

Call for Inputs from the UN System on the UN Decade of Sustainable Transport

ICAO Contribution

Questions

1. How can the <u>UN Decade of Sustainable Transport</u> best boost sustainable transport around the world and increase its contribution to the implementation of the Sustainable Development Goals? What kind of a shared vision of sustainable transport should the UN advocate for in the Implementation Plan?

Aviation is an integral part of society, connecting people and transporting goods worldwide, and an important driver of economic growth and sustainable development, improving the standard of living of people around the world through the safe and reliable operation of over 96,577[1]1 flights every day. The achievement of sustainable growth within the international air transport system strongly relies on a high-performing and seamless global air navigation system. In addition to the fundamental aviation performance principles of safety, security and environmental and economic sustainability, there are several other performance requirements that must be satisfied to meet the needs of society such as capacity, efficiency or access and equity

ICAO's objective is to achieve sustainable growth of the global civil aviation system through the collaborative integration of humans, information, technology, facilities and services. To this end, ICAO sets the necessary standards and policies to ensure the safe and orderly development of international civil aviation by serving as a global forum among its 193 Member States.² With the Global Air Navigation Plan (GANP), ICAO brings the aviation community together to achieve an agile, safe, secure, sustainable, high-performing and interoperable global air navigation system.

ICAO is exercising continuous leadership on all environmental issues relating to international civil aviation, including greenhouse gas (GHG) emissions. Notably, the ICAO Assembly has adopted a set of goals to mitigate the impact of aviation activities on the environment, specifically, the global aspirational goals for the international aviation sector of improving fuel efficiency by 2 per cent per annum, keeping the net carbon emissions from 2020 at the same level as adopted by the ICAO Assembly in 2010, and a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050 in support of the UNFCCC Paris Agreement's temperature goal as adopted by the ICAO Assembly in 2022.

To promote the sustainable growth of international aviation and to achieve global aspirational goals, ICAO has been working on advancing a basket of measures including aircraft technology, sustainable aviation fuels (SAFs), operational improvements and the global market-based measure scheme, in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

The United Nations' designation of 2026–2035 as the Decade of Sustainable Transport presents an opportunity to expand international collaboration in advancing sustainable aviation, under ICAO's leadership as identified in the <u>UNGA Resolution A/RES/78/148</u>. The Implementation Plan for the UN

¹ <u>abbb2024_summary.pdf</u>

² https://www.icao.int/about-icao/Council/Pages/vision-and-mission.aspx

Decade of Sustainable Transport can acknowledge ICAO's achievements in sustainable aviation and offer new platforms to extend awareness of ICAO's aviation decarbonization and sustainability efforts. Enhancing awareness of ICAO's would help stakeholders identify collaboration opportunities and align efforts and resources to advance ongoing ICAO aviation initiatives, which would in turn boost global sustainable transport and the implementation of the SDGs.

2. What are some of the key impediments to sustainable transport and how can the UN Decade strategically address these?

Political will and investment

The social and economic benefits of aviation will continue to be recognized by governments and policymakers. ICAO has demonstrated its commitment to supporting the United Nation 2030 Agenda for Sustainable Development and its 17 SDGs, aimed at improving the living conditions and economic prosperity of people all over the globe. A key goal that relates to the GANP is SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

Modernizing and building necessary infrastructure within the air navigation system to generate new services and optimize current services is essential to accommodating growing demand and meeting the requirements of a new era in aviation. This requires both significant political will and investment.

Unlike other modes of transportation, air transport has historically been self-sustaining in terms of infrastructure costs and has not been financed through taxation, public investment or subsidies. Infrastructure costs are covered by user charges, most of which are added to airfares. In 2016, it was estimated that airlines and passengers paid USD 125.9 billion14 to airports and ANSPs.

Resisting change

Due to the critical factor of aviation safety, the pace and uptake of innovation can be slow. However, the aviation industry is beginning to look at other industries where emerging technologies may be applied to aviation. These tried and tested technologies have the potential to reduce innovation life cycles and accelerate change in aviation, while ensuring that the net cost per passenger remains steady or is reduced.

