



ICAO

ENVIRONMENT

Updates on LTAG GLADs in Africa

AFI AVIATION WEEK SYMPOSIUM

Abuja, Nigeria

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Resolution A40-18, paragraph 9 requested the LTAG work

Task

The Assembly... Requests the Council to continue to explore the feasibility of a long term global aspirational goal for international aviation,

How to do the task

through conducting detailed studies assessing the attainability and impacts of any goals proposed, including the impact on growth as well as costs in all countries, especially developing countries,

Timeline

for the progress of the work to be presented to the 41st Session of the ICAO Assembly. [2022]

Consideration

Assessment of long term goals should include information from Member States on their experiences working towards the medium term goal.



CAEP undertook:

- (1) **data gathering** from internal and external sources in a transparent and inclusive manner,
- (2) **development of combined in-sector scenarios** from technology, fuels, and operations that represent a range of readiness and attainability based on the data gathering, and
- (3) **conducted final analysis** of the scenarios to understand those **impacts on CO₂ emissions** and **cost associated with the scenarios** and **economic impacts on aviation growth, noise and air quality**, in all countries especially developing countries and the results was placed **in context of the latest consensus scientific knowledge**.

The Council in March 2022 agreed that ICAO LTAG report be made available, as the input to further consideration by all States and stakeholders at the LTAG GLADs.

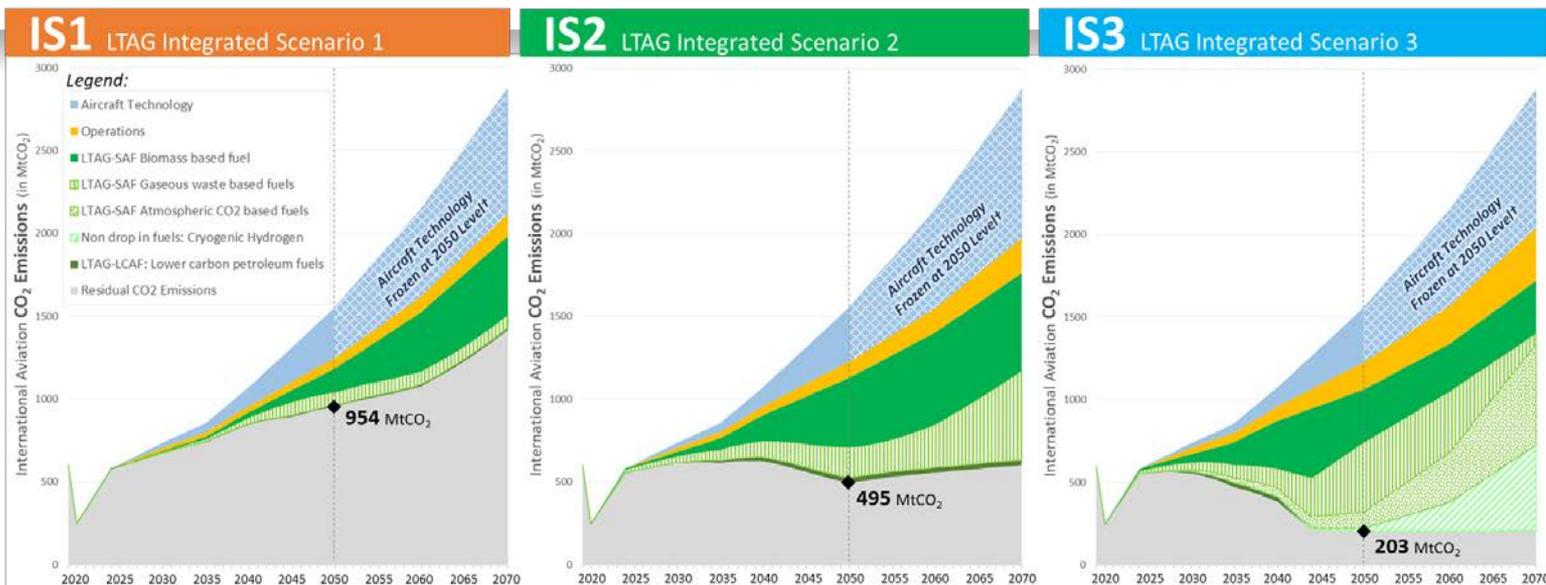
The LTAG report is now available at the LTAG Website.

