



SAFE SKIES.
**SUSTAINABLE
FUTURE.**

AFI AVIATION SYMPOSIUM

Libreville, Gabon
18 July 2024



Session 1: Global and Regional Perspectives

Mohamed Khalifa Rahma

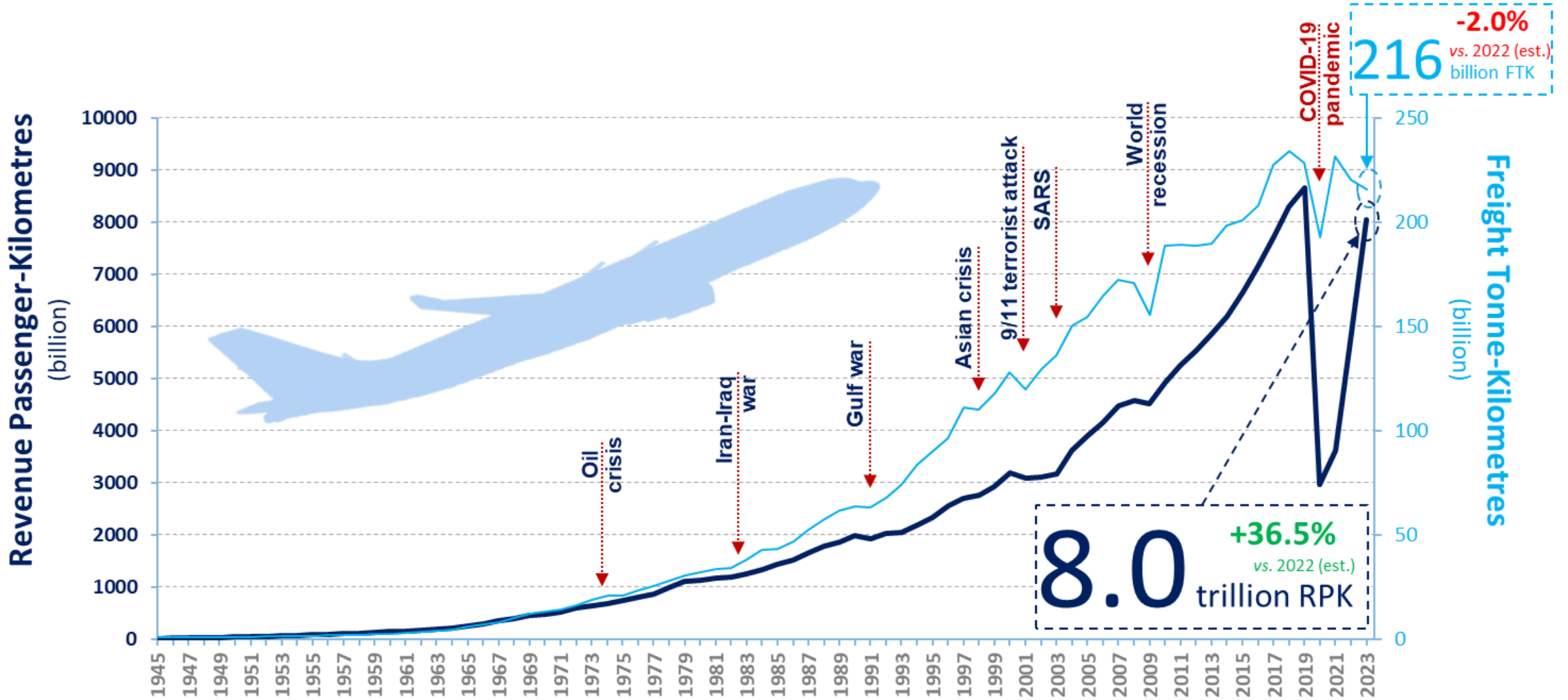
Director, Air Transport Bureau (ATB)

International Civil Aviation Organization (ICAO)

State of the Air Transport Industry



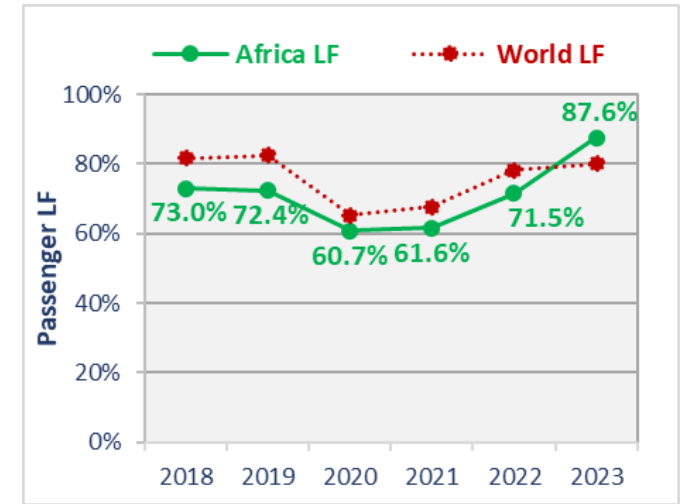
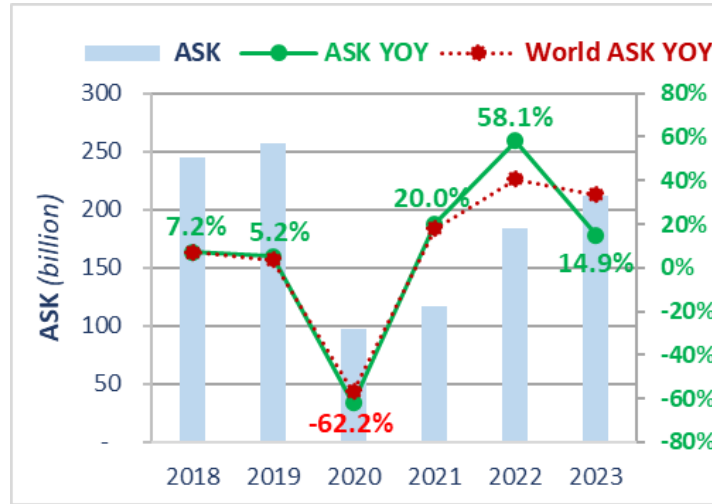
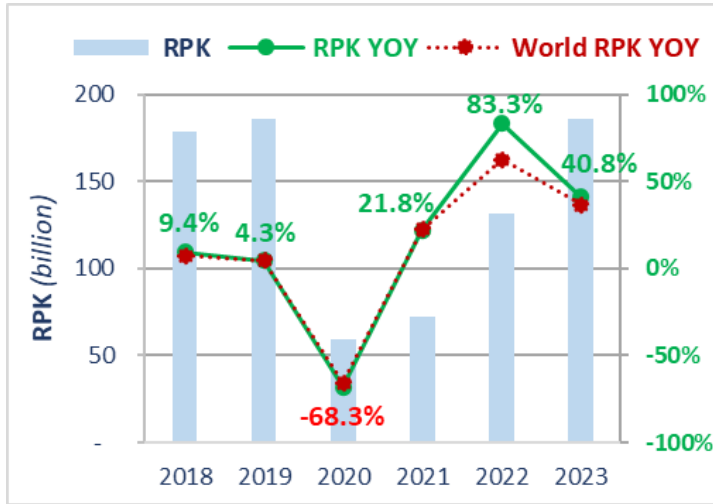
Global traffic: A recovery from the pandemic shock ⁴



Source: Presentation of Air Transport Statistical Result (2023 data is preliminary)



