



**Fifth GREPECAS–RASG-PA Joint Meeting (GREPECAS-RASG-PA/5) and  
 Twenty-Third Meeting of the CAR/SAM Regional Planning and Implementation Group  
 (GREPECAS/23)**

Virtual Phase (Asynchronous, 19 January to 17 February 2026)  
 In-Person Phase (Mexico City, Mexico, 4 to 6 March 2026)

**Agenda Item: Implementation of CAR/SAM air navigation**

**ENVIRONMENTAL PROTECTION**

(Presented by the Secretariat)

**EXECUTIVE SUMMARY**

This Working Paper summarizes the most relevant environmental decisions of the A42 Assembly – including Resolutions A42-21 and A42-22, as well as the incorporation of environmental sustainability and resilience as strategic priorities in the Strategic Plan 2026–2050 and in the 8th edition of the GANP. It also highlights that GREPECAS/22 identified operational improvements as the most immediate contribution to the fulfillment of the long-term aspirational objectives (LTAGs) and consequently, the Working Paper calls on States to integrate the Environment KPA into their national and regional planning, implement operational improvements that reduce emissions, strengthen the climate resilience of infrastructures and services, and align regulations and procedures with the environmental objectives of the GANP and the Assembly's requests, thus contributing to progress towards sustainable aviation.

<b>Action:</b>	The provisions of 4.1
<i>Objectives Strategic:</i>	<ul style="list-style-type: none"> <li>• Every flight is safe and secure</li> <li>• Aviation is environmentally sustainable</li> <li>• Aviation delivers seamless, accessible, and reliable mobility for all</li> <li>• No country left behind</li> </ul>
<i>References:</i>	<ul style="list-style-type: none"> <li>• Report of the 42nd ICAO Assembly</li> <li>• ICAO Strategic Plan 2026-2050</li> <li>• Report of the Fourteenth Air Navigation Conference (AN-Conf/14)</li> <li>• Global Air Navigation Plan, Eighth Edition (GANP, 8th)</li> <li>• GREPECAS/22 Report</li> </ul>

**1. Introduction**

1.1 The Forty-Second Session of the ICAO Assembly included on its agenda Item 16: Environmental Protection – International Aviation and Climate Change, the main result of which was the adoption of Resolutions A42-21 on climate change and A42-22 on CORSIA.

1.2 In this context, the ICAO Council approved the 2026-2050 Strategic Plan in 2024, under the slogan "*Safe Skies, Sustainable Futures*", incorporating among its strategic objectives that aviation is environmentally sustainable.

1.3 In addition, the Fourteenth Air Navigation Conference (AN-Conf/14) issued recommendations related to the environment and resilience, including Recommendation 1.2/1 aimed at strengthening harmonization between the GASP, the GANP and ICAO's environmental initiatives.

1.4 In line with the above, the Twenty-Second Meeting of GREPECAS (GREPECAS/22) analyzed how air navigation optimization can support the Long-Term Global Ambitious Goal (LTAG) for international aviation, identifying in particular operational improvements as a direct and immediate contribution to progress towards the LTAG goals.

## 2. Analysis

2.1 ICAO's New Strategic Plan 2026-2050 sets out the following six strategic objectives:

- ✓ All flights are safe and secure.
- ✓ **Aviation is environmentally sustainable.**
- ✓ Aviation provides seamless, accessible, and reliable mobility for everyone.
- ✓ Leave no country behind.
- ✓ The economic development of air transport enables economic prosperity and social well-being for everyone.
- ✓ The International Civil Aviation Convention and other treaties, laws and regulations address all challenges.

These goals align with the strategic priorities of the GANP (8th edition), including the Environment Key Performance Area (KPA) and the resilience focus area.

2.2 In Item 16 of the 42nd ICAO Assembly, the ICAO Council presented reports on activities related to international aviation and climate change, including work on LTAG and initiatives for monitoring, supporting implementation and financing of the fight against climate change under ICAO. Several documents related to the impact of climate change on the operational safety and operability of airports were also reviewed, as well as good practices related to operational improvements and their contribution to the decarbonization of international aviation in coherence with the performance management approach addressed in the 8th edition of the GANP.

