blocks which served as basis for the structuring and facilitation of discussions on the LTAG-related topics.

1.1.3 HLM-LTAG-WP/3 presented by the Secretariat provided information on recent developments in other United Nations (UN) bodies of relevance to international aviation, in particular to the feasibility of an LTAG for international aviation.

1.1.4 HLM-LTAG-WP/4 presented by the Secretariat focused on the technical assessment performed by CAEP on the feasibility of various aviation in-sector CO<sub>2</sub> emissions reduction scenarios, noting that the largest potential impact on aviation CO<sub>2</sub> emissions reduction will come from fuel-related measures, while observing an unprecedented level of emerging new technologies and innovations towards a green aviation transition.

1.1.5 HLM-LTAG-WP/5 presented by the Secretariat provided information on ICAO's work of relevance to the level of ambition for an LTAG for international aviation, through an information sharing and consultative process, such as the annual ICAO Stocktaking, and the LTAG Global Aviation Dialogues (GLADs), as well as the commitments by States, aviation industry and other stakeholders.

1.1.6 HLM-LTAG-WP/10 presented by Indonesia expressed the view that an LTAG should not hamper the growth of the aviation industry, especially in developing countries. The view highlighting the need for capacity building and cooperation by ICAO Member States to minimize unintended impact from the implementation of LTAG, would be discussed in Agenda item 2.

1.1.7 HLM-LTAG-WP/9 presented by China and Russian Federation expressed the need for continued research to develop more objective scenarios for a real reduction in CO<sub>2</sub> emissions, and to identify possible sources of funding for projected activities at the global level. It was suggested that LTAG scenarios should include the establishment of an international aviation force under the auspices of the UN to combat forest fires and other natural calamities. Also, it was proposed to ICAO to consider an evolutionary transition from the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to LTAG to avoid an unsustainable financial burden on the industry, especially in developing countries. The Chairperson explained ICAO's ongoing preparatory work in combating forest fires and other natural calamities, and also clarified that while out-of-sector measures could be part of the considerations in the context of an LTAG, the Meeting would not specifically discuss CORSIA or regional market-based measures.

1.1.8 HLM-LTAG-WP/12 presented by Egypt, Kuwait, Oman, Qatar, Saudi Arabia, Sudan and United Arab Emirates, and supported by ACAO, highlighted the view on considering a detailed review on the economic impact of any agreed LTAG, principles upon setting any LTAG, and limiting LTAG discussion and potential decision to aviation in-sector measures, as well as on acknowledging regional

endeavours to the production and use of novel fuels, including on Lower Carbon Aviation Fuel (LCAF) among others, as an efficient measure to reduce emissions from international aviation.

1.1.9 HLM-LTAG-WP/18 presented by Czechia on behalf of the EU and its Member States and the other Member States of the ECAC expressed the view to retain options for an LTAG which included a goal consistent with the temperature goals of the Paris Agreement, such as net-zero international aviation CO<sub>2</sub> emissions by 2050 with trajectory milestones, as well as to set at the ICAO Conference on Aviation and Alternative Fuels (CAAF/3) in 2023 a global framework for the deployment of sustainable aviation fuels (SAF) in a sustainable manner. The views on launching a process towards establishing means to monitor, report and verify the progress for the achievement of an LTAG, by the end of 2023, would be discussed in Agenda item 3.

1.1.10 HLM-LTAG-WP/21 presented by China, India, Russian Federation and Saudi Arabia expressed the view that ICAO must consider principles of common but differentiated responsibilities (CBDR) and equity while deciding on an LTAG, and for developed nations to take an immediate lead in peaking and reducing carbon emissions and logically reaching the goal of net-zero first. The view concerning the building of assistance mechanisms, and to provide developing countries with adequate technical, funding, and capacity building to strengthen their efforts to address international aviation and climate change, would be discussed in Agenda item 2.

1.1.11 HLM-LTAG-WP/24 presented by Brazil, China, India and Russian Federation expressed the view that addressing climate change included key elements of mitigation, adaptation, finance and technology, and the need for ICAO to wholly consider relevant United Nations Framework Convention on Climate Change (UNFCCC) legal documents and Intergovernmental Panel on Climate Change (IPCC) research findings when discussing long-term goals and other aviation emission reduction issues, especially the principles of fairness and CBDR.

1.1.12 HLM-LTAG-WP/25 presented by China, India and Russian Federation expressed the view that the work undertaken by the ICAO Council and supported by CAEP has not fulfilled the mandate of the 40th Session of the Assembly, and that the LTAG Report could not be used as the basis for the negotiations and consultations on the feasibility of any proposed LTAG at the 41st Session of the Assembly.

1.1.13 HLM-LTAG-WP/26 presented by China, India and Russian Federation expressed the view that enhancing the ambition of LTAG should be based on the stocktaking and research on the emission reduction goals and action independently determined by States, on the premise that developed countries take the lead in the dramatic reduction of emissions and provide adequate assistance to developing countries.

1.1.14 HLM-LTAG-WP/30 presented by New Zealand and co-sponsored by Canada, Cook Islands, Japan, Kenya, Kiribati, Papua New Guinea and Samoa expressed the view that decisions on climate action cannot be delayed, and that States should strive for an ambitious LTAG. The view that the delivery of an LTAG should include considerations of the need for an equitable transition would be discussed in Agenda item 2.

1.1.15 HLM-LTAG-WP/11 presented by ICSA expressed views supporting a net-zero emissions goal for international aviation, and for an LTAG to be in the form of a cumulative emissions target plus a designated year to peak emissions as an interim milestone. The Chairperson indicated that ICSA's proposal to encourage States to include their share of aviation emissions in Nationally Determined Contributions

(NDCs) of the UNFCCC Paris Agreement cannot be considered by the meeting of ICAO Member States, as emissions from international aviation were not part of NDCs and being addressed by ICAO. ICAO cannot take a decision on behalf of Parties to the UNFCCC, and vice versa, as both are sovereign UN bodies with respective mandates and memberships. The Chairperson also emphasized the fundamental role of ICAO in global harmonization, which would frame how discussions on an LTAG should take a global view, whilst taking into account different national and regional circumstances.

1.1.16 HLM-LTAG-WP/20 presented by ACI, CANSO, IATA, IBAC and ICCAIA, coordinated by ATAG, expressed the aviation industry's collective view for a sector-wide ICAO long-term aspirational goal for aviation climate action, in line with the Paris Agreement stretch goal of 1.5°C and backed by the latest scientific advice on limiting the worst impacts of climate change, and enable the achievement of net-zero carbon emissions by 2050. The view on ICAO Council to develop, with full support from industry, a work programme to determine the means of implementation for an LTAG, would be discussed in Agenda item 2.

1.1.17 The Chairperson also acknowledged the contributions of the following Information Papers to the Meeting: HLM-LTAG-IPs 1, 2, 3 and 4 by the Secretariat; HLM-LTAG-IP/5 by IBAC coordinated by ATAG; HLM-LTAG-IP/6 by ICSA; HLM-LTAG-IP/7 by CANSO; HLM-LTAG-IP/8 by ICCAIA coordinated by ATAG; HLM-LTAG-IP/9 by IATA; and HLM-LTAG-IP/10 by ATAG. The Meeting was presented with a video<sup>4</sup> provided by ATAG on the messages featuring young aviation professionals.

## 1.2 Discussion

1.2.1 During the following interventions, all States and organizations expressed the importance of taking action on the existential threat of climate change, and the need for a global long-term objective for international aviation, taking into account different circumstances and readiness levels of States, and the flexibility for each State to contribute to the collective efforts, while also recognizing the necessary means of implementation of an LTAG in the spirit of ICAO's *No Country Left Behind* initiative.

1.2.2 States and organizations expressed their appreciation for the work of ICAO on the feasibility of an LTAG since the last Assembly, in particular the development of the LTAG Report. Some delegates, acknowledged that the report was unanimously approved by CAEP, and considered the report to be complete and that no further work was necessary. They agreed that the report should be the basis for considerations on an LTAG at the next Assembly. Other delegates expressed concern, highlighting that CAEP's work had not completed the mandate set out by the ICAO Assembly Resolution A40-18, in particular on the cost impacts to specific regions and developing countries, and the lack of coverage on the assistance to developing countries in meeting any agreed LTAG.

1.2.3 Some delegates highlighted the urgency for ICAO to agree on an ambitious LTAG, expressing the need for the sector to work towards a global goal of net-zero carbon emissions by 2050 with possible intermediate waypoints in 2030 and 2040, in light of the latest consensus scientific understanding by the IPCC, and in support of the Paris Agreement's 1.5°C temperature goal. They also acknowledged that the implementation of an LTAG as a global aspirational collective goal should be flexible, without attributing specific emissions reductions goals to individual States.

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<sup>4</sup> <https://vimeo.com/729215593>

1.2.4 Other delegates expressed concern over the consideration of net-zero outcomes, noting that the extent of emissions reductions through in-sector measures based on the scenarios reflected in the LTAG report would not enable the sector to reach net-zero, and the latest IPCC scientific reports that recognised aviation as a hard to decarbonise sector. They requested developed States to take the lead in attaining net-zero outcomes, before developing States.

1.2.5 There was general acknowledgement of views on the interdependency between the level of ambition for an LTAG and the extent of providing the means of implementing an LTAG (which would be discussed under Agenda item 2).

1.2.6 Delegates expressed views on the critical importance of establishing practical means of implementation, including through ICAO State Action Plans, strengthening financing support, technology transfer and capacity-building efforts toward the achievement of any agreed LTAG, in support of ICAO's *No Country Left Behind* initiative. Some delegates expressed the view that it would be difficult to agree on an ambitious LTAG, due to the concern on impacts in particular to developing countries, while others emphasized that an agreed LTAG would provide the opportunity to divert much needed financial support to the sector and provide economic opportunities to developing States.

1.2.7 The Chairperson explained that a summary of papers submitted and main views expressed on this Agenda item would be drafted into a Summary of Discussions (HLM-LTAG-SD/1), which would be reviewed later during the Meeting. A similar approach would also be taken for Summaries of Discussions for Agenda item 2 (HLM-LTAG-SD/2) and Agenda item 3 (HLM-LTAG-SD/3). Due to the close inter-linkages between Agenda items 1, 2 and 3, the conclusions for these Agenda items would subsequently be considered together as a package, through a draft Summary of Discussions for Agenda item 4 (HLM-LTAG-SD/4).