Africa Passenger Traffic

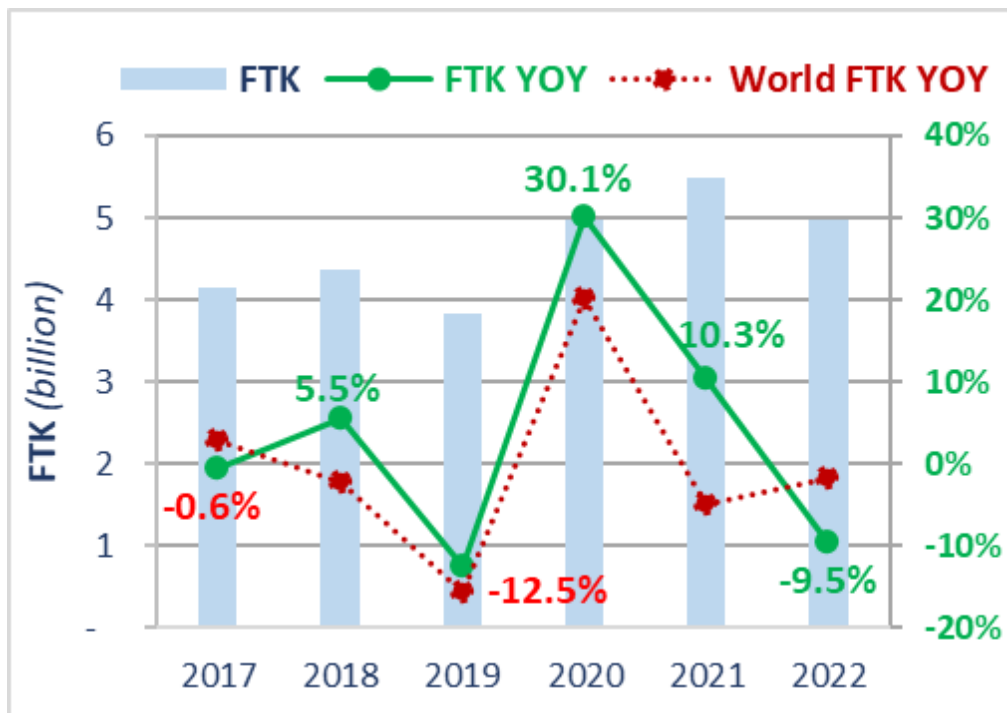


- Passenger traffic in Revenue Passenger-Kilometres (RPKs) increased by 40.8% in 2023.
- Passenger traffic increase rate is higher than the world average.

- Seat Capacity in Available Seat-Kilometres (ASKs) increased by 14.9% in 2023.
- Capacity increase rate is lower than the world average.

- Passenger load factor increased to 87.6% in 2023.
- Passenger load factor is lower than the world average.

Africa Cargo Traffic

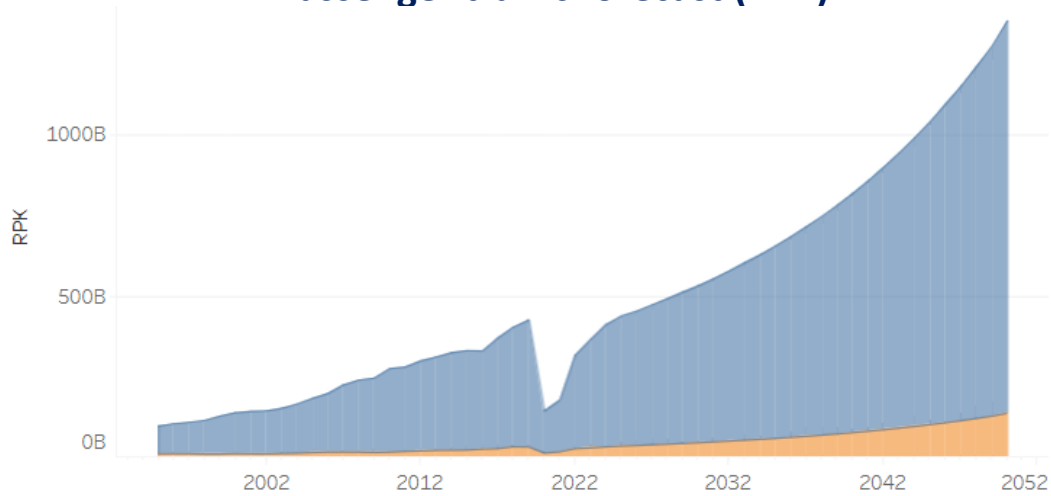


- Cargo traffic measures in Freight Tonnes-Kilometres (FTKs) decreased by 9.5% in 2023.
- FTK YOY in 2023 is lower than the world average

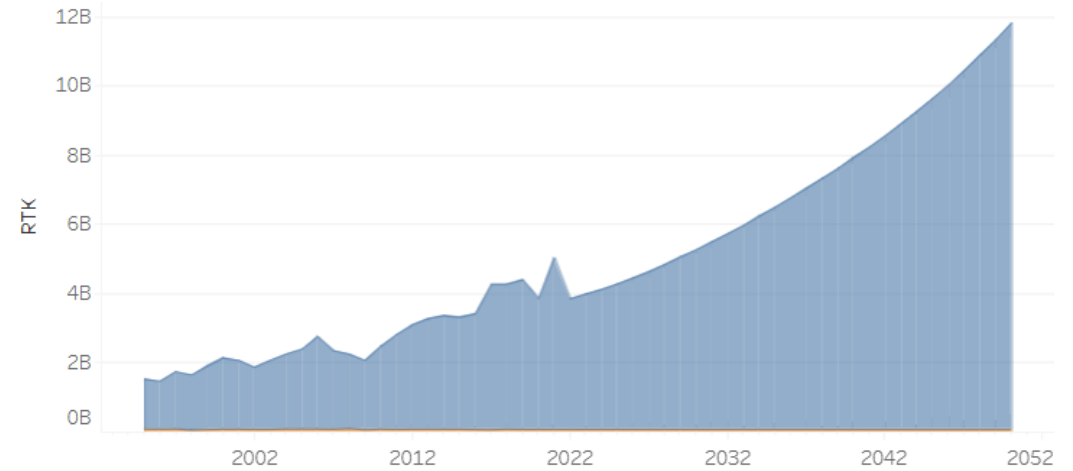


Long Term Traffic Forecasts (Africa)

Passenger traffic forecast (RPK)



Cargo traffic forecasts (FTK)



- Passenger traffic (RPK) CAGR* 2019-2050 forecast is 3.7%, 4.9% and 3.8% for international, domestic and total, respectively.

- Cargo traffic (FTK) CAGR 2019-2050 forecast is 3.2% for total.

**ICAO's
Programme
is designed
to:**

✈ Reduce State's costs in performing its economic regulatory functions

✈ Increase consumer's benefits and choices

✈ Improve air connectivity

✈ Create more competitive business opportunities in the marketplace

**Thereby contributing to
the sustainable
economic development
and to the expansion of
trade and tourism.**

Air Transport Regulation Work Areas

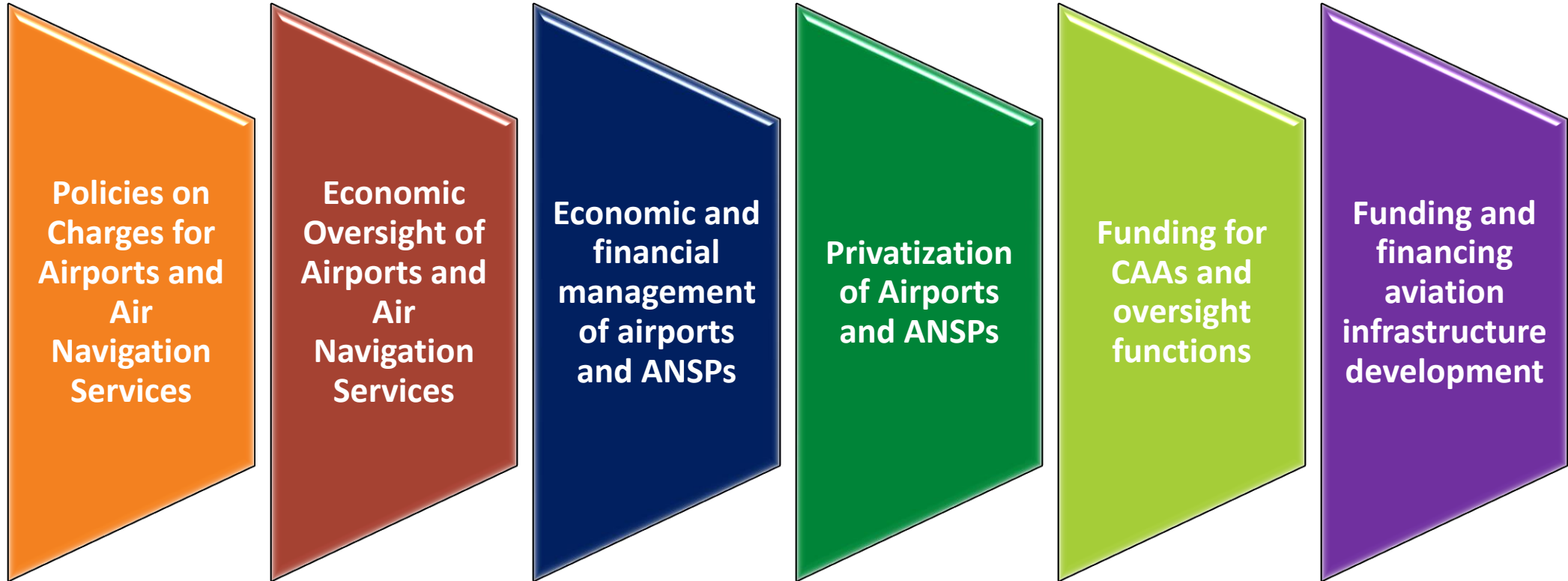
✈ The Seventeenth Meeting of the ATRP (ATRP/17)