It is also possible to speed up change by including early stage research, industrial research and development, and implementation experiences within the innovation life cycle. This minimizes deployment risks at an early stage by making good use of and sharing validated results from research and development activities taking place worldwide. This requires the performance validation and close collaboration of the aviation industry so that potential risks and threats can be understood and managed at an early stage.

An aviation system that is at the forefront of innovation and that actively addresses cybersecurity and ensures adequate integration of military requirements needs to be capable of providing suitable and timely responses to threats and attacks. The system must be capable of maximizing human capacity and strongly supported by technology. Since aviation consists of a system where the servicing of mobile assets, including large aircraft, small manned aircraft and unmanned vehicles, is the primary objective, ensuring the integrity of all information is of utmost importance. Embracing mainstream information and network technology can lead to a more cost-effective and rapid modernization of the aviation system.

• Inefficient allocation of resources and non-harmonized implementation

Traffic demands and available infrastructure may differ depending on the airport, airspace, State and region, resulting in different levels of motivation to modernize. Similarly, resources in the global aviation community are limited and unevenly distributed. One size does not fit all, which is why the air navigation

system evolves according to performance needs and requirements. The GANP contains solutions that should be implemented as needed, in line with specific operational requirements and performance needs. Most improvements to the air navigation system rely on the coordination and transfer of data and information across multiple stakeholder networks, systems and facilities. As a result, there is a need for multi-State and regional coordination processes to achieve the full potential and benefits expected from operational improvements. Such processes may be in the form of bilateral, multilateral agreements or even regional air navigation agreements.

The expectation of the GANP, which follows the underlying philosophy of "think global, act local", is not for everyone to implement everything, everywhere. Rather, the expectation is that a seamless quality of air navigation services should be delivered worldwide through regional and national performance objectives for meeting the performance ambitions. To achieve seamlessness while ensuring optimum use and allocation of resources, efforts should be made in each State and region to analyse the operating environment and to make consistent choices for increased modernization.

• Protecting the environment

As identified in the <u>technical analysis done at ICAO</u>, Sustainable Aviation Fuels (SAF) has the greatest potential to reduce CO₂ emissions from international aviation given its hard-to-abate nature. Following the LTAG agreement of 2050 net-zero carbon emissions, ICAO has adopted in 2023 a comprehensive <u>ICAO Global Framework for Aviation Cleaner Energies</u>. This Framework comprise of a Vision to reduce CO₂ emissions in international aviation by 5 per cent by 2030 through the use of SAF other aviation cleaner energies. The Framework also recognized the need for comprehensive capacity-building and implementation support and financing activities to support developing countries and States with particular needs, as well as progress broader aviation decarbonization efforts in a sustainable manner.

Access to financial resources is particularly crucial for the deployment of SAF and other aviation cleaner energies, as the scaling-up of aviation cleaner fuels in support of the LTAG would require cumulative investments of around USD 3.2 trillion by 2050.

To address this challenge, ICAO has established the <u>ICAO Finvest Hub</u> to facilitate dedicated pathways for funding SAF production facilities, clean energy infrastructure, and other aviation decarbonization initiatives. Additional options, such as partnerships with financing platforms from other organizations, are being explored to enhance access to financing and funding in order to accelerate SAF development and deployment. This collaboration between ICAO and other organizations to enhance the access of the aviation sector to climate financing can be further pursued under the UN Decade.

On the other end, despite the urgent need for resources to support aviation decarbonization efforts, there have been proposals under consideration by certain UN bodies and international organizations, including the UN Committee of Experts on International Cooperation on Tax Matters, the <u>International Monetary Fund (IMF)</u>, and the <u>Global Solidarity Levies Task Force</u> identifying the aviation and maritime transport sectors as potential sources for levies and taxes to mobilize financial resources for climate action in other sectors. These proposals would divert important resources away from the aviation sector and impede its efforts to pursue decarbonization measures.