<https://www.icao.int/environmental-protection/Pages/LTAG.aspx>
(or search “ICAO LTAG”)





Main takeaway from the LTAG Report

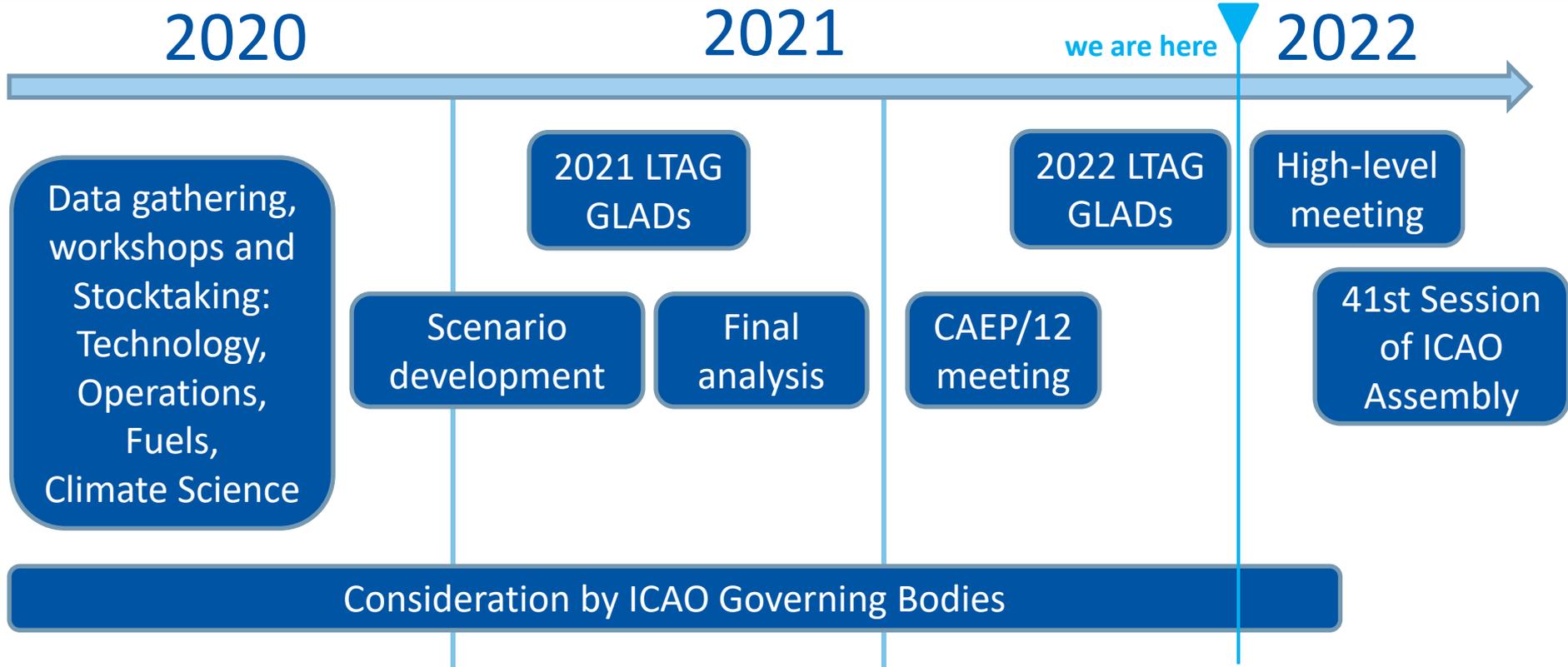


Metrics	IS1	IS2	IS3
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CO ₂ Emissions in 2050 after Reductions	≈950 MtCO ₂ in 2050 (160% of 2019 CO ₂ emissions)	≈500 MtCO ₂ in 2050 (80% of 2019 CO ₂ emissions)	≈200 MtCO ₂ in 2050 (35% of 2019 CO ₂ emissions)
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Reduction in 2050 from the Baseline	39% total through: Technologies - 20%, Operations - 4%, Fuels - 15%	68% total through: Technologies - 21%, Operations - 6%, Fuels - 41%)	87% total through: Technologies - 21%, Operations - 11%, Fuels - 55%
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Cumulative residual Emissions from 2020 to 2070	23 GtCO ₂ (2020 to 2050) 23 GtCO ₂ (2051 to 2070)	17 GtCO ₂ (2020 to 2050) 11 GtCO ₂ (2051 to 2070)	12 GtCO ₂ (2020 to 2050) 4 GtCO ₂ (2051 to 2070)
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- Part of the ICAO consultative process, the ICAO Global Aviation Dialogues (GLADs) on LTAG held as a series of five virtual regional events, as follows:
 - ✓ 28 March and 4 April 2022 for APAC region;
 - ✓ 28 March and 4 April 2022 for NACC and SAM regions;
 - ✓ 29 March and 5 April 2022 for MID region;
 - ✓ 30 March and 6 April 2022 for ESAF and WACAF regions; and
 - ✓ 31 March and 8 April 2022 for EUR-NAT region.