Aviation Infrastructure Management

Promoting the efficient development of aviation infrastructure





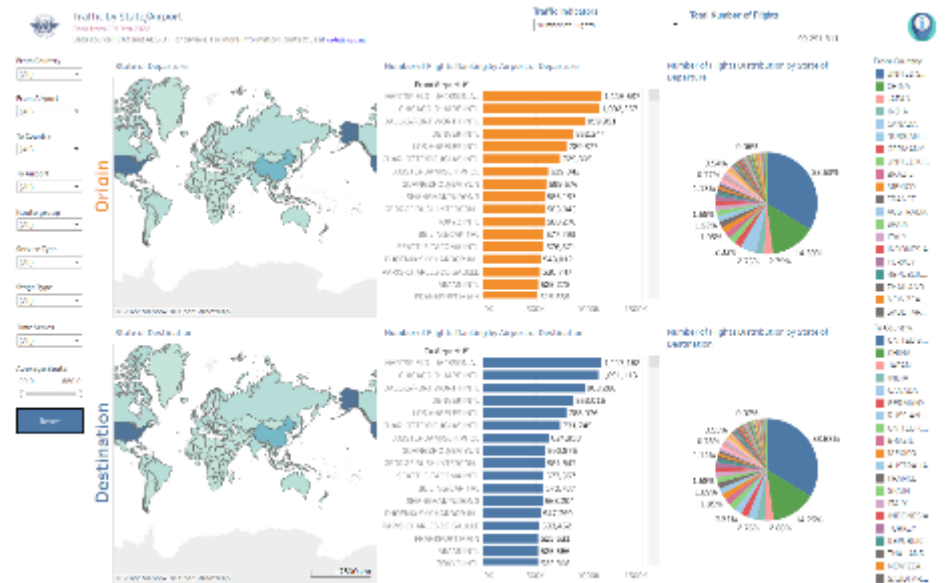
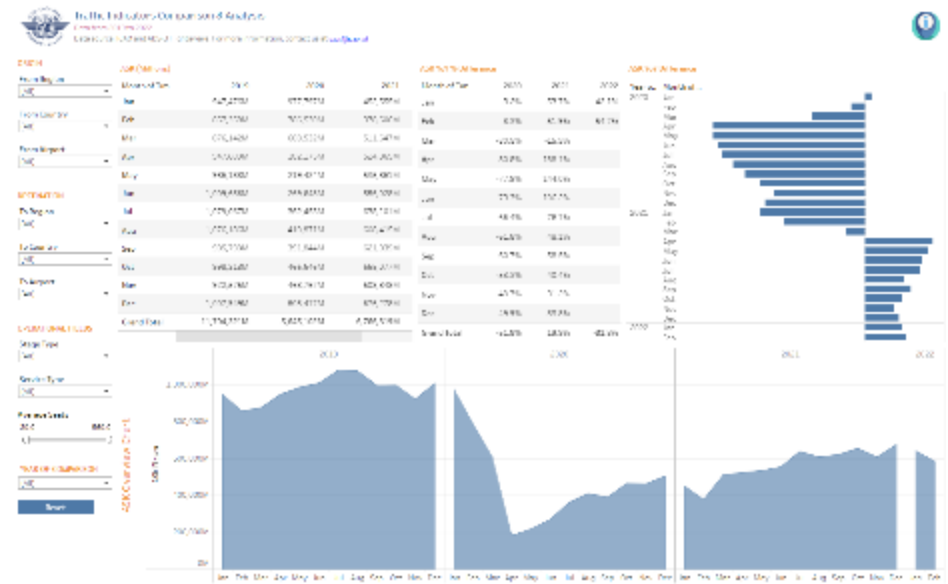
Ongoing Activities of the Airport Economics Panel and the Air Navigation Services Economics Panel (AEP-ANSEP)

Recommendations of the Ninth Joint Meeting of the Panels (AEP-ANSEP/9)

Charging policies	Article 15 of Chicago Convention	Enhance the implementation of ICAO policies	Sustainable funding for CAA	Funding for UAS, AAM	Cost recovery of MET services	Invoicing of air navigation service charges	Economic oversight of transnational airports
<ul style="list-style-type: none">• Update of ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082)• Definitions for the key charging principles	<ul style="list-style-type: none">• Incorporate Article 15 in Doc 9082, particularly concerning the issue of fees and charges for granting access to airspace	<ul style="list-style-type: none">• Global survey to assess the status and challenges faced by States• Training and regional workshops	<ul style="list-style-type: none">• Global survey on sustainable funding for oversight functions	<ul style="list-style-type: none">• Economic aspects and potential funding mechanisms for UAS and AAM	<ul style="list-style-type: none">• Collaborate with METP to address cost recovery for MET services	<ul style="list-style-type: none">• Guidance on invoicing air navigation services charges	<ul style="list-style-type: none">• Economic oversight of airports owned by foreign entities• Standalone document of "black swan" events

ICAO Traffic and Economic Dashboards

- ✈ Interactive dashboards developed using Tableau platform, which provide **visualization** and **customized querying capabilities**.
- ✈ Covering a **wide array of analytics**:
 - operations;
 - fleet usage;
 - passenger carried;
 - Flight Information Region (FIR) traffic;
 - revenue impact on airlines, airports and air navigation services providers (ANSPs) at different levels of granularity.
- ✈ Each Member States has been provided with a free license.



ICAO's capacity building support to States

Online training

Air Transport Regulation
online course

Air Transport Regulation
Issues online course

Air Transport Economics
online course

Air Transport Economics
for Airport Professionals
online course

In-person/Virtual training

**Joint ICAO-ACI
training on Airport
User Charges**

Regional workshop/seminar

***AFCAC validation
and stakeholder's
sensitization
workshop on the
draft Template
Economic
Regulation for
African States***

UPCOMING EVENT



ICAO Air Services Negotiations (ICAN) Event

Kuala Lumpur, Malaysia
21 to 25 October 2024

ICAN - WHERE CONTINENTS AND CULTURES MEET

Security and Facilitation

Security Risk Picture

Trends in security events affecting aviation globally 2022-24

- Attacks at a distance, especially in conflict zones
- Attacks using UAS
- Threat posed by insiders
- Violent extremism
- Cyber attacks
- Acts attributed to unrest and attacks in, or near conflict zones
- Unruly behavior
- Perimeter breaches and airport disruptions
- Communication of false information



Key features of 2nd Edition GAsEP

- Aspirational goal is always “full and effective implementation” of all ICAO aviation security Standards
- By the end of 9 years it is expected all States would have reached at least **75% EI**
- 2027, 2030 and 2033 are considered “milestone” years



All States should be able to contribute to the achievement of global aspirational goals



Voluntary reporting of experiences and best practices on a voluntary basis



The value of sharing experiences helps States understand challenges and use lessons learned.