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## **Agenda Item 2: Means of implementation for a long-term global aspirational goal for international aviation**

### **2.1 Documentation**

2.1.1 The Meeting considered two Working Papers by the Secretariat, and 12 Working Papers<sup>5</sup> from States and International Organizations. A summary of these papers are detailed below.

2.1.2 HLM-LTAG-WP/6 presented by the Secretariat provided an overview on the role of State Action Plans (SAPs) to reduce international aviation CO<sub>2</sub> emissions and the roadmaps to support the implementation and contributions of States towards the achievement of an LTAG, as well as ICAO CO<sub>2</sub> emissions reductions projects and partnerships with States and other international organizations.

2.1.3 HLM-LTAG-WP/7 presented by the Secretariat provided inputs on possible means of implementation of an LTAG, which included working together for the global development and deployment of SAF, Lower Carbon Aviation Fuels (LCAF), other cleaner energy sources and technologies for aviation, through the recently-launched ICAO Assistance, Capacity-building and Training for SAF (ACT-SAF) programme and its possible extension to additional aspects, as well as to facilitating access to financing and investment support for the implementation of specific CO<sub>2</sub> emissions reduction measures.

2.1.4 HLM-LTAG-WP/16 presented by Chile and supported by members of the LACAC, expressed views on the potential of hydrogen as an input for the production of SAF, and the need for further analysis to facilitate solutions involving the use of hydrogen.

2.1.5 HLM-LTAG-WP/17 presented by Chile, and supported by members of the LACAC, expressed views on the need for ICAO to support States in creating the skills and tools required to implement operational measures proposed in the LTAG Report, and to categorize and quantify air operations, with the clear objective of reducing greenhouse gas emissions.

2.1.6 HLM-LTAG-WP/14 presented by the 54 Member States of the AFCAC expressed views on the need for capacity building as a means to achieve any agreed LTAG, including through the ICAO ACT-SAF, as well as through support by other States and organizations undertaken as part of the *No Country Left Behind* initiative while embracing the concept of differentiated responsibilities.

2.1.7 HLM-LTAG-WP/15 presented by the 54 Member States of the AFCAC expressed views that the implementation of any agreed LTAG should not inhibit the growth of the African aviation sector, and that financial access/support should be explored to support African States to meet the financial obligations associated with any agreed LTAG.

2.1.8 HLM-LTAG-WP/19 presented by United Kingdom on behalf of the EU and its Member States, and the other Member States of the ECAC, expressed views on the importance of a means of implementation and capacity-building efforts in assisting all ICAO States to achieve an ambitious LTAG for international aviation, and the need to facilitate access to existing sources of financing, incentivising private investments, and called to provide voluntary contributions to ICAO in order to support an ambitious LTAG.

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<sup>5</sup> Includes four Working Papers (HLM-LTAG-WPs 10, 20, 21 and 30) which had already been presented prior, and reflected under Agenda item 1 of this Report.

2.1.9 HLM-LTAG-WP/22 presented by Brazil, India, Nigeria, the Russian Federation and Sudan and supported by Bolivia, Cuba, El Salvador and Paraguay, proposed the establishment of a Multilateral Fund for Sustainable Aviation (MFSA), in order to provide public and private stakeholders in developing countries with adequate means of implementation of aviation in-sector measures for emissions reductions.

2.1.10 HLM-LTAG-WP/27 presented by Brazil, China and the Russian Federation expressed views on the role of SAPs as an important resource for ICAO to monitor Member States' efforts to develop a green and low-carbon aviation, and are an important basis for ICAO to formulate policies to address climate change, including setting up LTAG for international aviation.

2.1.11 HLM-LTAG-WP/28 presented by Brazil, China and the Russian Federation expressed views on an ambitious assistance mechanism to ensure developing countries' access to adequate financial, technical and capacity-building assistance from developed countries, as a significant premise to an ambitious decarbonization of international aviation.

2.1.12 The Chairperson acknowledged the contributions of the following Information Papers to the Meeting: HLM-LTAG-IP/11 by Australia, Costa Rica and the United Kingdom, and HLM-LTAG-IP/12 by Guatemala and supported by Argentina, Bolivia, Chile, Cuba, Dominican Republic, El Salvador, Panama, Paraguay and Uruguay (as members of the LACAC) and the IATA.

## 2.2 Discussion

2.2.1 There was general support by delegates to the working papers submitted by the ICAO Secretariat. Delegates also supported the ICAO SAPs initiative, facilitating the implementation of robust actions by States in reducing international aviation CO<sub>2</sub> emissions, as well as the establishment of ICAO's partnerships with States and other international organizations for assistance projects for aviation CO<sub>2</sub> reduction measures. Delegates also expressed the view that capacity-building, financing and other assistance to States, in particular to developing countries, would be crucial in ensuring the implementation of any agreed LTAG, recognizing different circumstances of individual States and regions and that not one solution will fit all States and stakeholders.

2.2.2 Some delegates supported the importance for States and relevant stakeholders to work together for the global development and deployment of SAF, LCAF other cleaner energy sources and technologies for aviation, through the ICAO ACT-SAF programme and its possible extension to additional aspects, as a means to provide implementation support for the collective achievement of any agreed LTAG.

2.2.3 Regarding the provision of access to financial resources, there were divergent views expressed by delegates. Some delegates expressed support for ICAO to further facilitate access to financial and investment support by States in the implementation of specific aviation CO<sub>2</sub> reduction measures, taking on a facilitative role to match implementation needs with public or private funding. Other delegates requested the establishment of a specific fund to be managed by ICAO to cover assistance and funding needs of developing States that may not be financed by the private sector, while some delegates expressed concerns that there may be many institutional and legal issues associated with the establishment of such an ICAO fund.



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2.2.4 The Chairperson explained that a summary of papers submitted and main views expressed for this Agenda item would be drafted into a Summary of Discussions (HLM-LTAG-SD/2), which would be reviewed later at the Meeting.

2.2.5 The Meeting was reminded that, due to the close inter-linkages between Agenda items 1, 2 and 3, the conclusions for these Agenda items would subsequently be considered together as a package, through a draft Summary of Discussions for Agenda item 4 (HLM-LTAG-SD/4).

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### **Agenda Item 3: Means of monitoring progress and next steps**

#### **3.1 Documentation**

3.1.1 The Meeting considered one Working Paper by the Secretariat, and three Working Papers<sup>6</sup> from States and International Organizations. A summary of these papers are detailed below.

3.1.2 HLM-LTAG-WP/8 presented by the Secretariat expressed views on possible means for regularly monitoring progress towards the achievement of an LTAG, including through the ICAO Stocktaking process, tracker tools, further assessment of CO<sub>2</sub> emissions reductions benefits and cost impacts, and information from SAPs.

3.1.3 HLM-LTAG-WP/13 presented by the 54 States of the AFCAC expressed views on the important role of SAPs as the best means of monitoring the progress towards any agreed LTAG, and on aligning LTAG with SAP building on expertise from the development of CO<sub>2</sub> emissions reporting mechanisms.

3.1.4 HLM-LTAG-WP/29 presented by Brazil, China and Russian Federation expressed views on ICAO to monitor progress of any agreed LTAG in a facilitative, non-intrusive, and non-punitive manner, respectful of national sovereignty. It also expressed the view that the objective of ICAO's implementation of monitoring progress was to provide States opportunities for their concerted efforts and mutual learning to address international aviation and climate change, rather than form the basis for States to enhance the level of ambitions in the nationally determined mitigation of aviation emissions.

#### **3.2 Discussion**

3.2.1 Delegates expressed the view that establishing the means to monitor the progress for the achievement of any agreed LTAG, on a regular basis, and in a non-intrusive and transparent manner, would be important, building upon various existing means to do so, such as the ICAO Stocktaking process and tracker tools as part of monitoring the latest innovations and initiatives for reduction of aviation CO<sub>2</sub> emissions, as well as information from SAPs and the CO<sub>2</sub> reporting mechanism under CORSIA.

3.2.2 Delegates also highlighted the need for continued provision of capacity building and other assistance as well as necessary tools to support the preparation and updates of SAPs, bearing in mind the voluntary nature of SAPs and individual contributions of States to the collective achievement of any agreed LTAG. Some delegates also expressed the need for further assessment of the CO<sub>2</sub> reduction and cost impacts on international aviation and regions and countries, including the impact on developing countries. Some delegates emphasized that a continuous monitoring regarding the provision of the means of implementation, in support to delivering the LTAG, should be part of the overall monitoring approach.

3.2.3 The Chairperson explained that a summary of papers submitted and main views expressed at this Agenda item would be drafted into a Summary of Discussions (HLM-LTAG-SD/3), which would be reviewed later at the Meeting.

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<sup>6</sup> Includes one Working Paper (HLM-LTAG-WP/18) which had already been presented prior, and reflected under Agenda item 1 of this Report.

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3.2.4           The Meeting was reminded that, due to the close inter-linkages between Agenda items 1, 2 and 3, the conclusions for these Agenda items would subsequently be considered together as a package, through a draft Summary of Discussions for Agenda item 4 (HLM-LTAG-SD/4).

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## **Agenda Item 4: Conclusions and recommendations of the Meeting**

### **4.1 Documentation**

4.1.1 The Chairperson explained that due to the close inter-linkages between Agenda items 1, 2 and 3, draft conclusions for those Agenda items were prepared as a package of possible outcomes of HLM-LTAG, taking into account the WPs/IPs submitted by States and international organizations as well as the views expressed on them.

4.1.2 Following the exchange of views by the delegates on the possible HLM-LTAG outcomes, the Meeting agreed to recommend that the following conclusions of the HLM-LTAG<sup>7</sup> be further considered by the ICAO Council for presentation of its proposal to the 41st Session of the ICAO Assembly.