- A total of **421** participants from **108** States and **11** Organizations attended the five event.



The LTAG-GLADs aim to raise awareness on the ICAO work on LTAG and facilitate the exchange of views amongst Member States, with the following two objectives:

1) communicate the latest ICAO technical work on LTAG

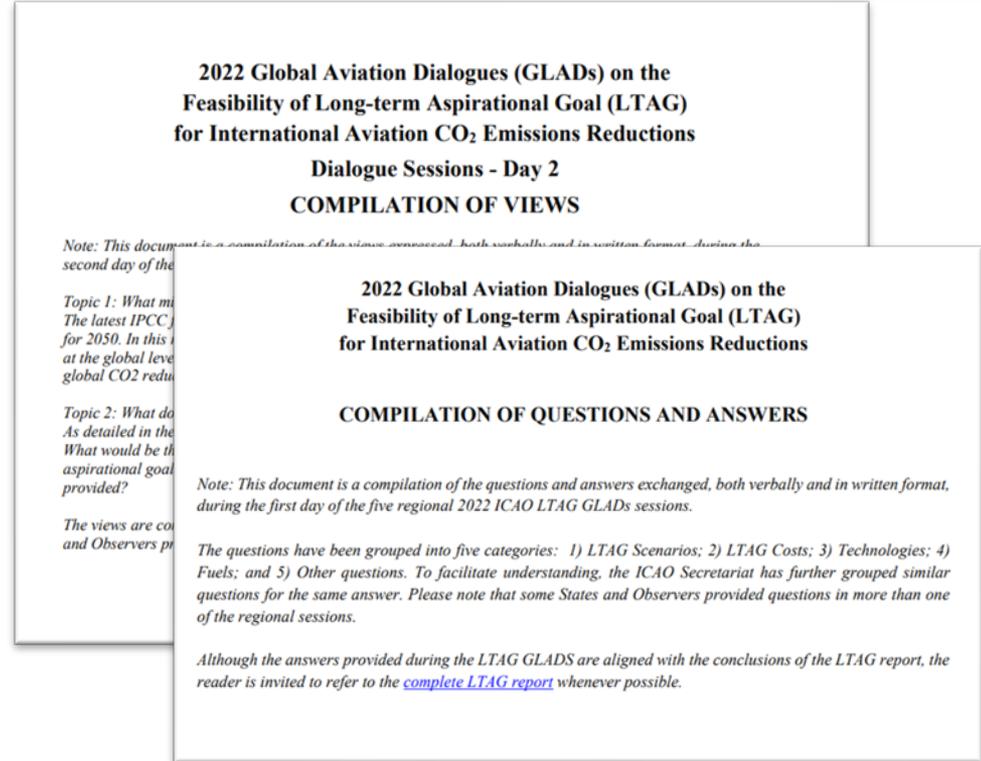
(How can the ICAO technical work form the basis of a decision on LTAG?); and

2) discuss how to facilitate a decision on LTAG

(What will the ICAO High-level Meeting recommend and what will the 41st Session of the ICAO Assembly be requested to decide on LTAG?).