GASeP Priority Areas

Priority Area 2
Maintain a strong and effective security culture

Priority Area 1
Enhance risk awareness and response

Priority Area 4
Improve technological resources and foster innovation

Priority Area 3
Develop and promote the role of human factors

Priority Area 6
Increase cooperation and support

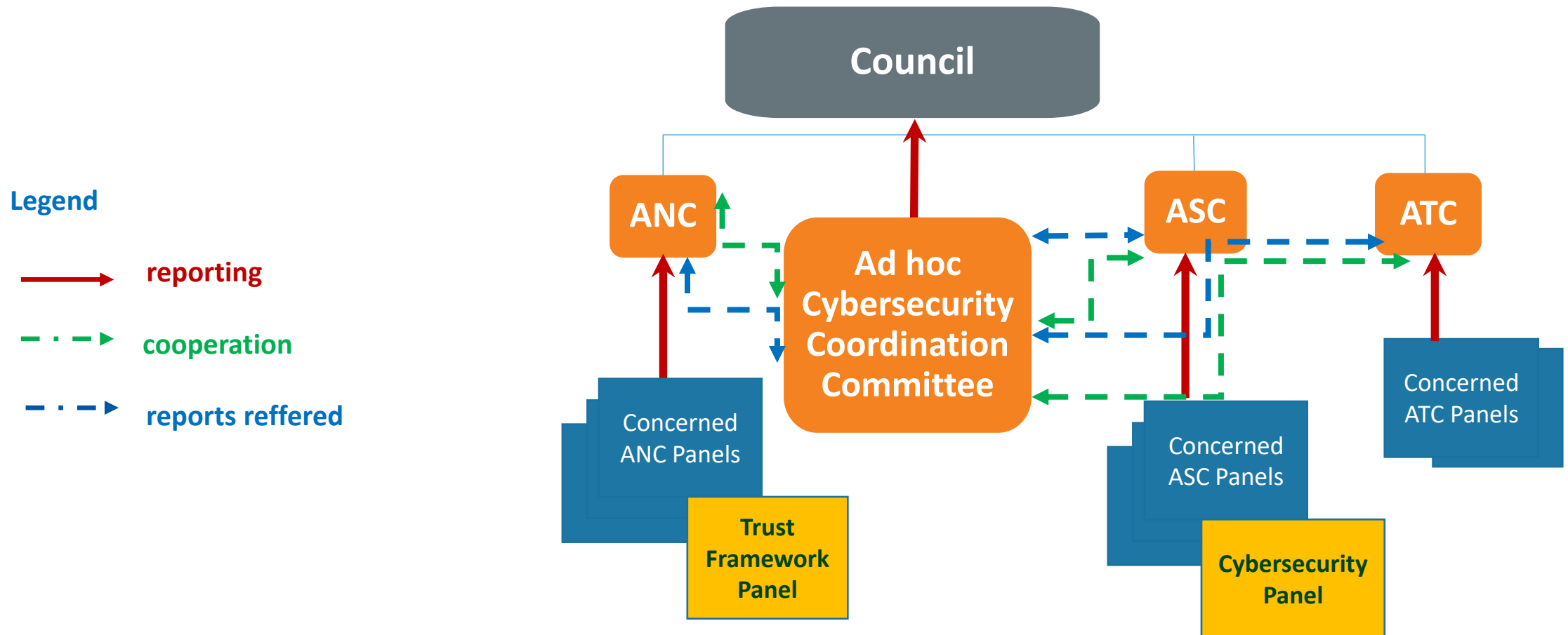
Priority Area 5
Improve oversight and quality assurance



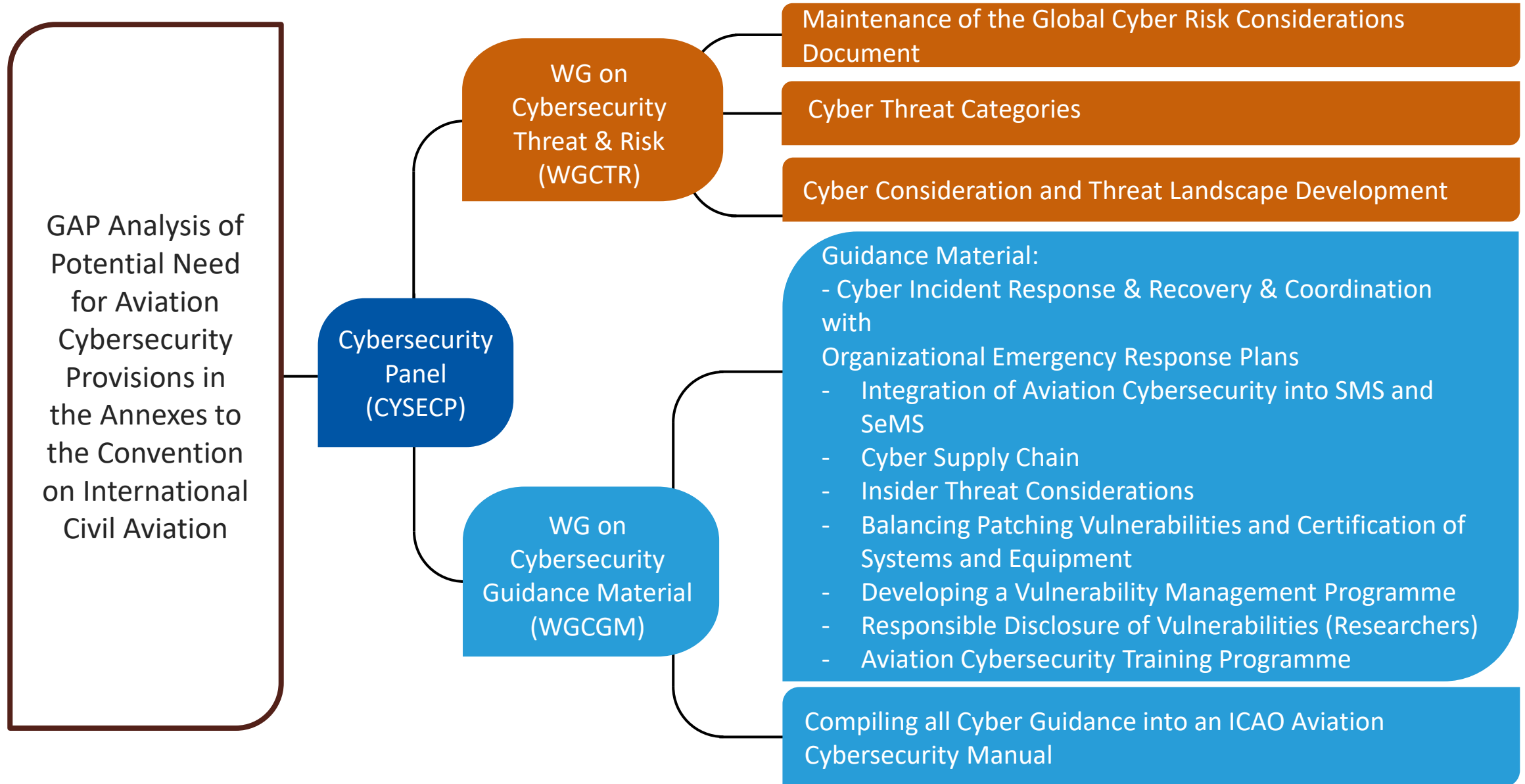
Addressing Cybersecurity in Civil Aviation

- Legal Instruments
- Assembly Resolutions
- Standards and Recommended Practices
- ICAO Aviation Cybersecurity Strategy and the Cybersecurity Action Plan
- Guidance Material
- Training
- Implementation Assistance and Projects
- International Aviation Trust Framework