### **CONCLUSIONS OF THE HIGH-LEVEL MEETING ON THE FEASIBILITY OF A LONG-TERM ASPIRATIONAL GOAL FOR INTERNATIONAL AVIATION CO<sub>2</sub> EMISSIONS REDUCTIONS (HLM-LTAG)**

**Montréal, 19 to 22 July 2022**

The High-Level Meeting on the feasibility of a Long-Term Aspirational Goal for international aviation CO<sub>2</sub> emissions reductions (HLM-LTAG), convened by the International Civil Aviation Organization (ICAO) at its Headquarters in Montréal from 19 to 22 July 2022, and attended by Ministers and other high-level officials representing 104 Member States and 15 international organizations, in light of the latest IPCC scientific understanding, reached the following conclusions:

1. ICAO and its Member States are encouraged to work together to strive to achieve a collective long-term global aspirational goal for international aviation (LTAG) of net-zero carbon emissions by 2050, in support of the Paris Agreement's temperature goal, recognizing that each State's special circumstances and respective capabilities (e.g., the level of development, maturity of aviation markets, sustainable growth of its international aviation, just transition, and national priorities of air transport development) will inform the ability of each State to contribute to the LTAG within its own national timeframe.
2. While recognizing that the LTAG is a collective global aspirational goal, and it does not attribute specific obligations or commitments in the form of emissions reduction goals to individual States, each State is urged to contribute to achieving the goal in a socially, economically and environmentally sustainable manner and in accordance with national circumstances.
3. Recalled the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement and acknowledged its principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances;
4. Also acknowledged the principles of non-discrimination and equal and fair opportunities to develop international aviation set forth in the Chicago Convention.

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<sup>7</sup> A request was received by China to register their reservation to the conclusions of the HLM-LTAG.

5. Affirmed that addressing GHG emissions from international aviation requires the active engagement and cooperation of States and the industry, and noted the collective commitment announced by the international air transport industry, to achieve net-zero carbon emissions by 2050.
6. ICAO and its Member States are invited to work together with relevant organizations to strive to achieve the maximum possible level of progress on the implementation of aviation in-sector CO<sub>2</sub> emissions reduction measures (e.g. technology, operations and fuels), recognizing that the largest potential impact on aviation CO<sub>2</sub> emissions reduction will come from fuel-related measures.
7. ICAO and its Member States are encouraged to keep abreast of innovative aircraft technologies, new types of operations conducive to emissions reductions, and Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other cleaner energy sources in line with the *No Country Left Behind* initiative, in order to enable timely certification, as well as timely update and development of relevant ICAO SARPs and guidance, as appropriate. ICAO and its Member States are urged to continue work on the elements of the basket of measures for the achievement of the LTAG, including:

***Regarding Aircraft Technology:***

ICAO and its Member States are encouraged to work with manufacturers and aircraft operators to encourage the introduction of increasingly fuel-efficient aircraft into the market and facilitate cost-effective fleet renewal as well as to incentivize and accelerate investments in the research and development of new aircraft with zero CO<sub>2</sub> emissions.

***Regarding Operations:***

ICAO and its Member States are encouraged to work with manufacturers, Air Navigation Service Providers (ANSPs), aircraft operators and airports to implement enhanced air and ground operations, including by accelerating the deployment of the ICAO Aviation System Block Updates (ASBUs) and its implementation in accordance with the Global Air Navigation Plan (GANP).

***Regarding Fuels:***

- a) ICAO Member States are invited to incentivize, through policies and policy tools, the research, development and deployment of Sustainable Aviation Fuels (SAF), Lower Carbon Aviation Fuels (LCAF) and other cleaner energy sources for aviation;
  - b) ICAO is invited to review the 2050 ICAO Vision for SAF, including LCAF and other cleaner energy sources for aviation, at the third ICAO Conference on Aviation and Alternative Fuels (CAAF/3) in 2023, in order to define a global framework in line with the *No Country Left Behind* initiative and taking into account national circumstances and capabilities; and
  - c) ICAO and its Member States are invited to work with the relevant stakeholders to accelerate the research and certification of new fuel pathways and the certification of new aircraft and engines, to allow the use of 100% SAF, to scale up SAF supply, especially through encouraging and promoting SAF and/or LCAF purchase agreements, as well as to support timely delivery of any necessary changes to airport and energy supply infrastructure.
8. Means of implementation commensurate to the level of ambition, including financing, will promote the achievement of the LTAG. It requires substantial investments for States, according to their national circumstances, and that various possible modalities and/or funding mechanisms could be used by ICAO to facilitate financing and investment support for implementation of specific aviation CO<sub>2</sub> reduction measures. ICAO is invited to initiate specific measures or mechanisms so as to facilitate, in particular for developing countries and States having particular needs, better access to private investment capacities, as well as funding from financial institutions, such as development banks, for projects

contributing to the decarbonisation of international aviation, as well as encourage new and additional funding to this purpose. ICAO is also invited to further consider the establishment of a climate finance initiative or funding mechanism under ICAO, while addressing the possible financial, institutional and legal challenges, and report to the 42nd Session of the ICAO Assembly.

9. This will be complementary to a robust assistance and cooperation programme dedicated to LTAG in order to share information on best practices and provide guidance, capacity building, and other technical assistance. Welcoming the establishment of the ICAO Assistance, Capacity-building and Training for SAF (ACT-SAF) programme, it should be extended to add support to the implementation of other emissions reduction measures in an ICAO ACT-LTAG programme (e.g., aircraft technologies, operational improvements, infrastructural changes, LCAF and other cleaner energy sources for aviation).
  10. Additionally, ICAO is encouraged to promote the voluntary transfer of technology, in particular for developing countries and States having particular needs, to enable them to adapt to cutting-edge technology and to enhance their contribution to achieve the LTAG.
  11. In line with the *No Country Left Behind* initiative, ICAO Member States are urged to make regular and substantial contributions to the ICAO Environment Fund, to address specific ICAO activities on the LTAG, including ACT-SAF programme, aiming at assisting developing States and States having particular needs. States are also encouraged to develop specific projects under the ICAO Technical Cooperation Programme.
  12. All ICAO Member States are encouraged to submit and update voluntary action plans to ICAO to reduce CO<sub>2</sub> emissions from international aviation, with a view to achieving the LTAG. State Action Plans should outline respective actions and roadmaps, including long-term projections, and highlight respective national capacities and circumstances and any specific assistance needs for the implementation of CO<sub>2</sub> reduction measures. ICAO and its Member States are invited to provide assistance for preparation and implementation of such plans and the necessary capacity building, including through cooperation and assistance on identifying possible sources of financing for decarbonization of aviation, in cooperation with financial and other relevant organizations.
  13. ICAO is invited to regularly monitor progress on the implementation of all elements of the basket of measures towards the achievement of the LTAG, including through: the ICAO environment stocktaking process; the review of the ICAO Vision for SAF; further assessment of the CO<sub>2</sub> reduction and cost impacts of a changing climate on international aviation and regions and countries, in particular developing countries, and the impact on the development of the sector, as well as the cost impacts of the efforts to achieve the LTAG; monitoring of information from State Action Plans for international aviation CO<sub>2</sub> emissions; and means of implementation. To this purpose, ICAO is invited to consider necessary methodologies for the monitoring of progress, and report to a future Session of the ICAO Assembly.
  14. Starting from the conclusions of the HLM-LTAG above, further deliberations among Member States will continue towards the 41st Session of the ICAO Assembly.
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**LIST OF PARTICIPANTS TO HLM-LTAG  
(English only)**

**ICAO MEMBER STATES**

| State                  | Participant Name           | Role                     | Participation |
|------------------------|----------------------------|--------------------------|---------------|
| ARGENTINA              | PAOLA TAMBURELLI           | Chief Delegate           | Virtual       |
|                        | NAHUEL EDUARDO MORANDI BEL | Delegate                 | Virtual       |
|                        | TOMÁS AINCHIL              | Delegate                 | Virtual       |
|                        | ROMINA MINOTTI             | Advisor                  | Virtual       |
| AUSTRALIA              | JIM WOLFE                  | Chief Delegate           | Virtual       |
|                        | ROSS ADAMS                 | Alternate Chief Delegate | InPerson      |
|                        | CHANNELLE FITZGERALD       | Delegate                 | InPerson      |
|                        | JESPER BRONSVOORT          | Delegate                 | Virtual       |
|                        | MICHELLE PETERSEN          | Delegate                 | Virtual       |
|                        | ERICA SUNG                 | Advisor                  | Virtual       |
|                        | KATE HANCOCK               | Advisor                  | Virtual       |
| AUSTRIA                | ELISABETH LANDRICHTER      | Chief Delegate           | Virtual       |
|                        | ANTONIA HATLER             | Alternate Chief Delegate | Virtual       |
|                        | CHRISTIAN SCHLEIFER        | Alternate Chief Delegate | InPerson      |
|                        | KARIN PULEO-LEODOLTER      | Delegate                 | Virtual       |
| AZERBAIJAN             | FARIZ ALIYEV               | Delegate                 | Virtual       |
|                        | BAHRUZ MALIKOV             | Advisor                  | Virtual       |
| BAHAMAS                | CHANELLE BROWN             | Chief Delegate           | InPerson      |
|                        | ZANDA BONAMY               | Delegate                 | Virtual       |
| BANGLADESH             | MUHAMMAD MAFIDUR RAHMAN    | Alternate Chief Delegate | Virtual       |
|                        | KHALILUR RAHMAN            | Delegate                 | InPerson      |
|                        | S M RABBANI                | Delegate                 | Virtual       |
| BENIN                  | ELYSEE DANSOU              | Delegate                 | Virtual       |
| BOLIVIA, P.S.          | CARLOS CABALLERO           | Delegate                 | Virtual       |
|                        | NEIDY MARIELA CRUZ RAMÍREZ | Delegate                 | Virtual       |
| BOSNIA AND HERZEGOVINA | ČEDOMIR ŠUŠNJAR            | Chief Delegate           | Virtual       |