As such, ICAO and its Member States have consistently expressed a clear concern, through the UNFCCC process, on the use of international aviation as a potential source for the mobilization of revenue for climate finance to the other sectors, in order to ensure that international aviation would not be targeted as a source of such revenue in a disproportionate manner. ICAO's concerns can be acknowledged through appropriate platforms established under the UN Decade, ensuring that essential financial resources remain within the aviation sector for the achievement of ICAO's climate goals.

- 3. Please share up to five (5) main policy recommendations that should be included in the Implementation Plan? If applicable, indicate the level most aligned with the policy recommendation (global, regional, national, subnational and local, or other).
 - States should embrace innovation to address emerging challenges and opportunities stemming from aviation and technological trends.
 - States should develop national air navigation plans aligned with their national development plans.
 - The need for performance should drive the evolution of the air navigation system to ensure proper allocation of resources.

Policy recommendations related to international aviation and environment should not be included in the UN Decade of Sustainable Development Transport Implementation Plan, as the establishment and updates of globally-harmonized policies, standards and their implementation plans related to international civil aviation fall under ICAO's mandate and leadership as per the decisions of its 193 Member States.

- 4. How can the implementation of the plan be effectively monitored, and what methods can be used to track its progress across Member States? Please share most relevant existing monitoring frameworks and indicators.
 - Number of States with aviation reflected in their national development plans
 - Number of States with national air navigation plans
 - Number of States with performance indicators (<u>KPI OVERVIEW ICAO GANP Portal</u>) in their national air navigation plans
 - Number of deficiencies against the regional air navigation plans

Regarding the environment area, ICAO has already established the methodologies, tools and initiatives and programmes to monitor and track the progress made in aviation decarbonization efforts, including annual ICAO Stocktaking events, ICAO Tracker Tools, ICAO State Action Plans initiative, and ICAO Assistance, Capacity-building and Training for Sustainable Aviation Fuels (ACT-SAF) programme, with regular updates provided on ICAO Environment website.

5. Please share up to three (3) examples of concrete initiatives, projects or programmes that your entity is engaged in that can contribute to the success of the UN Decade of Sustainable Transport? Please, make sure to include relevant links.

Here are three key ICAO initiatives that directly contribute to the UN Decade of Sustainable Transport by promoting sustainability, efficiency, and innovation in aviation:

- a. ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)
 - <u>CORSIA</u> is the global market-based measure (MBM) scheme to address international aviation carbon emissions, and the first MBM across all sectors.
 - CORSIA implementation is progressing with 129 ICAO Member States voluntarily participating as of 1 January 2025.
 - The CORSIA Central Registry (CCR) has been fully operational, and the reporting of 2023 CO₂ emissions by Member States to ICAO through the CCR achieved a record 99.0% coverage.
 - ICAO implements the Assistance, Capacity-building and Training on CORSIA (ACT-CORSIA) Programme to support CORSIA implementation. To date, 136 States are participating in the programme (17 supporting States and 119 supported States).

b. New cleaner energy sources for aviation

- ICAO has adopted in 2023 a comprehensive <u>ICAO Global Framework for SAF, LCAF and other Aviation Cleaner Energies</u> which was adopted by the Third Conference on Aviation and Alternative Fuels (CAAF/3).
- This comprise of a Vision to reduce CO₂ emissions in international aviation by 5 per cent by 2030 through the use of SAFs, lower carbon aviation fuels (LCAF) and other aviation cleaner energies.
- ICAO also implements the <u>Assistance, Capacity-building and Training for Sustainable Aviation Fuels</u>
 (<u>ACT-SAF</u>) <u>programme</u> to provide tailored implementation support for States in various stages of SAF
 development and deployment, and facilitate partnerships and cooperation under ICAO coordination.
 The programme now involves more than 200 States and Organizations,
- Under the ACT-SAF programme, ICAO organized a set of <u>ACT-SAF Training Series</u>, where ICAO and ACT-SAF supporting partners deliver training sessions on various SAF-related topics.
- ICAO has been significantly scaling up the <u>SAF feasibility studies</u> to support approximately 20 States during the 2024 to 2026 period. ICAO also developed a template for SAF feasibility studies to facilitate harmonization, as well as an additional template for SAF business implementation studies.
- The global progress and latest developments are also being monitored through the <u>ICAO Stocktaking</u> events, <u>ICAO Tracker Tools</u>, <u>ICAO State Action Plans initiative</u>.

c. ICAO Global Air Navigation Plan (GANP) & Digital Air Traffic Management (ATM) Initiatives

<u>Goal:</u> Bring the aviation community together to achieve an agile, safe, secure, sustainable, high-performing and interoperable global air navigation system.

<u>How it helps:</u>

The GANP is a key contributor to the achievement of ICAO's Strategic Objectives and has an important role to play in supporting the United Nations 2030 Agenda for Sustainable Development. A key goal that relates to the GANP is Sustainable Development Goal (SDG) 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.

The content of the GANP is organized into a multilayer structure with each layer tailored to different audiences. The four-layer structure is made up of global (strategic and technical), regional and national levels, and provides a framework for alignment of regional, sub-regional and national plans. The global strategic level provides high-level strategic direction for decision-makers to drive the evolution of the global air navigation system. The global technical level is designed to support technical managers in planning the implementation of basic services and new operational improvements in a scalable and cost-effective manner and according to specific operational and performance needs, while ensuring interoperability of systems and harmonization of procedures. The regional level addresses regional and subregional performance and operational needs, differences, constraints and opportunities through the ICAO Regional Air Navigation Plans and other regional initiatives (such as research and development programmes) aligned with the global strategic and technical levels. The national level focuses on State planning. The development of national air navigation plans, in coordination with relevant stakeholders and in alignment with regional and global plans, is a strategic part of the State's national aviation planning framework and is crucial to achieve the common vision being developed in the GANP.

6. Please provide up to five (5) main reports or other publications that the Implementation Plan of the UN Decade should draw upon. Please, make sure to include relevant links.

The Implementation Plan of the UN Decade of Sustainable Transport should draw upon the following key ICAO reports and publications to ensure alignment with global aviation sustainability, efficiency, and safety goals:

a. ICAO Environmental Report (Latest Edition: 2022)

• Provides comprehensive information the aviation sector's decarbonization efforts and progress under the leadership of ICAO. New 2025 edition will be soon published at the <u>2025 ICAO Aviation Climate Week</u> in June 2025.

b. ICAO Global Air Navigation Plan (GANP)

- Serves as a strategic framework for modernizing air navigation systems.
- Promotes a **performance-** management system enabled by digitalisation, sharing of information and full connectivity.
- Supports a high performing system where:
 - No aviation community member is excluded or treated unfairly
 - o the nominal capacity is easily scalable with demand
 - Disruptive events do not interrupt service provision and do not significantly affect the performance of the system
 - There is no increase of total direct ANS cost while maintaining the safety and quality of service
 - o there is significant increase of ANS productivity, irrespective of demand,
 - there is a reduction of the gap between the flight efficiency achieved and the desired optimum trajectory of airspace users
 - o Required changes to individual, business and operational trajectories are absorbed
 - interoperability is granted at an operational and technical elvels
 - there is pre-agreed level of participation by the ATM community to make the maximum shared use of the air navigation resources
 - o there is no increase in ANS delivery variability including asset availability
 - o safety is improved and there are zero significant disruptions due to cyber events.

c. ICAO State of Global Aviation Safety Report

- Analyzes global aviation safety trends, emerging risks, and accident prevention measures.
- Provides insights on how safety improvements align with sustainable and resilient air transport.
- Supports the safe expansion of aviation infrastructure under the UN Decade goals.

d. ICAO Economic Report: Air Transport Outlook

- Analyzes aviation's economic impact, global air traffic trends, and infrastructure investment needs.
- Supports policies for equitable air transport access, particularly in developing countries.
- Essential for balancing economic growth with sustainability in aviation.