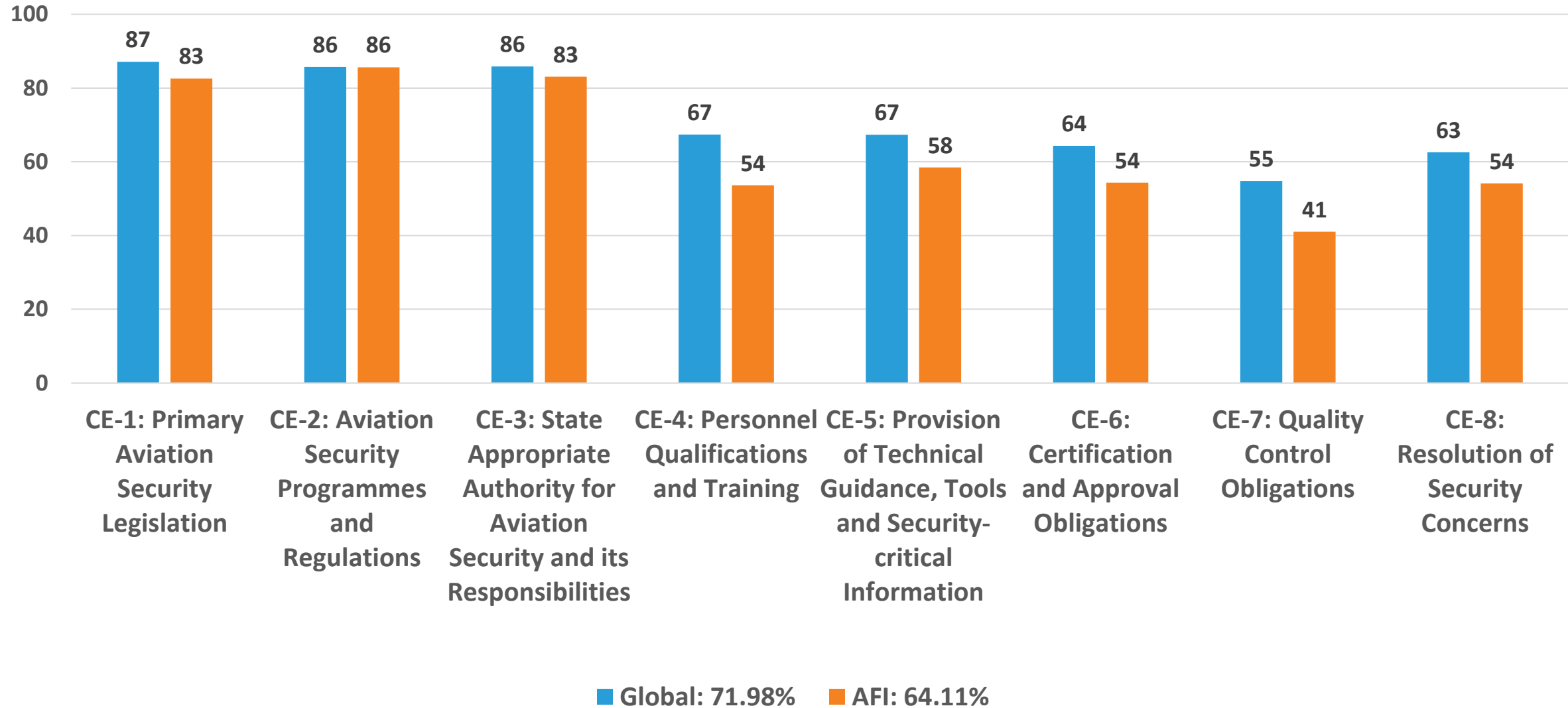
ICAO Cybersecurity Governance and Operations



Cybersecurity Panel's Work Programme (2024 – 2026)



Global and AFI Audit Results – Sustainability indicator



Aviation Security Assistance



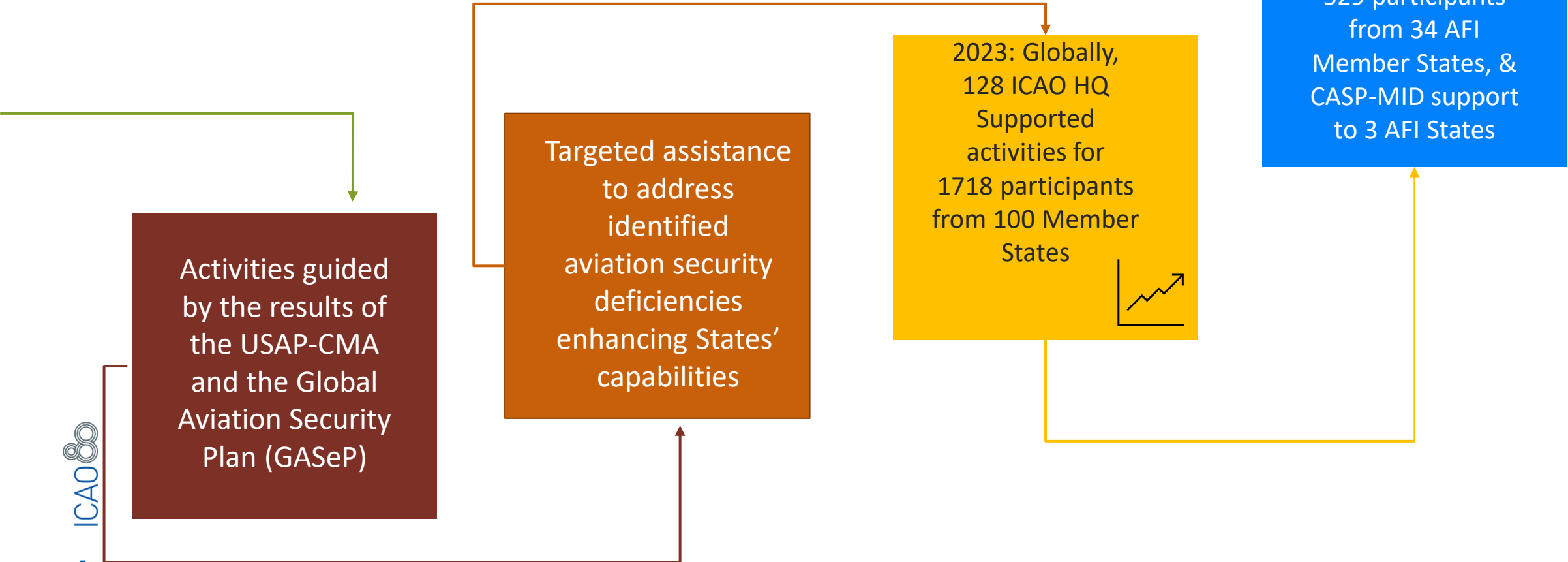
Activities guided by the results of the USAP-CMA and the Global Aviation Security Plan (GASeP)

Targeted assistance to address identified aviation security deficiencies enhancing States' capabilities

2023: Globally, 128 ICAO HQ Supported activities for 1718 participants from 100 Member States

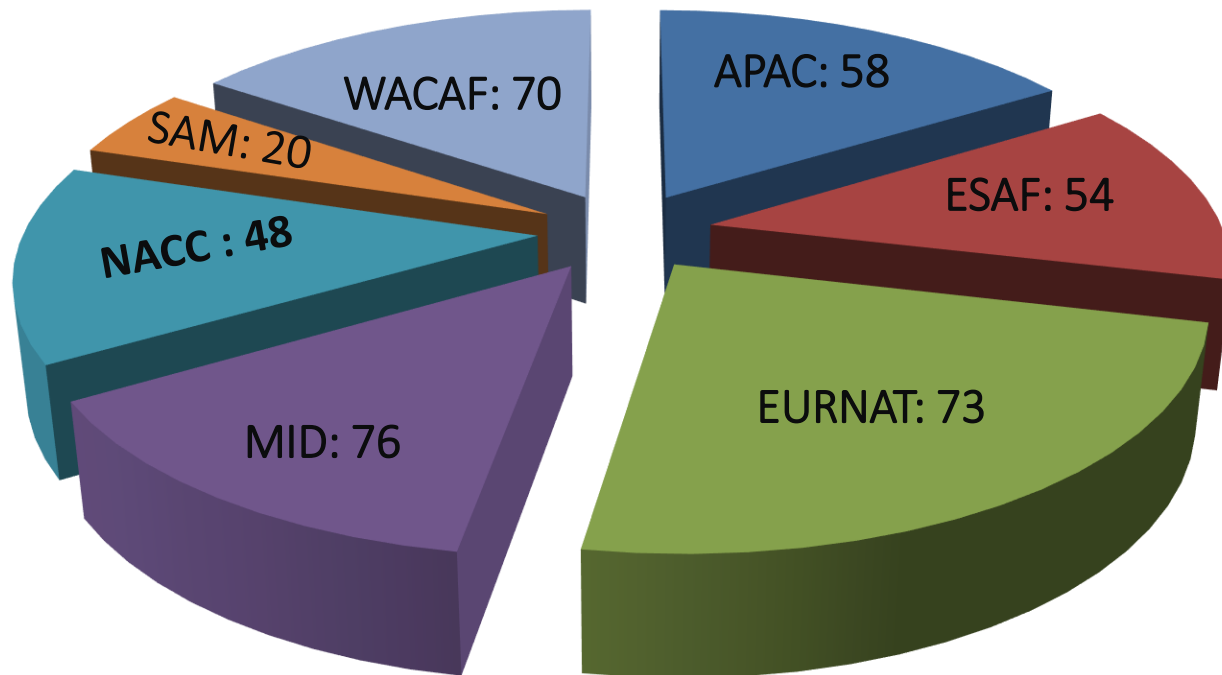


2023: AFI, 32 ICAO HQ Supported activities for 529 participants from 34 AFI Member States, & CASP-MID support to 3 AFI States