| State       | Participant Name              | Role                     | Participation |
|-------------|-------------------------------|--------------------------|---------------|
| BRAZIL      | RICARDO BISINOTTO<br>CATANANT | Chief Delegate           | InPerson      |
|             | NORBERTO MORETTI              | Alternate Chief Delegate | InPerson      |
|             | DURVAL LUIZ PEREIRA           | Delegate                 | InPerson      |
|             | FÁTIMA GOUVÊA                 | Delegate                 | Virtual       |
|             | IVANISE MACIEL                | Delegate                 | Virtual       |
|             | MARCELA ANSEMI                | Delegate                 | InPerson      |
|             | MARCELO LIMA                  | Delegate                 | InPerson      |
|             | MARIANA CESAR                 | Delegate                 | Virtual       |
|             | ARY RODRIGUES<br>BERTOLINO    | Advisor                  | InPerson      |
|             | MARCELO CAVALCANTE            | Advisor                  | InPerson      |
| BULGARIA    | KREMENA KOLEVA                | Advisor                  | Virtual       |
| CABO VERDE  | CARLOS MONTEIRO               | Chief Delegate           | Virtual       |
|             | CARLOS JORGE SANTOS           | Delegate                 | Virtual       |
| CAMBODIA    | LYKEANG NEA                   | Delegate                 | Virtual       |
|             | VAN OEURN TENG                | Delegate                 | Virtual       |
| CAMEROON    | ENGLEBERT ZOA<br>ETUNDI       | Alternate Chief Delegate | InPerson      |
| CANADA      | ANDREW COOK                   | Delegate                 | InPerson      |
|             | CLAUDE HURLEY                 | Delegate                 | InPerson      |
|             | KERRI HENRY                   | Delegate                 | InPerson      |
|             | MELANIE ROBERT                | Delegate                 | InPerson      |
|             | NATHALIE MORIN                | Delegate                 | InPerson      |
|             | WENDY BAILEY                  | Delegate                 | InPerson      |
|             | ASHAN EDOO                    | Advisor                  | InPerson      |
|             | FRANK NEUBAUER                | Advisor                  | InPerson      |
| JON OBNAMIA | Advisor                       | InPerson                 |               |
| CHILE       | JUAN CARLOS MUÑOZ             | Chief Delegate           | Virtual       |
|             | MARTÍN MACKENNA               | Alternate Chief Delegate | InPerson      |
|             | RAÚL JORQUERA<br>CONRADS      | Alternate Chief Delegate | InPerson      |
|             | ANGELICA ROMERO               | Delegate                 | Virtual       |
|             | CESAR MAC NAMARA              | Delegate                 | InPerson      |
|             | DAVID DUENAS                  | Delegate                 | Virtual       |
|             | FELIPE ORELLANA               | Delegate                 | InPerson      |



| State         | Participant Name                     | Role                     | Participation |
|---------------|--------------------------------------|--------------------------|---------------|
|               | GINA TILLERIA                        | Delegate                 | InPerson      |
|               | PAULINA RADRIGAN                     | Delegate                 | InPerson      |
|               | RODOLFO DONOSO                       | Delegate                 | InPerson      |
|               | ROMINA ALTAMIRANO                    | Delegate                 | Virtual       |
|               | SEBASTIAN FLORES                     | Delegate                 | Virtual       |
| CHINA         | XIAOFENG CUI                         | Chief Delegate           | Virtual       |
|               | SHENGJUN YANG                        | Delegate                 | InPerson      |
|               | XIAOXI SUN                           | Delegate                 | InPerson      |
|               | YANG MU                              | Delegate                 | Virtual       |
|               | YUXIU CHEN                           | Delegate                 | InPerson      |
| COLOMBIA      | MAURICIO RAMIREZ<br>KOPPEL           | Chief Delegate           | InPerson      |
|               | VICTORIA RICO                        | Alternate Chief Delegate | Virtual       |
|               | ANGELA MARCELA<br>MASMELA DELGADILLO | Delegate                 | Virtual       |
|               | CESAR BEJARANO                       | Delegate                 | InPerson      |
|               | JHONATAN ANTURI                      | Delegate                 | Virtual       |
|               | JUAN DAVID<br>DOMINGUEZ ARRIETA      | Delegate                 | Virtual       |
| COSTA RICA    | GUILLERMO FEDERICO<br>HOPPE          | Chief Delegate           | InPerson      |
|               | MAURICIO ORTIZ                       | Alternate Chief Delegate | InPerson      |
|               | ANDREA JIMÉNEZ                       | Advisor                  | Virtual       |
| CÔTE D'IVOIRE | SILUE SINALY                         | Chief Delegate           | Virtual       |
|               | AHMED COULIBALY                      | Delegate                 | InPerson      |
|               | WAOGNINLIN TRAORE                    | Delegate                 | Virtual       |
| CUBA          | MERCEDES VÁZQUEZ<br>GONZÁLEZ         | Chief Delegate           | InPerson      |
|               | ANTONIO LAHERA SAM                   | Delegate                 | Virtual       |
| CYPRUS        | ANTONIOS LEMESIANOS                  | Chief Delegate           | InPerson      |
|               | EFTYCHIOS EFTYCHIOU                  | Alternate Chief Delegate | Virtual       |
|               | YIANNIS YIANNAKI                     | Alternate Chief Delegate | Virtual       |
|               | VASILIOS PHILIPPOU                   | Delegate                 | InPerson      |
| CZECHIA       | MARTIN KUPKA                         | Chief Delegate           | Virtual       |
|               | ZDENĚK JELÍNEK                       | Alternate Chief Delegate | InPerson      |
|               | MARTINA NOVACKOVA                    | Delegate                 | InPerson      |

| State                  | Participant Name                  | Role                     | Participation |
|------------------------|-----------------------------------|--------------------------|---------------|
|                        | PETR CECAK                        | Delegate                 | InPerson      |
|                        | HANA GUYAUX<br>PECHACKOVA         | Advisor                  | Virtual       |
| DEM. REP. OF THE CONGO | KALLY KALENGULA<br>KADIMA         | Delegate                 | InPerson      |
| DENMARK                | KÅRE CLEMMESSEN                   | Chief Delegate           | Virtual       |
|                        | JENS ERIK DITLEVSEN               | Delegate                 | InPerson      |
| DOMINICAN REPUBLIC     | HÉCTOR PORCELLA                   | Chief Delegate           | InPerson      |
|                        | CAMILA MOYA                       | Alternate Chief Delegate | InPerson      |
|                        | JULIO PENA                        | Alternate Chief Delegate | InPerson      |
|                        | JUDIT S. DE LEÓN S.               | Delegate                 | InPerson      |
|                        | MIGUEL MEJIA                      | Delegate                 | InPerson      |
|                        | MILDRED GARCIA<br>FABIAN          | Delegate                 | InPerson      |
|                        | VALERIE YAPOR                     | Delegate                 | InPerson      |
| ECUADOR                | SUELEN REALPE                     | Chief Delegate           | Virtual       |
|                        | CARLOS JATIVA                     | Delegate                 | Virtual       |
|                        | JUAN JACHO                        | Delegate                 | Virtual       |
|                        | MARISOL NIETO                     | Delegate                 | Virtual       |
| EGYPT                  | ABDELGHAFAR<br>ELSAYED ABDELHALIM | Chief Delegate           | InPerson      |
|                        | SAMEH ELHEFNY                     | Delegate                 | InPerson      |
| EQUATORIAL GUINEA      | ESTANISLAO ESONO                  | Delegate                 | InPerson      |
|                        | JULIE NG CHIN YUE                 | Delegate                 | Virtual       |
| ETHIOPIA               | GETACHEW MENGISTIE<br>ALEMAYEHU   | Delegate                 | InPerson      |
|                        | HIWOT DERESSA                     | Delegate                 | InPerson      |
| FIJI                   | THERESA LEVESTAM                  | Delegate                 | Virtual       |
| FINLAND                | JANNE MÄNTTÄRI                    | Chief Delegate           | Virtual       |
|                        | SAMULI VUOKILA                    | Advisor                  | Virtual       |
| FRANCE                 | LAURENT PIC                       | Chief Delegate           | InPerson      |
|                        | DE LACOMBE<br>BERTRAND            | Alternate Chief Delegate | InPerson      |
|                        | ERIC RISSE                        | Delegate                 | InPerson      |
|                        | OLIVIER MEYNOT                    | Delegate                 | InPerson      |
|                        | SOPHIA OLMOS                      | Advisor                  | InPerson      |

| State     | Participant Name              | Role                     | Participation |
|-----------|-------------------------------|--------------------------|---------------|
| GABON     | DIANGA NZENGUE                | Chief Delegate           | Virtual       |
|           | LARISSA PAMELA                |                          |               |
| GERMANY   | MARINA KOESTER                | Chief Delegate           | InPerson      |
|           | FRAUKE PLEINES-SCHMIDT        | Delegate                 | Virtual       |
|           | HEINZ DECKER                  | Delegate                 | InPerson      |
|           | MARKUS NITSCHKE               | Advisor                  | Virtual       |
|           | STEFAN BICKERT                | Advisor                  | Virtual       |
|           | ULRICH SCHWIERCZINSKI         | Alternate Chief Delegate | InPerson      |
| GHANA     | ANITA ADJEI-NMASHIE           | Delegate                 | InPerson      |
| GREECE    | CHRISTOS TSITOURAS            | Chief Delegate           | Virtual       |
|           | MARIA SARANTI                 | Chief Delegate           | InPerson      |
|           | VASSILIKI LAZARI              | Alternate Chief Delegate | InPerson      |
|           | AGAPIOS KALOGNOMIS            | Delegate                 | Virtual       |
|           | ARGYRO SAKKI                  | Delegate                 | Virtual       |
|           | GEORGIA LYKOU                 | Delegate                 | Virtual       |
|           | KONSTANTINOS KARAGEORGIS      | Delegate                 | Virtual       |
|           | VASILIKI BETCHAVA             | Delegate                 | InPerson      |
| GUATEMALA | CARMEN LUCIA GONZALEZ SAMAYOA | Delegate                 | InPerson      |
|           | EDWIN GIOVANNI TOBAR GUZMAN   | Delegate                 | InPerson      |
| GUYANA    | EGBERT FIELD                  | Chief Delegate           | Virtual       |
|           | JUAN EDGHILL                  | Delegate                 | InPerson      |
|           | KEZIA JOSEPH                  | Delegate                 | Virtual       |
|           | SAHEED SULAMAN                | Delegate                 | Virtual       |
| HUNGARY   | VIVIEN JUDIT CSAPLICZKY       | Delegate                 | Virtual       |
| ICELAND   | KRISTÍN HELGA MARKÚSDÓTTIR    | Chief Delegate           | InPerson      |
|           | ANNA SIGURVEIG RAGNARSDÓTTIR  | Delegate                 | Virtual       |
|           | VALDIS ADALSTEINSDOTTIR       | Delegate                 | InPerson      |
| INDIA     | RAJIV BANSAL                  | Chief Delegate           | InPerson      |
|           | SHEFALI JUNEJA                | Alternate Chief Delegate | InPerson      |