- ✓ Questions and answers at the Q&A session (Day 1) were consolidated by the Secretariat, and are **available as FAQs on the GLADs website**;
- ✓ Views expressed at the Dialogue session (Day 2) were consolidated by the Secretariat, and **are available at the GLADs website**



<https://www.icao.int/Meetings/2022-ICAO-LTAG-GLADS/Pages/default.aspx>

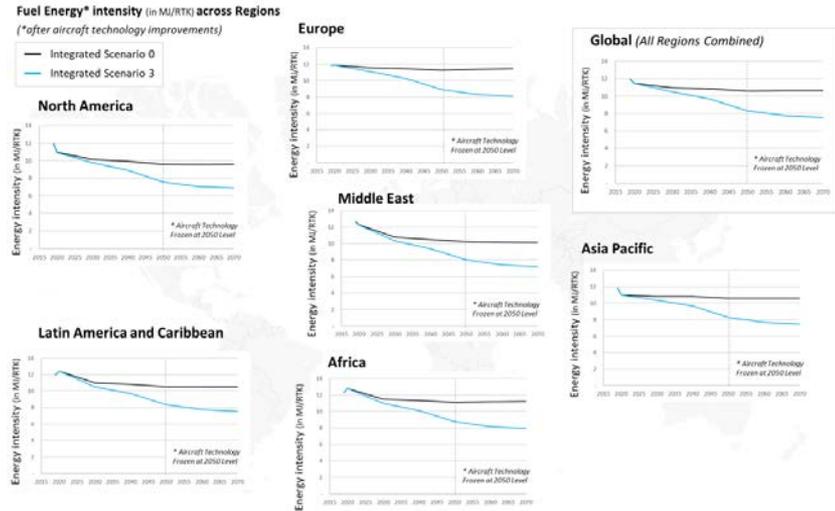


Q&A sessions allowed States to clarify on various topics related to LTAG, such as:

- **LTAG is not an individual State goal**
 - Any global aspirational goal would be the collective goal of the global international aviation sector;
 - Does not set obligations or targets to individual States;
 - Individual State's contributions based on their assessment of its best mix of measures – States can contribute to collective goal differently.

- **Practical implications of regional variances and limitations in relation to LTAG**

- LTAG study is a global analysis;
- When data was available in some limited instances, regional level assessments were conducted;
- Certain aspects, e.g. investments into aircraft technologies, are not applicable to all States, but rather States with manufacturers and/or certification authorities.



Fuel (energy) intensity across ICAO regions taking into account technology improvements (Appendix R1, LTAG Report)



- **Capacity Building**

- Possible needs for capacity building and assistance e.g.:
 - ✓ workshops on measures, including understanding costs
 - ✓ assistance on monitoring and measuring CO2 emissions
 - ✓ an overarching training programme (e.g. related to SAF) which could be similar to ACT-CORSIA; in accordance with No Country Left Behind strategy.



- **Implications of LTAG analyses considering that scenarios will not lead to net-zero outcomes without out of sector measures**
 - Reflective of the complementary role of out-of-sector measures
 - While industry has decided on a 2050 net-zero ambition, ICAO has not yet decided on the goal
 - LTAG report provides information on emissions reduction scenarios, and residual emissions
 - Subject to decision taken, States may need to consider complementary measures – this had been done with Carbon Neutral Growth, achieved through basket of measures with a global CORSIA scheme



- **Concerns over costs**

- Integrated Scenario 3 is the most ambitious scenario, costs driven mostly by the replacement of conventional jet fuel with SAF
- Important points to note:
 - ✓ Cumulative cost over 30 years should be put into the context of industry total revenue/operating cost across similar timeframe
 - ✓ LTAG scenarios do not put obligations on airlines, neither does it force airlines to bear implementation costs.
 - ✓ It defines an aspirational goal – does not prejudge downstream decisions. Even so, there are means to address cost impacts of mechanisms (e.g. periodic review for CORSIA)



LTAG-GLADs provided an opportunity for States to share their views on:

- i. What might an LTAG look like?**
- ii. What does it take to implement an LTAG?**

ESAF/WACAF LTAG-GLADs was able to capture views expressed from African States, which will support deliberations at the upcoming HLM and Assembly

- ✓ Range of views from support to concerns that developing States may not be ready
- ✓ Assistance and capacity building such that an LTAG may be attainable/feasible
- ✓ Regulatory frameworks, roadmaps, collaborations and funding needed



- Available at the ICAO LTAG-GLADs website
 - ✓ Compilation of Questions and Answers, and views expressed (both verbally and in written format) on LTAG

- All African States are invited to;
 - ✓ contribute and join ICAO Stocktaking 2022 on aviation in sector CO2 emissions reductions will be held on 18-19 July as a virtual event, prior to the ICAO High-level Meeting on LTAG; and
 - ✓ attend the High-level Meeting to be convened from 20 to 22 July 2022 in Montréal.



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THANK YOU