ICAO-certified AVSEC Instructors Cadre – by Region

Total: 399 Instructors from 107 Member States



UPCOMING EVENT

ICAO SECURITY WEEK

SEC 20
24

9-12 Dec 2024 | Muscat, Oman

Hosted by



ICAO SECURITY WEEK 2024

- ❖ Covers all aspects of aviation security, including aviation cybersecurity and other emerging issues.
- ❖ Will be a distinctive edition to celebrate the 50-year anniversary of Annex 17 – Aviation Security as well as ICAO's 80th anniversary.
- ❖ Symposium sessions on 9 and 10 December; a high-level Ministerial segment on 11 December; and activities organized by the Civil Aviation Authority of Oman on 12 December 2024.
- ❖ For further information please refer to:
 - ❖ <https://www.icao.int/Meetings/securityweek2024>
 - ❖ State letter 8/1.9.2-24/47 dated 3 July (invitation)
 - ❖ State letter 39/1-24/74 dated 4 July (feedback to Draft Declaration)



2024 **TRIP**
ICAO
SYMPOSIUM
MONTRÉAL, CANADA | NOVEMBER 13-15

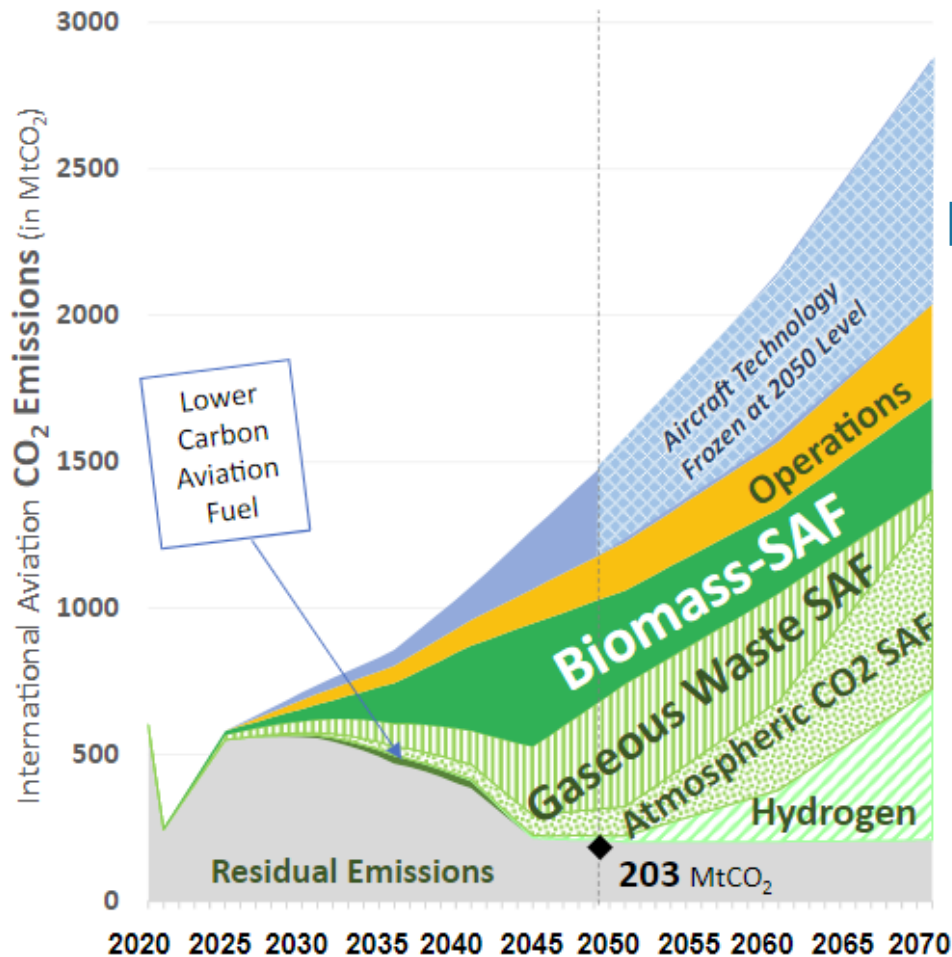
UPCOMING EVENT

19th Symposium on the ICAO Traveller Identification Programme (TRIP)

- ❖ ICAO Headquarters, Montréal, Canada from 13 to 15 November 2024.
- ❖ A global event enabling the exchange of information on all aspects and phases of the air traveller's journey.
- ❖ Focus on harmonizing processes for free-flowing travel, enhancing the passenger experience by linking Annex 9 provisions with new technology tools.
- ❖ An exhibition showcasing a broad range of products and services related to travel document security applications and identification management.
- ❖ State letter EC6/8.5.18-24/63 dated 6 May 2024, inviting online registration by 1 November 2024
- ❖ For further information please refer to: <https://www.icao.int/Meetings/TRIP-Symposium-2024/Pages/default.aspx>

Environmental Protection

A collective long-term aspirational goal (LTAG) of net-zero carbon emissions from international aviation by 2050



Contributions from technology, fuels, operations towards decarbonization

- ➔

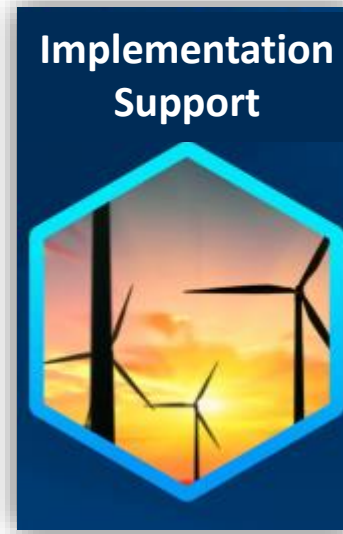
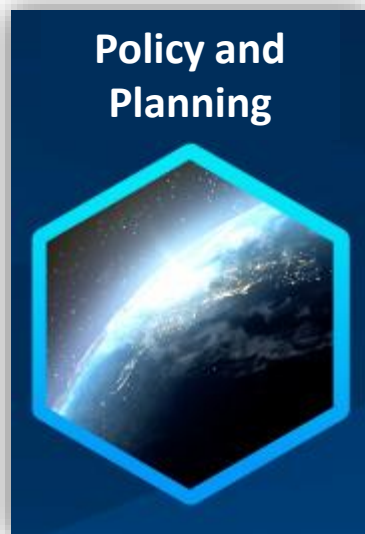
Advanced tube and wing, unconventional airframe/propulsion concept aircraft, non-drop-in fuels such as battery electric etc.
- ➔

Improvements in the performance of flights across all phases
- ➔

Sustainable aviation fuels (SAF) and other cleaner energy have the largest impact on residual CO₂ emissions, driving overall reductions by 2050

Contributions from hydrogen may increase in the 2050s and 2060s if technically feasible and commercially viable