| State     | Participant Name                   | Role                     | Participation |
|-----------|------------------------------------|--------------------------|---------------|
|           | AJAY JOSHI                         | Delegate                 | InPerson      |
|           | ANSHUMAN GAUR                      | Delegate                 | InPerson      |
|           | EKTA AGRAWAL                       | Delegate                 | InPerson      |
|           | MD. NOOR RAHMAN SHEIKH             | Delegate                 | InPerson      |
|           | ROHIT THAKUR                       | Delegate                 | InPerson      |
| INDONESIA | FRANSISCUS BUDI PRAYITNO           | Chief Delegate           | Virtual       |
|           | AFEN SENA                          | Alternate Chief Delegate | InPerson      |
|           | DANIEL TUMPAL SUMURUNG SIMANJUNTAK | Alternate Chief Delegate | InPerson      |
|           | PENNY DEWI HERASATI                | Alternate Chief Delegate | Virtual       |
|           | AHMAD NURDIN AULIA                 | Delegate                 | Virtual       |
|           | ARYANI SATYAMURNI                  | Delegate                 | Virtual       |
|           | BAMBANG RIANTO                     | Delegate                 | Virtual       |
|           | CAPT. NOVYANTO WIDADI              | Delegate                 | Virtual       |
|           | DEWI MULYATI SANTOSO               | Delegate                 | Virtual       |
|           | INDRA SIPAYUNG                     | Delegate                 | InPerson      |
|           | MINDA MORA                         | Delegate                 | Virtual       |
|           | MOKHAMMAD KHATIM                   | Delegate                 | Virtual       |
|           | POLANA BANGUNINGSIH PRAMESTI       | Delegate                 | Virtual       |
|           | SEPTIAN MARNO                      | Delegate                 | InPerson      |
|           | ADE KUSMANA                        | Advisor                  | Virtual       |
|           | DESY AFIFAH RACHMAWANTI            | Advisor                  | Virtual       |
|           | FERIYADI FERIYADI                  | Advisor                  | Virtual       |
|           | FESCHILIA NIDYA                    | Advisor                  | Virtual       |
|           | IKA NIYANTI OKTRIAN                | Advisor                  | Virtual       |
|           | INNANU HUSNA MANIKAM               | Advisor                  | Virtual       |
|           | KUSMINI KUSMINI                    | Advisor                  | Virtual       |
|           | MARWANTO HERU SANTOSO              | Advisor                  | Virtual       |
|           | MEROSA DWI DIAYANTI                | Advisor                  | Virtual       |

| State                    | Participant Name             | Role                     | Participation |
|--------------------------|------------------------------|--------------------------|---------------|
|                          | MOKHAMMAD<br>NASRULLOH       | Advisor                  | Virtual       |
|                          | MUTIARA ADELLA               | Advisor                  | Virtual       |
|                          | NURDINI TAMBUNAN             | Advisor                  | Virtual       |
|                          | PETRUS VAN DER<br>WESTHUIZEN | Advisor                  | Virtual       |
|                          | PUTI HANDAYANI               | Advisor                  | Virtual       |
|                          | SUWITO HK                    | Advisor                  | Virtual       |
|                          | WENDY ARITENANG              | Advisor                  | Virtual       |
| IRAN, ISLAMIC REP.<br>OF | FARHAD PARVARESH             | Delegate                 | InPerson      |
| IRELAND                  | NIAMH O'BRIEN                | Chief Delegate           | Virtual       |
|                          | DANIEL GRIFFIN               | Delegate                 | Virtual       |
|                          | TOMÁS MACCÁRTHAIGH           | Delegate                 | Virtual       |
| ISRAEL                   | JONATHAN SHACHAR<br>LUZZATTO | Delegate                 | Virtual       |
| ITALY                    | SILVIA COSTANTINI            | Chief Delegate           | InPerson      |
|                          | ANDREA MAROTTA               | Delegate                 | InPerson      |
|                          | CHIARA CICIRELLO             | Delegate                 | InPerson      |
|                          | GIOVANNI BARRACO             | Delegate                 | InPerson      |
| JAMAICA                  | NARI WILLIAMS-SINGH          | Chief Delegate           | InPerson      |
|                          | SHARON MILLER                | Delegate                 | InPerson      |
| JAPAN                    | TETSUTO IGARASHI             | Chief Delegate           | InPerson      |
|                          | ISAO FUKUSHIMA               | Alternate Chief Delegate | InPerson      |
|                          | TAKENORI OKA                 | Alternate Chief Delegate | InPerson      |
|                          | HIROAKI KATSUMA              | Delegate                 | Virtual       |
|                          | SATORU TOGAMI                | Delegate                 | InPerson      |
|                          | SATOSHI OSHIMA               | Delegate                 | InPerson      |
|                          | SHINJI SUGIYAMA              | Delegate                 | InPerson      |
| JORDAN                   | ELHAM ALRAWASHDEH            | Delegate                 | Virtual       |
| KAZAKHSTAN               | CATALIN RADU                 | Chief Delegate           | Virtual       |
|                          | ASSEL ARALTAY                | Delegate                 | InPerson      |
| KENYA                    | CHARITY MUSILA               | Chief Delegate           | InPerson      |
|                          | JOSEPH CHEBUNGEI             | Delegate                 | Virtual       |
|                          | NICHOLAS MUHOYA              | Delegate                 | InPerson      |
|                          | PETER THUKU                  | Delegate                 | InPerson      |

| State      | Participant Name                   | Role                     | Participation |
|------------|------------------------------------|--------------------------|---------------|
|            | FRANCIS MWANGI                     | Advisor                  | Virtual       |
|            | WINSTONE GICHERU                   | Advisor                  | Virtual       |
| MALAYSIA   | NORMAH OSMAN                       | Chief Delegate           | InPerson      |
|            | MOHAMAD RADZUAN MAZLAN             | Alternate Chief Delegate | InPerson      |
|            | ASNAWI ABD LATIF                   | Delegate                 | InPerson      |
|            | AZMAN HITAM                        | Delegate                 | InPerson      |
|            | FLORA CHIN LEE SA                  | Delegate                 | InPerson      |
|            | INA CZARINA ARIEF THAM             | Delegate                 | InPerson      |
|            | NORMAH BINTI OSMAN                 | Delegate                 | InPerson      |
|            | ZAINUL ABIDIN MASLAN               | Delegate                 | InPerson      |
|            | MING-YAU CHAN                      | Advisor                  | InPerson      |
| MALDIVES   | AISHATH NAHULA                     | Chief Delegate           | InPerson      |
|            | HUSSAIN JALEEL                     | Alternate Chief Delegate | Virtual       |
|            | ABDULLA RASHEED                    | Delegate                 | Virtual       |
|            | FATHIMATH RAMIZA                   | Delegate                 | Virtual       |
|            | HAMADH ABDUL GHANEE                | Delegate                 | InPerson      |
| MALTA      | CHARLES PACE                       | Chief Delegate           | Virtual       |
|            | STEPHEN CAMILLERI                  | Alternate Chief Delegate | Virtual       |
| MAURITANIA | BRAHIM KANE                        | Chief Delegate           | Virtual       |
| MAURITIUS  | GEERISH SEWLALL                    | Delegate                 | Virtual       |
|            | SHALINEE KOONJAL BISSESSUR         | Delegate                 | Virtual       |
|            | SHARMEEN FOORABALLY                | Delegate                 | Virtual       |
| MEXICO     | PABLO CARRANZA PLATA               | Chief Delegate           | Virtual       |
|            | DIONISIO MÉNDEZ                    | Alternate Chief Delegate | InPerson      |
|            | JOSDENY ALELY ALARCON GONZALEZ     | Delegate                 | Virtual       |
|            | JULIO ANTONIO DIAZ CRUZ            | Delegate                 | Virtual       |
|            | MARCO ANTONIO LOUSTAUNAU CABALLERO | Delegate                 | InPerson      |
| NEPAL      | BHRIGU DHUNGANA                    | Delegate                 | InPerson      |

| State               | Participant Name                | Role                     | Participation |
|---------------------|---------------------------------|--------------------------|---------------|
|                     | ROJINA TAMRAKAR                 | Delegate                 | InPerson      |
| NETHERLANDS         | RICHARD OSSENDORP               | Alternate Chief Delegate | InPerson      |
|                     | JESPER VAN MANEN                | Delegate                 | InPerson      |
|                     | MICHAEL LUNTER                  | Delegate                 | InPerson      |
|                     | ALBANO COUTINHO                 | Advisor                  | InPerson      |
| NEW ZEALAND         | JOANNA POHATU                   | Chief Delegate           | Virtual       |
|                     | DAISY CADIGAN                   | Delegate                 | Virtual       |
| NIGERIA             | MAHMOUD BEN TUKUR               | Alternate Chief Delegate | InPerson      |
|                     | MAHMUD YAKUBU                   | Alternate Chief Delegate | InPerson      |
|                     | MUSA NUHU                       | Alternate Chief Delegate | Virtual       |
|                     | OYETOUN ADEGBESAN               | Delegate                 | InPerson      |
| NORTH MACEDONIA     | MARIJA FILIPOVA<br>SPREMO       | Delegate                 | Virtual       |
|                     | VETI GJORGJIESKA-<br>ATANASOSKA | Delegate                 | Virtual       |
| NORWAY              | ØYVIND EK                       | Chief Delegate           | Virtual       |
|                     | KARL KOEFOED                    | Alternate Chief Delegate | Virtual       |
| OMAN                | NAIF AL ABRI                    | Chief Delegate           | Virtual       |
|                     | ABDULLAH<br>ALKHADOURI          | Delegate                 | Virtual       |
|                     | ASMAHAN ALRAHBI                 | Delegate                 | Virtual       |
|                     | HAFIDHA AL RUJAIBI              | Delegate                 | Virtual       |
|                     | KHALID ALTOOBI                  | Delegate                 | Virtual       |
|                     | KHAMIS ALZIDI                   | Delegate                 | Virtual       |
|                     | MOHAMMED AL-<br>RUQAISHI        | Delegate                 | Virtual       |
|                     | MUBARAK AL GHEILANI             | Delegate                 | Virtual       |
| PAKISTAN            | SALIM AL HUSAINI                | Delegate                 | Virtual       |
|                     | MUHAMMAD JAMAL<br>ARSHAD        | Alternate Chief Delegate | Virtual       |
|                     | ISHTIAK AHMED AKIL              | Delegate                 | InPerson      |
|                     | MUDASSIR MASOOD                 | Delegate                 | Virtual       |
| PANAMA              | CARLOS VON SEIDLITZ             | Delegate                 | Virtual       |
| PAPUA NEW<br>GUINEA | BENEDICT ORAKA                  | Chief Delegate           | Virtual       |
|                     | AMANDA NAMBAU                   | Delegate                 | Virtual       |
|                     | GABRIEL SALAYAU                 | Delegate                 | Virtual       |
|                     | GAIL RIVU                       | Delegate                 | Virtual       |