2.3 There it was highlighted that severe weather events associated with climate change have generated accidents, incidents that have disturbed the safety of flights in addition to flooding airports preventing their operation for long periods, which merit applying risk management processes to strengthen the climate resilience of the aeronautical system, in line with the GANP 8th Edition that incorporates performance ambitions in terms of minimizing environmental impacts To improve fuel efficiency, reduce local noise and emissions, and maintain operational continuity in the face of disruptive events, integrating a performance-based operational approach.

2.4 This update enables an integrated approach to performance management, and links global planning with ICAO's environmental and resilience initiatives, in line with recommendation 1.2/1 of the 14th Air Navigation Conference (AN-Conf/14) — Work to improve the harmonization of the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP) and provide a coordinated approach to the environment and resilience.

2.5 The GREPECAS/22 Meeting analyzed the Environment strategy for the CAR/SAM Regions, focused on the State Action Plans for CO<sub>2</sub> emission reductions from international civil aviation (SAP), identifying "operational improvements" as the immediate measure to support LTAG from air

navigation. To promote this measure and quantify the reductions in CO<sub>2</sub> emissions through operational improvements, GREPECAS/22 had issued Conclusion **22/12 - Environment Strategy in the NAM/CAR/SAM Regions**.

2.6 In addition, Resolution A42-21 requests the Council:

- Expand the ACT-SAF Programme to include technical support to other operational and technological measures (e.g. aircraft technology, operational and infrastructure measures) through an ACT-LTAG, strengthening support to States (Res A42-21 item 21 h),
- Reduce legal, safety, economic and institutional barriers to enable the implementation of new air traffic management (ATM) operational concepts for environmentally beneficial use of airspace. (Res A42-21 item 32 (b))
- Maintain and update guidance on operational measures for the reduction of emissions from international aviation, emphasizing improved fuel efficiency in all aspects of the GANP; (Res A42-21 item 33, paragraph a))
- Technical input from the CAEP, strengthen scientific understanding and clear uncertainties of aviation's climate impacts, including exploring ways to quantify the potential climate impacts of aviation emissions other than CO<sub>2</sub> and technological and operational measures to address such impacts.
- Encourage States to incorporate climate resilience criteria in the development of aeronautical systems and infrastructure, including the exchange of best practices, promoting the development of their aviation systems and infrastructure, favoring climate resilience criteria, providing guidance and exchanging best practices, emphasizing the formulation of policies that integrate climate mitigation and adaptation actions to advance development of sustainable aviation. (Res A42.21 (e) item 3)

### 3. Conclusions

3.1 The Secretariat requests the Meeting to:

- Urge States to work with National Planners to include the Environment KPA in National Air Navigation Plans. In this regard, the secretariat will include the aforementioned KPA in Volume III of the Regional Air Navigation Plan of the CAR/SAM regions, incorporating the respective corresponding Key Performance Indicators (KPIs), in line with Resolution A42-21 and the GANP 8th Edition.
- Recommend to States the implementation of measures that prioritize technologies and processes that reduce emissions and increase energy efficiency, aligned with global commitments, such as: **more direct routes** and continuous approach (CDO) and continuous climb (CCO) procedures to reduce flight time and fuel consumption and enhance the use of **collaborative air traffic flow management (ATFM)** to minimize ground and flight delays.
- Recommend that States **promote fuel-optimized planning** and the use of advanced weather forecasting tools to reduce unnecessary contingencies.

3.2 With regard to the resilience of airport infrastructure, States should promote the development of aeronautical systems that take into account risks associated with climate change and variability (extreme temperatures, floods, severe storms, droughts) and recommend regional and international mechanisms to share successful experiences in mitigation and adaptation.

3.3 Considering the Eighth Edition of the GANP (see NE 4.2), the meeting should recommend the incorporation of climate objectives into regulations, operational procedures and investment plans aimed at **sustainable aviation**.

3.4 **The Meeting should recommend that airport management contribute to LTAG by increasing the use of technologies for environmental management and the efficiency of ground operations.**

#### **4. Recommended Action**

4.1 It is recommended that the Meeting:

- a) To take note of the present document and of Resolutions A42-20, A42-21 and A42-22 as a guiding framework;
- b) Approve and promote the actions recommended in section 3
- c) Take other actions that the meeting deems appropriate.

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