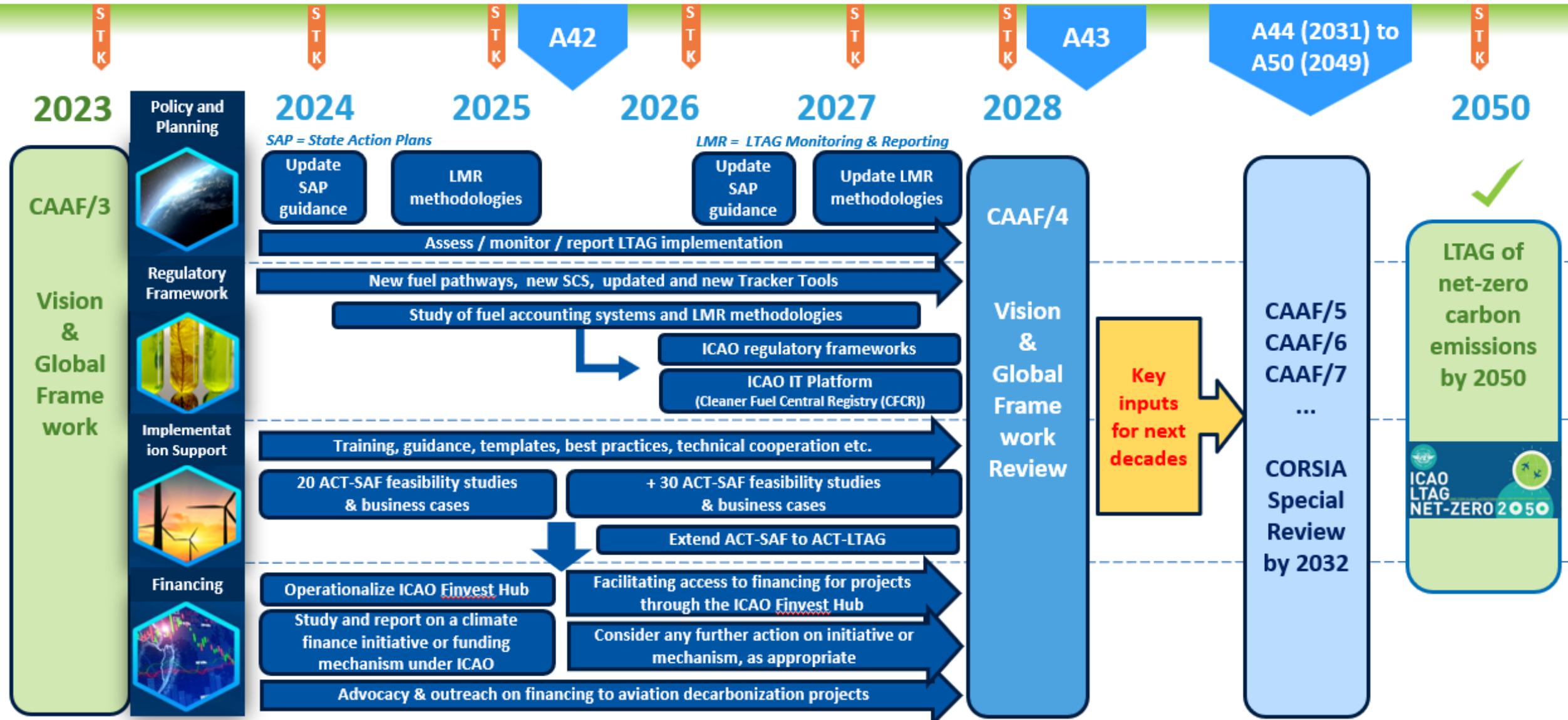
ICAO Global Framework on SAF, LCAF and other Aviation Cleaner Energies



- Supports global scale up of aviation cleaner energies – **Collective Vision to reduce 5% CO₂ by 2030**
- Provides clarity, consistency and predictability to all stakeholders on 1) policy and planning, 2) regulatory framework, 3) implementation support, and 4) financing – 4 Building Blocks
- Monitors the implementation progress on emissions reductions and means of implementation
- **Aspiring to have cleaner energy production facilities in all regions by CAAF/4 (no later than 2028)**
- To update the Vision at CAAF/4 on the basis of market developments

ICAO Roadmap for implementation of CAAF/3 outcomes and LTAG

STK = Annual LTAG Stocktaking events

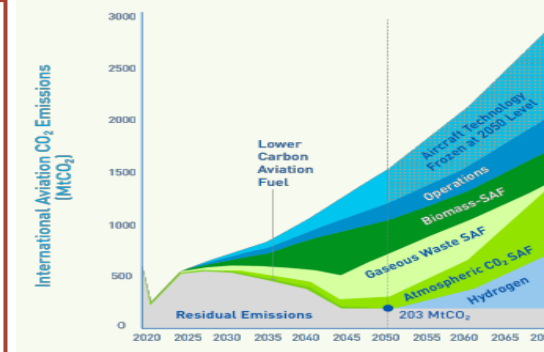


BB1 – Policy and Planning (Monitoring Methodologies & State Action Plans)

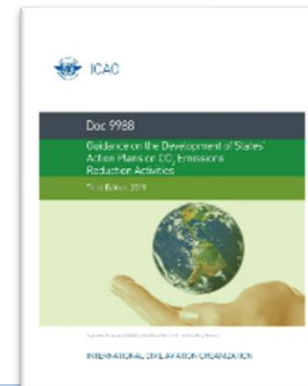
Proposed Actions



- To expand ongoing work for the development of **LTAG monitoring methodologies** by including specific methodologies for **monitoring the achievement of the collective global aspirational Vision and the implementation of the Global Framework**
- To add monitoring of the Global Framework implementation, as part of **annual ICAO LTAG Stocktaking events**, including **monitoring of the implementation support and financing**
- To increase **new and updated State Action Plans**, with focus on SAF, LCAF and other aviation cleaner energies, and gather, compile and analyse the data submitted, aiming to assist in monitoring progress
- To convene **CAAF/4 no later than 2028**, with a view to updating the Vision and the Global Framework



ICAO WORK ON LONG-TERM ASPIRATIONAL GOAL			
Operations	Technology	Fuels	Fuel
 Operations	 Technology	 Fuels	 Sources of energy
 Ground operations	 Advanced batteries	 Drop-in fuels	 Solar
 Crew operations	 Human resources	 Sustainable aviation fuels (SAF)	 Renewable energy
 Air traffic control	 Air traffic management	 SAF production	 Renewable energy
 Airline operations	 Airline operations	 SAF production	 Renewable energy



BB2 – Regulatory Framework (ENV Tools and Platform)

Proposed Actions



- To accelerate the analysis and approval of **life cycle values for new fuel sources and pathways** as CORSIA eligible fuels
- To accelerate the development and approval of **new Sustainability Certification Schemes (SCS)** on the use of CORSIA eligible fuels
- To undertake a **study of fuel accounting systems for international aviation**, which can help determine **any possible ICAO role**
- To develop and/or update necessary **ICAO regulatory frameworks**, based on the study of fuel accounting systems and the LTAG monitoring and reporting (LMR) methodologies
- To develop a **possible ICAO IT platform** to integrate the monitoring of the Global Framework and LTAG implementation



Study on fuel accounting systems

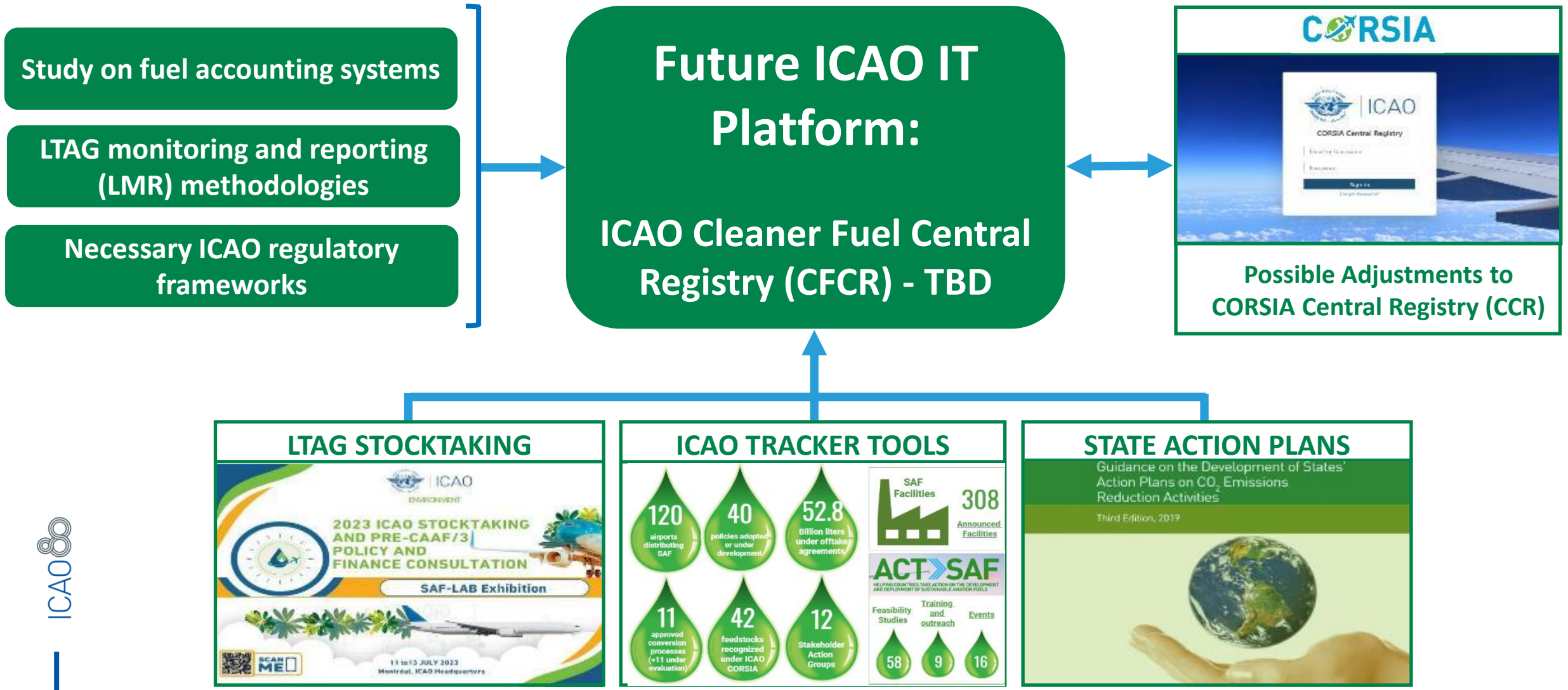


Necessary ICAO regulatory frameworks



Possible ICAO IT platform

BB2 – Regulatory Framework (ENV Tools and Platform)