| State       | Participant Name                   | Role                     | Participation |
|-------------|------------------------------------|--------------------------|---------------|
|             | GLORIA MULAI                       | Delegate                 | Virtual       |
|             | HANNA PORE TOPA                    | Delegate                 | Virtual       |
|             | SHIRLEY AARON                      | Delegate                 | Virtual       |
|             | TOM WAQA                           | Delegate                 | Virtual       |
|             | LEI DO'O                           | Advisor                  | Virtual       |
| PARAGUAY    | DAVID URQUHART                     | Chief Delegate           | InPerson      |
|             | OSCAR PEREZ                        | Delegate                 | InPerson      |
|             | RAUL ANTONIO<br>MONTIEL GASTO      | Delegate                 | InPerson      |
|             | SINDY MARIA DE LA PAZ<br>SUAREZ    | Delegate                 | Virtual       |
| PERU        | DONALD CASTILLO<br>GALLEGOS        | Chief Delegate           | Virtual       |
|             | FERNANDO TORRES<br>ARGOMEDO        | Alternate Chief Delegate | Virtual       |
|             | ADOLFO MEDINA                      | Delegate                 | Virtual       |
|             | AUGUSTO FREYRE                     | Delegate                 | InPerson      |
|             | CARLOS ZAMORA                      | Delegate                 | InPerson      |
|             | DAVID RUBEN<br>CROVETTO CASTILLEJO | Delegate                 | Virtual       |
|             | JACKELINE<br>CHARAPAQUI            | Delegate                 | Virtual       |
|             | VERONICA PAJUELO                   | Delegate                 | Virtual       |
|             | WALTER LINARES                     | Delegate                 | InPerson      |
| PHILIPPINES | MARCO ANTONINO<br>JAVIER           | Chief Delegate           | Virtual       |
|             | ELOISA MAE ILAGAN                  | Delegate                 | Virtual       |
|             | MARIE DAINNE ESPIRITU              | Delegate                 | Virtual       |
|             | SOFIA PAULA<br>FULMARAN            | Delegate                 | Virtual       |
|             | VINCENT PAUL<br>GALDONES           | Delegate                 | Virtual       |
| POLAND      | ROBERT PRZYBYLSKI                  | Chief Delegate           | Virtual       |
|             | TADEUSZ REKLEWSKI                  | Advisor                  | Virtual       |
| PORTUGAL    | ANTÓNIO BARROSO                    | Alternate Chief Delegate | Virtual       |
|             | ANA MATA                           | Delegate                 | Virtual       |
|             | CARLOS GOMES                       | Delegate                 | Virtual       |
|             | FERNANDA BANDARRA                  | Delegate                 | Virtual       |



| State               | Participant Name        | Role                     | Participation |
|---------------------|-------------------------|--------------------------|---------------|
| QATAR               | MOHAMED FALEH AL-HAJRI  | Chief Delegate           | InPerson      |
|                     | ESSA ABDULLA AL MALKI   | Alternate Chief Delegate | InPerson      |
|                     | AISHA AL-NUAIMI         | Delegate                 | InPerson      |
|                     | FATHI ATTI              | Delegate                 | InPerson      |
|                     | JULIEA BRATHWAITE ROLLE | Delegate                 | InPerson      |
|                     | NOORA EISA A AL FADHALA | Delegate                 | InPerson      |
|                     | PRAVEEN PYATA           | Delegate                 | Virtual       |
|                     | RACHID RAHIM            | Delegate                 | InPerson      |
|                     | TALAL AL-MALKI          | Delegate                 | InPerson      |
|                     | MOHAMMED ALMARZOOQI     | Advisor                  | InPerson      |
|                     | NOORA AL-NUAIMI         | Advisor                  | InPerson      |
| REPUBLIC OF KOREA   | YONG-SIK JEONG          | Chief Delegate           | InPerson      |
|                     | CRYSTAL KIM             | Delegate                 | InPerson      |
|                     | GAKYOUNG MIN            | Delegate                 | InPerson      |
|                     | JEONGHWA LEE            | Delegate                 | InPerson      |
|                     | JONGHWA KIM             | Delegate                 | Virtual       |
|                     | JONGIK YOO              | Delegate                 | Virtual       |
|                     | SANGDO KIM              | Delegate                 | InPerson      |
|                     | SIHONG KWEON            | Delegate                 | InPerson      |
|                     | SUKWHAN AHN             | Delegate                 | Virtual       |
| REPUBLIC OF MOLDOVA | VERONICA ONESCIUC       | Delegate                 | Virtual       |
| ROMANIA             | LUMINITA LUCA           | Chief Delegate           | Virtual       |
|                     | MARIANA VOICU           | Delegate                 | Virtual       |
| RUSSIAN FEDERATION  | ALEXEY NOVGORODOV       | Alternate Chief Delegate | InPerson      |
|                     | ANASTASIYA GREBENNIKOVA | Alternate Chief Delegate | Virtual       |
|                     | GALINA KIRICHENKO       | Alternate Chief Delegate | InPerson      |
|                     | PAULA MALININA          | Delegate                 | Virtual       |
|                     | ARTUR MIRZOYAN          | Advisor                  | Virtual       |
|                     | EKATERINA KUZNETSOVA    | Advisor                  | Virtual       |
| RWANDA              | SILAS UDAHEMUKA         | Chief Delegate           | Virtual       |

| State        | Participant Name          | Role                     | Participation |
|--------------|---------------------------|--------------------------|---------------|
|              | NOBLE MUYENZIKAZI         | Delegate                 | Virtual       |
|              | ALEX RUZIGANA             | Advisor                  | Virtual       |
|              | CHARLENE UMUBYEYI         | Advisor                  | InPerson      |
|              | INGRID UMUTONI            | Advisor                  | Virtual       |
| SAUDI ARABIA | SULAIMAN S<br>ALMUHAIMEDI | Chief Delegate           | InPerson      |
|              | BADER ALSAGRI             | Alternate Chief Delegate | InPerson      |
|              | FRASE ALSUHABANI          | Delegate                 | Virtual       |
|              | HAMOUD R. ALOTAIBI        | Delegate                 | InPerson      |
|              | MOHAMMED ALBARRAK         | Delegate                 | InPerson      |
|              | MOHAMMED HABIB            | Delegate                 | InPerson      |
|              | ADNAN ALOTAIBI            | Advisor                  | Virtual       |
|              | DANH ALKURDI              | Advisor                  | InPerson      |
| SENEGAL      | FARBA DIOUF               | Delegate                 | Virtual       |
|              | OUMAR DIALLO              | Delegate                 | Virtual       |
| SERBIA       | MAJA BJELOBRK             | Delegate                 | Virtual       |
| SIERRA LEONE | AHMED KALLON              | Delegate                 | InPerson      |
|              | FLOYD A. P. DAVIES        | Delegate                 | InPerson      |
|              | SHEKU JABBIE              | Delegate                 | InPerson      |
| SINGAPORE    | KOK JUAN HAN              | Chief Delegate           | InPerson      |
|              | EILEEN POH                | Alternate Chief Delegate | InPerson      |
|              | DANIEL NG                 | Delegate                 | InPerson      |
|              | ERLINA ANG                | Delegate                 | InPerson      |
|              | MERVYN G. FERNANDO        | Delegate                 | Virtual       |
|              | SHAO HUA NG               | Delegate                 | InPerson      |
|              | ALYSA ONG                 | Advisor                  | InPerson      |
|              | BEE JUAN LAU              | Advisor                  | InPerson      |
|              | ONG HENG YAP              | Advisor                  | InPerson      |
|              | SIN YING CHUA             | Advisor                  | InPerson      |
| SLOVAKIA     | IVANA MARKOVA             | Chief Delegate           | InPerson      |
| SOUTH AFRICA | POPPY KHOZA               | Chief Delegate           | InPerson      |
|              | MABASO LEVERS             | Alternate Chief Delegate | InPerson      |
|              | GAWIE BESTBIER            | Delegate                 | Virtual       |
|              | LERATO LEKALAKALA         | Delegate                 | Virtual       |

| State                  | Participant Name                       | Role                     | Participation |
|------------------------|--|--------------------------|---------------|
|                        | MOTLAKARO EVELYN<br>SHOGOLE            | Delegate                 | Virtual       |
|                        | PULANE MANALE                          | Delegate                 | InPerson      |
|                        | THEMBA NKONTWANA                       | Delegate                 | InPerson      |
| SPAIN                  | VÍCTOR M. AGUADO                       | Chief Delegate           | InPerson      |
|                        | ANDRÉS SÁNCHEZ<br>SÁNCHEZ              | Delegate                 | InPerson      |
|                        | ISMAEL PACHECO<br>SERRANO              | Delegate                 | Virtual       |
| SRI LANKA              | RAYHAN WANNIAPPA                       | Delegate                 | Virtual       |
| SUDAN                  | IMADELDIN MOHAMED<br>ELHAG ABDELRAHMAN | Chief Delegate           | InPerson      |
|                        | ASMA ABDALFATAH                        | Delegate                 | Virtual       |
|                        | AYMAN MOHAMED                          | Delegate                 | Virtual       |
| SURINAME               | IRMGARD VERWEY                         | Delegate                 | Virtual       |
| SWEDEN                 | GUNNAR LJUNGBERG                       | Chief Delegate           | Virtual       |
|                        | EMMA JEPPSSON                          | Alternate Chief Delegate | InPerson      |
|                        | JENNY RYMAN                            | Advisor                  | Virtual       |
| SWITZERLAND            | FRANCINE<br>ZIMMERMANN                 | Chief Delegate           | InPerson      |
|                        | URS ZIEGLER                            | Chief Delegate           | InPerson      |
| THAILAND               | SUTTIPONG KONGPOOL                     | Chief Delegate           | Virtual       |
|                        | SARUN BENJANIRAT                       | Alternate Chief Delegate | Virtual       |
|                        | DUSADEE<br>PRATIPSINDHU                | Delegate                 | Virtual       |
|                        | ILADA<br>PONGPATTANAGORN               | Delegate                 | Virtual       |
|                        | PASAVI<br>RATCHAPONGSIRIKUL            | Delegate                 | Virtual       |
| TRINIDAD AND<br>TOBAGO | AREEFA KHAN-LABBAN                     | Delegate                 | Virtual       |
| TÜRKIYE                | ALI BOZCALISKAN                        | Chief Delegate           | InPerson      |
|                        | AHMET BERKAN<br>KORKMAZ                | Delegate                 | Virtual       |
|                        | EMRE ZAIMOGLU                          | Advisor                  | Virtual       |
| UKRAINE                | OLENA TSYBUKH                          | Alternate Chief Delegate | InPerson      |
|                        | YULIIA KOVALIV                         | Alternate Chief Delegate | InPerson      |
|                        | SVITLANA MARUNYCH                      | Delegate                 | Virtual       |

| State                               | Participant Name         | Role                     | Participation |
|-------------------------------------|--------------------------|--------------------------|---------------|
| UNITED ARAB<br>EMIRATES             | MOHAMMED SALEM           | Alternate Chief Delegate | InPerson      |
|                                     | HASSAN AL SUWAIDI        | Delegate                 | Virtual       |
|                                     | JOANA BEL                | Delegate                 | Virtual       |
|                                     | NOORA ALSHARHAN          | Delegate                 | Virtual       |
|                                     | VISHAL JOSHI             | Delegate                 | Virtual       |
|                                     | MAJED ALMUJAINI          | Advisor                  | Virtual       |
|                                     | MARYAM AL BALOOSHI       | Advisor                  | InPerson      |
|                                     | STEPHANE MORIN           | Advisor                  | Virtual       |
| UNITED KINGDOM                      | RANNIA LEONTARIDI        | Chief Delegate           | InPerson      |
|                                     | ANDREW O'HENLEY          | Alternate Chief Delegate | InPerson      |
|                                     | HOLLY GREIG              | Alternate Chief Delegate | InPerson      |
|                                     | JASMINE BANGHARD         | Alternate Chief Delegate | InPerson      |
|                                     | ALEX PHILPOTT            | Delegate                 | InPerson      |
|                                     | BEN TAYLOR               | Delegate                 | InPerson      |
|                                     | DAVID MOROZ              | Delegate                 | InPerson      |
|                                     | JULIA RODRIGUEZ          | Delegate                 | InPerson      |
|                                     | OLIVER STEELE            | Delegate                 | Virtual       |
|                                     | TAMARA GOODWIN           | Delegate                 | InPerson      |
| UNITED STATES OF<br>AMERICA         | ANDREW VEPREK            | Alternate Chief Delegate | InPerson      |
|                                     | SUSAN BINIAZ             | Alternate Chief Delegate | InPerson      |
|                                     | ANNIE PETSONK            | Delegate                 | InPerson      |
|                                     | KEVIN WELSH              | Delegate                 | InPerson      |
|                                     | ALAN MITCHELL            | Advisor                  | InPerson      |
|                                     | BENJAMIN TAYLOR          | Advisor                  | InPerson      |
|                                     | CHARLIE ASHLEY           | Advisor                  | InPerson      |
|                                     | CINDY BARABAN            | Advisor                  | InPerson      |
|                                     | DANIEL WILLIAMS          | Advisor                  | InPerson      |
|                                     | MOLLY PETERS-<br>STANLEY | Advisor                  | InPerson      |
| URUGUAY                             | MARTIN VIDAL             | Chief Delegate           | InPerson      |
|                                     | EDUARDO<br>AGUIRREGARAY  | Delegate                 | InPerson      |
|                                     | GABRIEL FERNÁNDEZ        | Delegate                 | Virtual       |
| VENEZUELA,<br>BOLIVARIAN REP.<br>OF | EDGAR GARANTON           | Alternate Chief Delegate | Virtual       |
|                                     | ANGELA YAGHMOUR          | Delegate                 | Virtual       |
|                                     | AURA ROMERO              | Delegate                 | Virtual       |

| State                          | Participant Name      | Role     | Participation |
|--------------------------------|-----------------------|----------|---------------|
| VIET NAM                       | HANG NGUYEN           | Delegate | Virtual       |
|                                | TUNG VU               | Delegate | Virtual       |
|                                | THANH VU              | Advisor  | Virtual       |
| ZAMBIA                         | VINCENT BANDA         | Delegate | InPerson      |
| ZIMBABWE                       | MARTIN RUSHIZHA       | Delegate | Virtual       |
|                                | MUNYARADZI WANIWA     | Delegate | InPerson      |
|                                | SHERPHARD MACHINGAUTA | Advisor  | Virtual       |
| <b>Total for Member States</b> | 428                   |          |               |

### INTERNATIONAL ORGANIZATIONS

| Organization  | Participant Name         | Role           | Participation |
|---|--------------------------|----------------|---------------|
| AFRICAN CIVIL AVIATION COMMISSION                         | ANGELINE SIMANA          | Chief Observer | Virtual       |
|   | FRANKLINE OMONDI         | Observer       | InPerson      |
| AGENCY FOR AIR NAVIGATION SAFETY IN AFRICA AND MADAGASCAR | CHARLES KOUADIO KANGA    | Observer       | Virtual       |
| AIR TRANSPORT ACTION GROUP                                | HALDANE DODD             | Chief Observer | InPerson      |
| AIRPORTS COUNCIL INTERNATIONAL                            | ALICJA GAJEWSKA          | Observer       | InPerson      |
|   | DENISE PRONK             | Observer       | Virtual       |
|   | JENNIFER DESHARNAIS      | Observer       | InPerson      |
|   | JULIANA SCAVUZZI         | Observer       | InPerson      |
|   | LUIS FELIPE DE OLIVEIRA  | Observer       | InPerson      |
|   | MICHAEL ROSSELL          | Observer       | InPerson      |
| ARAB CIVIL AVIATION ORGANIZATION                          | VIVEKANANDHAN SINDHAMANI | Observer       | Virtual       |
|   | ABDENNEBI MANAR          | Chief Observer | Virtual       |
|   | ADIL BOULOUTAR           | Observer       | InPerson      |
|   | ALI EL CHAAR             | Observer       | Virtual       |
|   | MICHELLE BISHOP          | Chief Observer | InPerson      |

|  |                                    |                |          |
|--|------------------------------------|----------------|----------|
| CIVIL AIR<br>NAVIGATION<br>SERVICES<br>ORGANISATION                                    | NICO VOORBACH                      | Observer       | InPerson |
|  | SCOTT LEIS                         | Observer       | Virtual  |
| EUROPEAN CIVIL<br>AVIATION<br>CONFERENCE   | PATRICIA REVERDY                   | Chief Observer | InPerson |
|  | BEATRICE<br>ADOLEHOUME             | Observer       | InPerson |
| EUROPEAN UNION   | HENRIK HOLOLEI                     | Chief Observer | InPerson |
|  | ANDREI MUNGIU                      | Observer       | Virtual  |
|  | DELPHINE MICHEAUX<br>NAUDET        | Observer       | InPerson |
|  | FILIP CORNELIS                     | Observer       | InPerson |
|  | MAGNUS GISLEV                      | Observer       | InPerson |
|  | MARIA DE LAS FLORES<br>DIAZ PULIDO | Observer       | InPerson |
|  | STEPHEN ARROWSMITH                 | Observer       | InPerson |
| INTERNATIONAL<br>AIR TRANSPORT<br>ASSOCIATION  | CONRAD CLIFFORD                    | Chief Observer | InPerson |
|  | DANIEL CHEREAU                     | Observer       | InPerson |
|  | JEAN-FRANCOIS GROUT                | Observer       | InPerson |
|  | JORGE DIEGUEZ                      | Observer       | InPerson |
|  | MICHAEL COMBER                     | Observer       | InPerson |
|  | SEBASTIAN MIKOSZ                   | Observer       | InPerson |
|  | THOMAS REYNAERT                    | Observer       | InPerson |
|  | TIMOTHY POHLE                      | Observer       | InPerson |
| YUE HUANG  | Observer                           | InPerson       |          |
| INTERNATIONAL<br>BUSINESS<br>AVIATION COUNCIL  | KURT EDWARDS                       | Chief Observer | InPerson |
|  | LEO KNAAPEN                        | Observer       | InPerson |
| INTERNATIONAL<br>COALITION FOR<br>SUSTAINABLE<br>AVIATION                              | TIM JOHNSON                        | Chief Observer | Virtual  |
|  | PEDRO PIRIS-CABEZAS                | Observer       | Virtual  |
|  | SHRAEYA MITHAL                     | Observer       | Virtual  |
| INTERNATIONAL<br>COORDINATING<br>COUNCIL OF<br>AEROSPACE<br>INDUSTRIES<br>ASSOCIATIONS | ERIC UPTON                         | Chief Observer | InPerson |
|  | MARC HAMY                          | Chief Observer | InPerson |
|  | ANOUCK BARREAUX                    | Observer       | InPerson |
|  | ARNAUD BONNET                      | Observer       | Virtual  |
|  | DAN ALLYN                          | Observer       | Virtual  |

|   |                           |                |          |
|---|---------------------------|----------------|----------|
|   | DANIEL CARNELLY           | Observer       | InPerson |
|   | FREDERIC EYCHENNE         | Observer       | InPerson |
|   | HEATHER SHEFFER           | Observer       | Virtual  |
|   | JIAN-MING (JIMMY)<br>ZHOU | Observer       | Virtual  |
|   | KRISHA NOBREGA            | Observer       | Virtual  |
|   | MARCELO GONCALVES         | Observer       | Virtual  |
|   | MARK HUISING              | Observer       | InPerson |
|   | OLIVIER HUSSE             | Observer       | InPerson |
|   | PIERRE DUCHAIGNE          | Observer       | InPerson |
|   | SCOTT GOOBIE              | Observer       | Virtual  |
| INTERNATIONAL<br>PARTNERS FOR<br>AVIATION<br>DEVELOPMENT,<br>INNOVATION AND<br>SUSTAINABILITY | OLUMUYIWA BENARD<br>ALIU  | Chief Observer | InPerson |
| LATIN AMERICAN<br>CIVIL AVIATION<br>COMMISSION  | JAIME BINDER              | Chief Observer | InPerson |
| ROYAL<br>AERONAUTICAL<br>SOCIETY  | CHRISTOPHER LYLE          | Chief Observer | InPerson |
| <b>Total for International<br/>Organizations</b>  | 58                        |                |          |

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**WORKING PAPERS**

| <b>HLM-LTAG WP</b> | <b>Agenda Item</b> | <b>Title</b>  | <b>Languages</b> | <b>Presented by</b>   |
|--------------------|--------------------|---|------------------|---|
| 1                  | 1, 2, 3, 4         | Meeting Arrangements and Tentative Timetable  | E,F,S,R,A,C      | Secretariat   |
| 2                  | 1, 2, 3, 4         | Overview of ICAO Work on the Feasibility of LTAG  | E,F,S,R,A,C      | Secretariat   |
| 3                  | 1, 4               | Scientific Understanding (Building Block 1)   | E,F,S,R,A,C      | Secretariat   |
| 4                  | 1, 4               | Technical Feasibility of LTAG Scenarios (Building Block 2)  | E,F,S,R,A,C      | Secretariat   |
| 5                  | 1, 4               | Level of LTAG Ambition (Building Block 3)   | E,F,S,R,A,C      | Secretariat   |
| 6                  | 2, 4               | State Action Plans and Roadmaps (Building Block 4)  | E,F,S,R,A,C      | Secretariat   |
| 7                  | 2, 4               | Means of Implementation (Building Block 5)  | E,F,S,R,A,C      | Secretariat   |
| 8                  | 3, 4               | Means of Monitoring Progress (Building Block 6)   | E,F,S,R,A,C      | Secretariat   |
| 9                  | 1                  | Issues of Implementation of the LTAG Integrated Scenarios and their Relationship with CORSIA                  | E,F,S,R,A,C      | Russian Federation and People's Republic of China                           |
| 10                 | 1, 2, 3, 4         | Indonesia Observation on the ICAO LTAG (Long-term Aspirational Goal) Study                                    | E,F,S,R,A,C      | Indonesia   |
| 11                 | 1                  | ICSA's Views on a Long-Term Aspirational Goal for International Aviation CO <sub>2</sub> Emissions Reductions | E,F,S,R,A,C      | ICSA  |
| 12                 | 1                  | Views on Exploring the Feasibility of a Long-Term Global Aspirational Goal for International Aviation         | E,F,S,R,A,C      | Egypt, Kuwait, Oman, Qatar, Saudi Arabia, Sudan, UAE, and supported by ACAO |
| 13                 | 3                  | Aligning LTAG with the Voluntary SAP as the Best Means of Monitoring the Progress                             | E,F,S,R,A,C      | AFCAC   |
| 14                 | 2                  | Capacity Building Support to African States   | E,F,S,R,A,C      | AFCAC   |
| 15                 | 2                  | Financing the Implementation of the Long Term Aspirational Goals Scenarios for the African Continent          | E,F,S,R,A,C      | AFCAC   |
| 16                 | 2                  | The Role of Hydrogen in the Development of Sustainable Fuels (SAF)  | E,F,S,R,A,C      | Chile   |
| 17                 | 2                  | Building Skills and Tools to Implement LTAG Operational Measures  | E,F,S,R,A,C      | Chile   |
| 18                 | 1, 3, 4            | Towards an Ambitious Long-Term Global   | E,F,S,R,A,C      | Czechia on  |

| <b>HLM-LTAG WP</b> | <b>Agenda Item</b> | <b>Title</b>   | <b>Languages</b> | <b>Presented by</b>   |
|--------------------|--------------------|--|------------------|---|
|                    |                    | Aspirational Goal for International Aviation   |                  | behalf of the EU and its Member States and the other Member States of the ECAC                                |
| 19                 | 2                  | Supporting States to Mobilise Finance in Pursuit of an Ambitious Long-Term Aspirational Goal | E,F,S,R,A,C      | Czechia on behalf of the EU and its Member States and the other Member States of the ECAC                     |
| 20                 | 1                  | Industry Views on Delivering a Long-Term Climate Goal for Aviation                           | E,F,S,R,A,C      | ACI, CANSO, IATA, IBAC and ICCAIA, coordinated by ATAG  |
| 21                 | 1                  | Considerations for the Feasibility of a Long-Term Aspirational Goal (LTAG)                   | E,F,S,R,A,C      | India, China, Russian Federation and Saudi Arabia   |
| 22<br>(Revised)    | 2, 4               | Establishment of a Multilateral Fund for International Aviation                              | E,F,S,R,A,C      | Brazil, India, Nigeria, Russian Federation and Sudan and supported by Bolivia, Cuba, El Salvador and Paraguay |
| 23<br>(Revised)    | 1, 2, 3, 4         | Perspectives on the Provisional Agenda of the HLM-LTAG                                       | E,F,S,R,A,C      | People's Republic of China, Brazil, India and Russian Federation  |
| 24<br>(Revised)    | 1, 2, 4            | Perspectives on Scientific Understanding of UNFCCC and IPCC (Building Block 1, 3, 5 & 6)     | E,F,S,R,A,C      | People's Republic of China, Brazil, India and Russian Federation  |
| 25                 | 1, 2, 4            | Perspectives on the Technical Feasibility  | E,F,S,R,A,C      | People's  |

| <b>HLM-LTAG WP</b> | <b>Agenda Item</b> | <b>Title</b>  | <b>Languages</b> | <b>Presented by</b>  |
|--------------------|--------------------|---|------------------|--|
| (Revised)          |                    | Analysis of any Proposed LTAG for International Aviation (Building Block 2)                               |                  | Republic of China, India and Russian Federation  |
| 26 (Revised)       | 1, 2, 4            | Perspectives on the Ambition of International Aviation and Climate Change (Building Block 3 & 5)          | E,F,S,R,A,C      | People's Republic of China, India and Russian Federation   |
| 27 (Revised)       | 1, 2, 4            | Perspectives on State Action Plans and Roadmaps (Building Block 4)  | E,F,S,R,A,C      | People's Republic of China, Brazil and the Russian Federation  |
| 28 (Revised)       | 1, 2, 4            | Perspectives on the Development of a Robust Support Mechanism for Developing Countries (Building Block 5) | E,F,S,R,A,C      | People's Republic of China, Brazil and Russian Federation  |
| 29 (Revised)       | 3, 4               | Perspectives on ICAO Implementation of Monitoring (Building Block 6)                                      | E,F,S,R,A,C      | People's Republic of China, Brazil and Russian Federation  |
| 30                 | 1, 2, 3, 4         | An Ambitious Long Term Aspirational Goal (LTAG) is Necessary for International Aviation                   | E,F,S,R,A,C      | New Zealand and co-sponsored by Canada, Cook Islands, Japan, Kenya, Kiribati, Papua New Guinea and Samoa |

**INFORMATION PAPERS**

| <b>HLM-LTAG IP</b> | <b>Agenda Item</b> | <b>Title</b>                                | <b>Languages</b> | <b>Presented by</b> |
|--------------------|--------------------|---|------------------|---------------------|
| 1                  | 1, 2, 3            | ICAO Assembly Resolution A40-18             | E                | Secretariat         |
| 2                  | 1, 2, 3            | ICAO Report on the Feasibility of LTAG      | E                | Secretariat         |
| 3                  | 1, 2, 3            | ICAO LTAG Global Aviation Dialogues (GLADS) | E                | Secretariat         |

|    |      |  |   |   |
|----|------|--|---|---|
| 4  | 2, 3 | Second ICAO Conference on Aviation Alternative Fuels (CAAF/2)  | E | Secretariat   |
| 5  | 1    | Climate Action from Business Aviation in Support of Industry Decarbonisation                                       | E | IBAC, coordinated by ATAG   |
| 6  | 1    | Aviation Decarbonization Pathways Placed in the Context of Paris Agreement Temperature Targets                     | E | ICSA  |
| 7  | 1    | Climate Action from ANSPs in Support of Industry Decarbonisation   | E | CANSO   |
| 8  | 1    | Climate Action from Manufacturing Industry in Support of Industry Decarbonisation                                  | E | ICCAIA, coordinated by ATAG   |
| 9  | 1    | Climate Action from Airlines in Support of Industry Decarbonisation  | E | IATA  |
| 10 | 1    | The Cost of Achieving Net-Zero Carbon in Aviation  | E | ATAG  |
| 11 | 2    | Supporting States to Mobilise Finance in Pursuit of an Ambitious Long-Term Aspirational Goal                       | E | Australia, Costa Rica and the United Kingdom  |
| 12 | 1, 2 | Necesidad de impulsar un esquema normativo integral para el desarrollo de los combustibles sostenibles de aviación | S | Guatemala supported by Argentina, Bolivia, Chile, Cuba, El Salvador, Panama, Paraguay, Dominican Republic, Uruguay and IATA |