BB3 – Implementation Support (ACT-SAF and ACT-LTAG programmes)



Proposed Actions

- To deliver a **robust, targeted and tailored** capacity-building and implementation support 
- ACT-SAF programme, including **guidance and training, sharing of best practices, feasibility studies and business cases**, through partnerships and cooperation amongst States, industry and other stakeholders
- To extend ACT-SAF to add other emissions reduction measures (e.g. aircraft technology, operation) as **ACT-LTAG programme**



BB4 – Financing

(Advocacy & Outreach, Finvest Hub, Study)

35

Proposed Actions

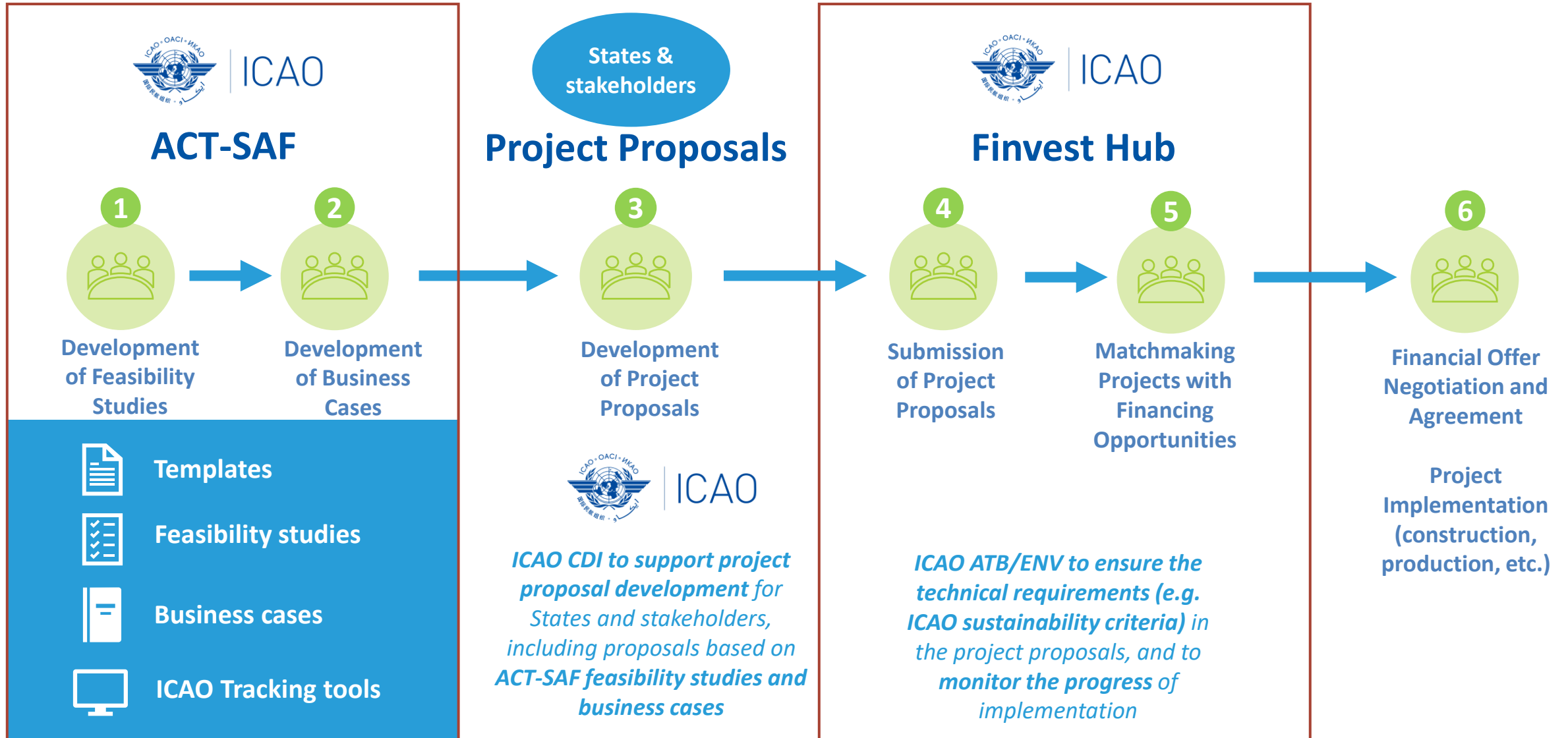


- To undertake further **advocacy and outreach by organizing dialogues** with States, industry and energy producers, financial institutions and investors, and relevant UN and other international financial initiatives, regarding **financing needs toward the achievement of the LTAG**, and identify **opportunities to increase the allocation or earmarking of public and private capital to aviation decarbonization projects**
- To develop **specific measures or mechanisms to facilitate better access to financing** (e.g. private investment capacities, as well as funding from financial institutions such as development banks) for developing countries and States having particular needs, in particular the **operationalization of the ICAO Finvest Hub** (A41-21, para 18. a))
- To conduct a study through the services of a third-party consultancy, regarding the **consideration of the establishment of a climate finance initiative or funding mechanism under ICAO**, while addressing the possible financial, institutional and legal challenges (A41-21, para 18. b))



BB4 – Financing

(Advocacy & Outreach, Fininvest Hub, Study)



Upcoming ENV Events

2024 ICAO Regional Seminars on Environment

07/08 - 12/09/24 – 05 Seminars/Multiple locations

ESAF/WACAF Region – 27 to 28 August 2024

ICAO RO, Dakar, Sénégal

2024 ICAO Symposium on Non-CO₂ Aviation Emissions

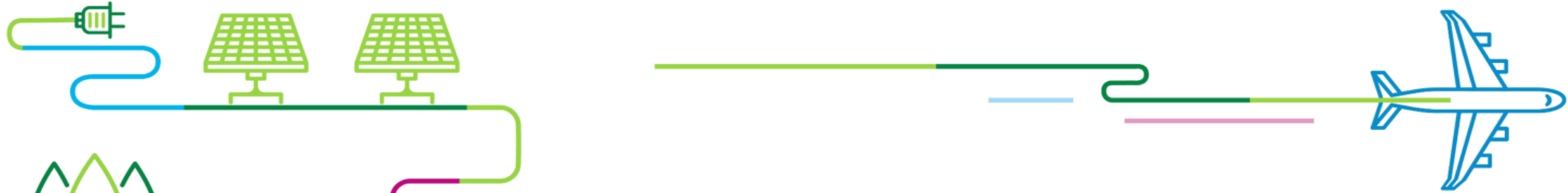
16 to 18 September 2024

ICAO Headquarters

Montréal, Canada



Upcoming Env Events



2024 ICAO LTAG STOCKTAKING

7 — 10 OCTOBER 2024

ICAO HEADQUARTERS, MONTREAL, CANADA



Thank You



ICAO
Headquarters
Montréal

European and
North Atlantic
(EUR/NAT) Office
Paris

Asia and Pacific
(APAC) Sub-office
Beijing

Middle East
(MID) Office
Cairo

Asia and Pacific
(APAC) Office
Bangkok

Eastern and
Southern African
(ESAF) Office
Nairobi

Western and
Central African
(WACAF) Office
Dakar

North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima