



| ICAO

INTERNATIONAL CIVIL AVIATION ORGANIZATION

A UN SPECIALIZED AGENCY



**7th Meeting of Directors General of Civil Aviation
Middle East Region
Riyadh, Saudi Arabia 19-20 May 2024**

Aviation Safety and Air Navigation Global Developments

on behalf of the Director Air Navigation Bureau,
International Civil Aviation Organization (ICAO)

Plan Overview

01 Prioritization

02 Safety
- Global view
- Regional views

03 Air Navigation

04 AN products and tools

05 Upcoming Events

06 Summary

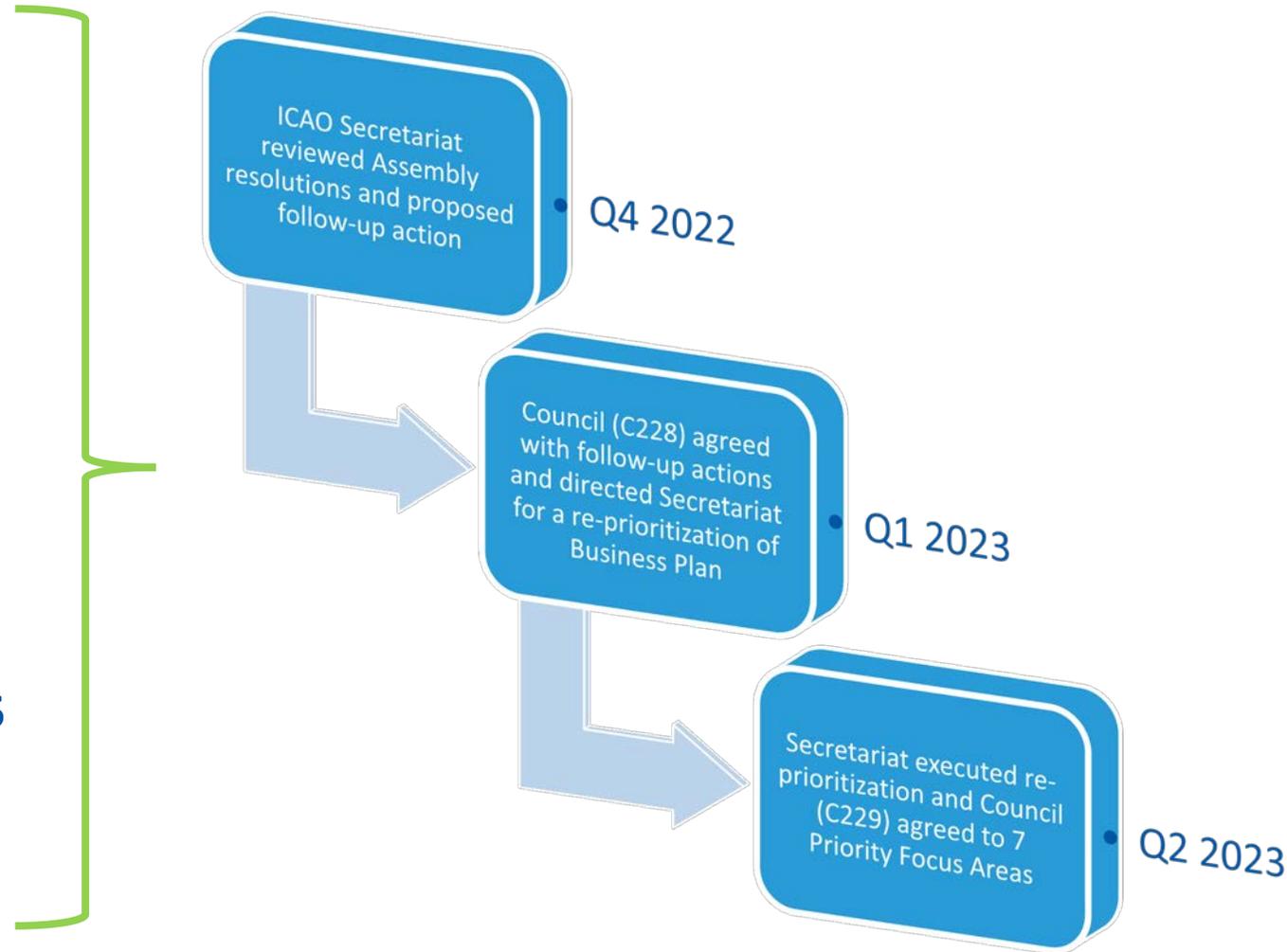
Prioritization



Organization-Wide Prioritization

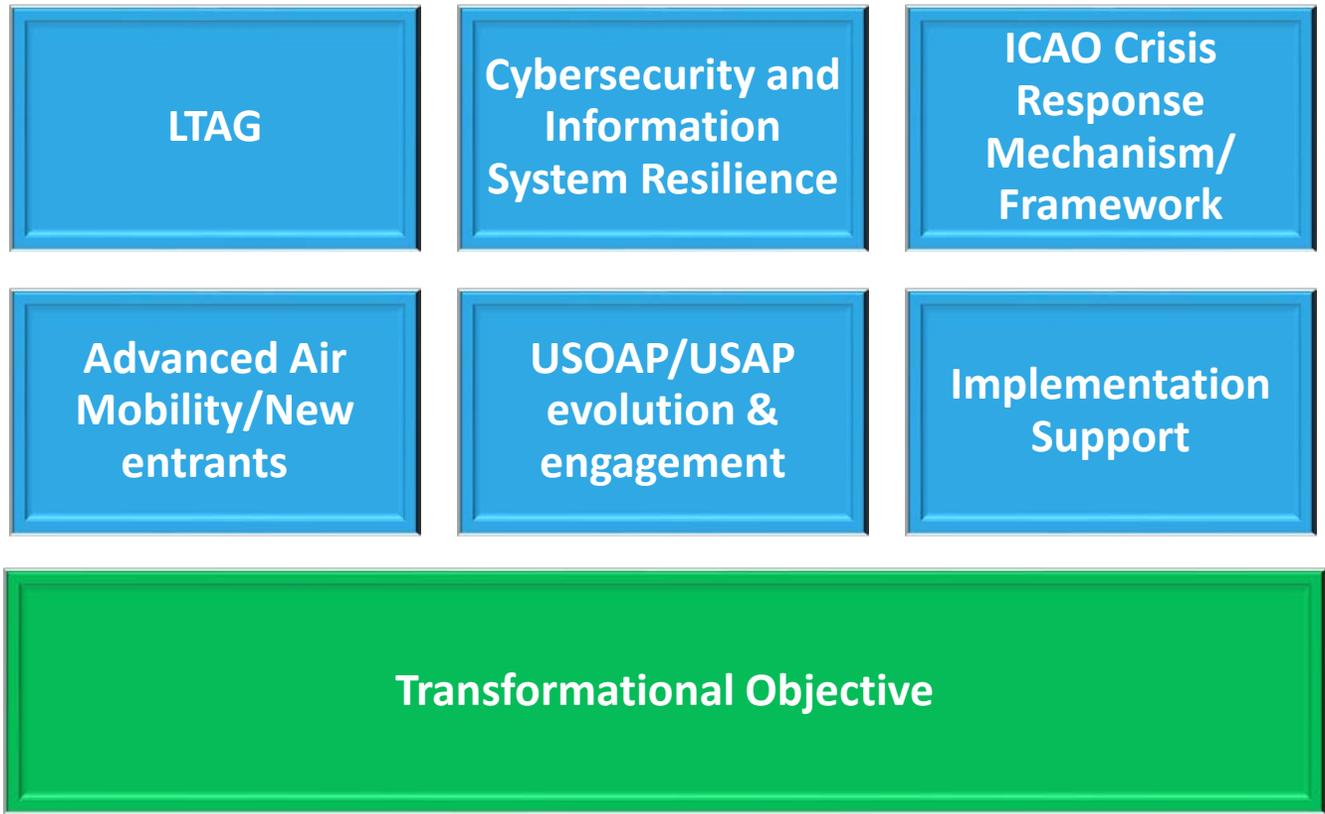


Results-based ICAO Business Plan 2023-2025



Global Priorities - Priority Focus Areas

ICAO Business Plan 2023-2025



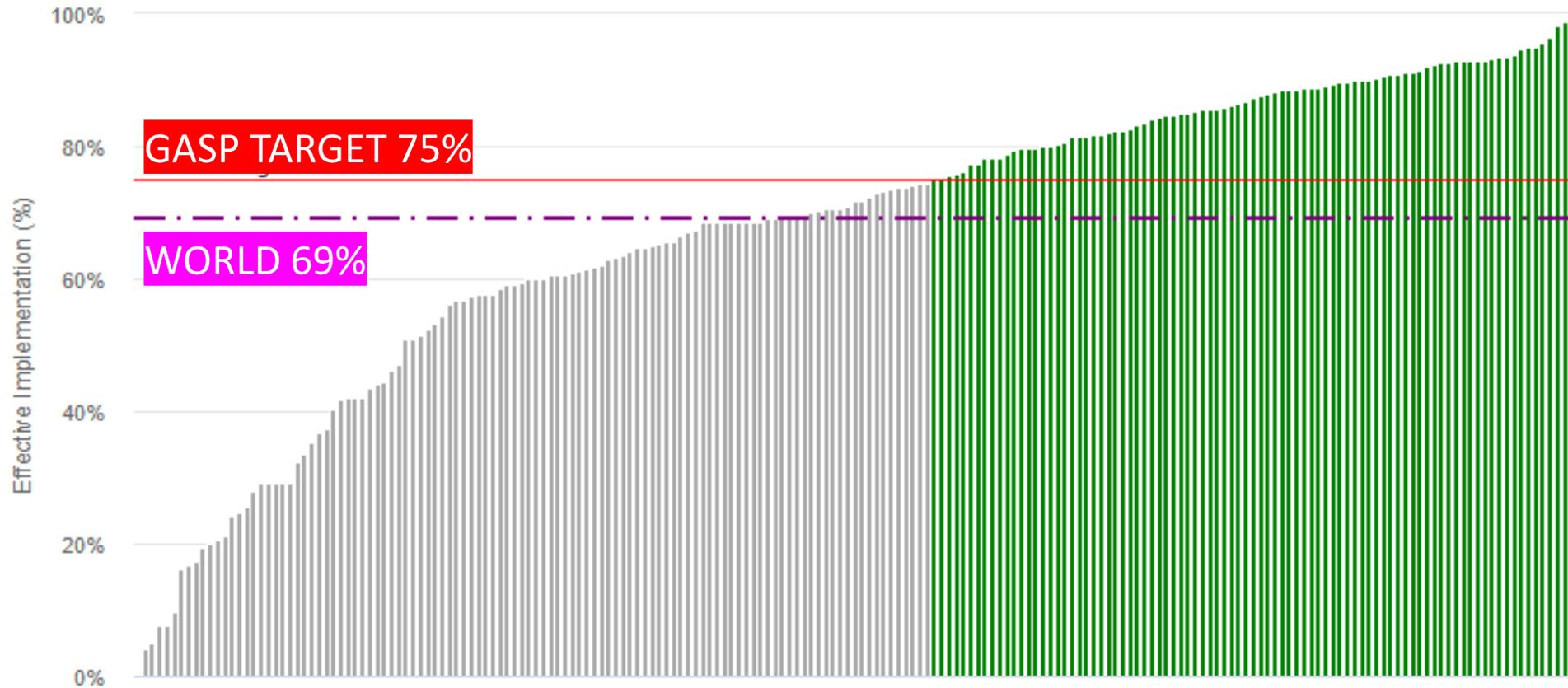
Crisis Response and Contingency Management

- Development of a global Framework for crisis preparedness and response is one of the priority focus Areas.
- ANB is working closely with all ICAO Regions to harmonize the regional ATM contingency framework.
- Contingency Coordination Teams (CCTs) have been a great mechanism for managing contingencies.
- The allocation of adequate resources and the prompt exchange of information are keys to successful preparedness and response to the crisis.

AVIATION SAFETY



GASP TARGET OF 75% BY 2024 OVERVIEW for WORLD

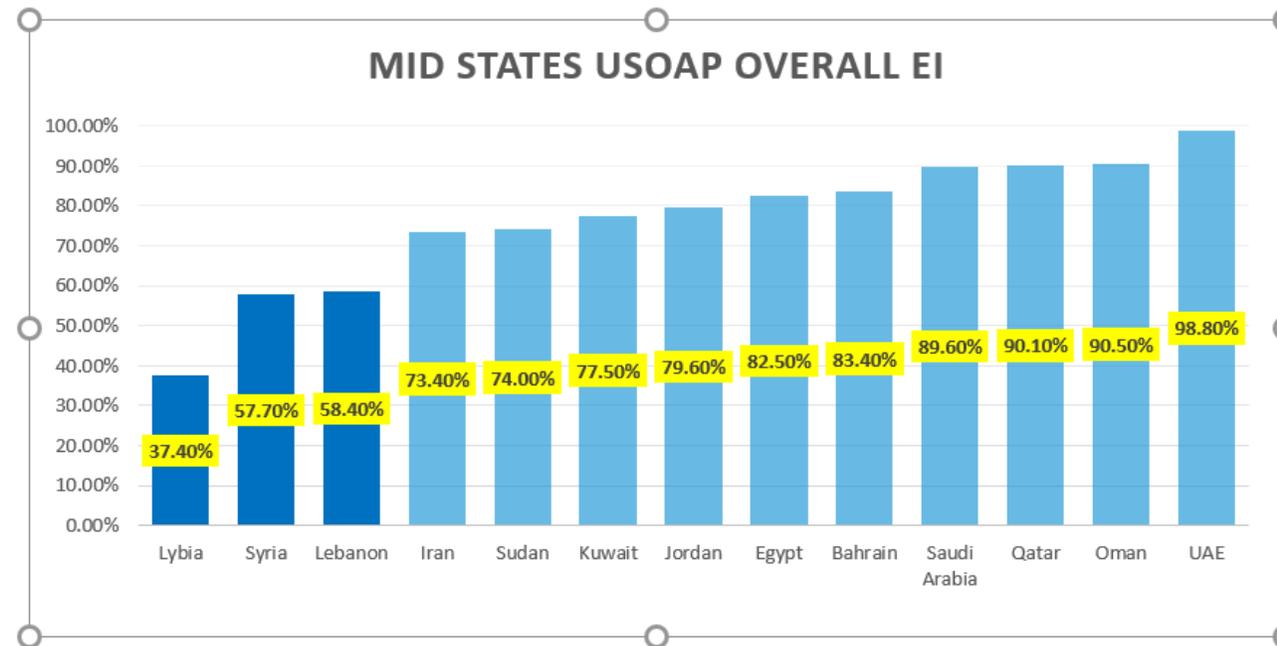


As of now, 44% of the States in World have achieved the target of 75% EI, as suggested by the Global Aviation Safety Plan (GASP).

GASP TARGET OF 75% BY 2024 OVERVIEW for MID

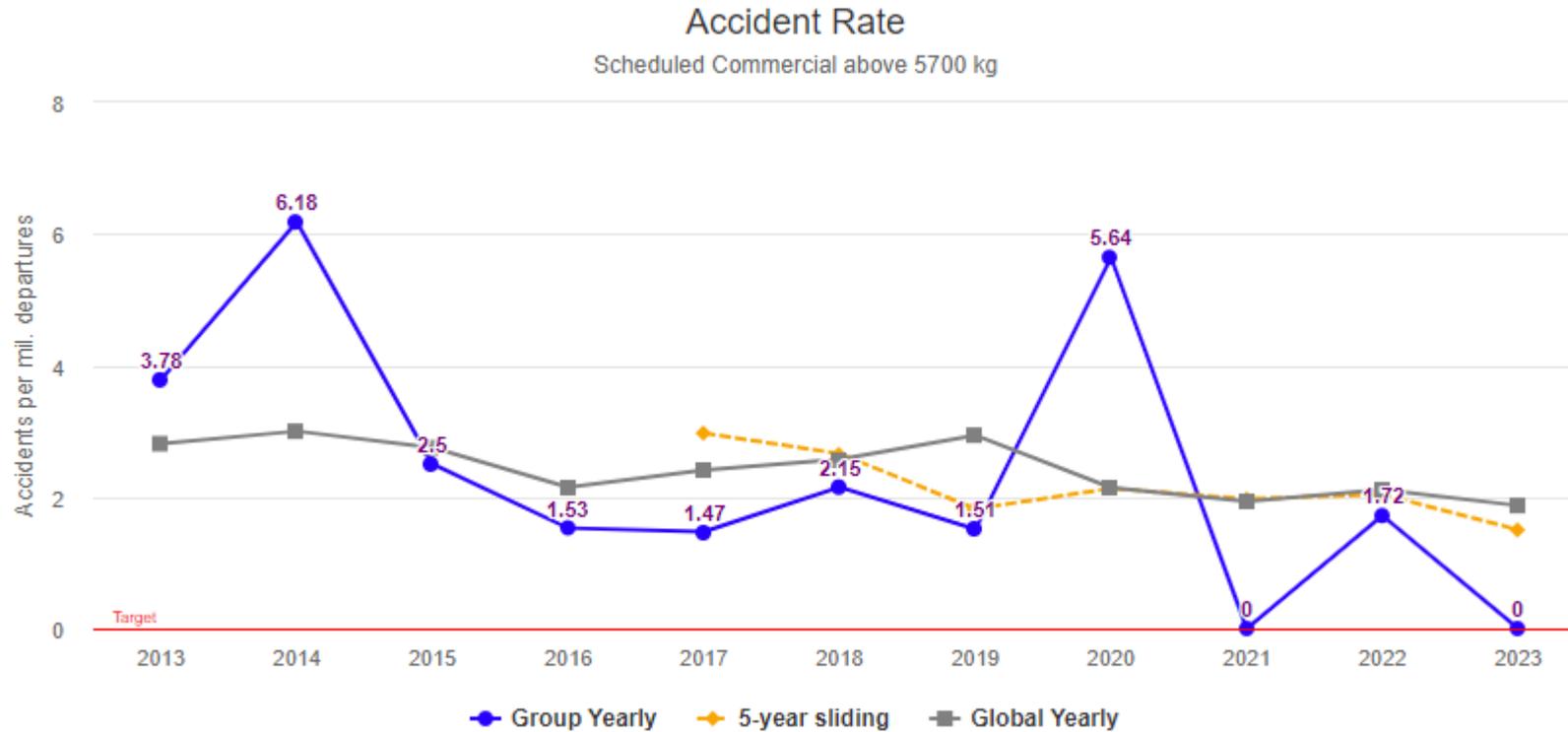
GASP TARGET 75%

MID 76.63%



As of now, 53.33% of the States in MID have achieved the target of 75% EI, as per the GASP.

Accident Rate Overview



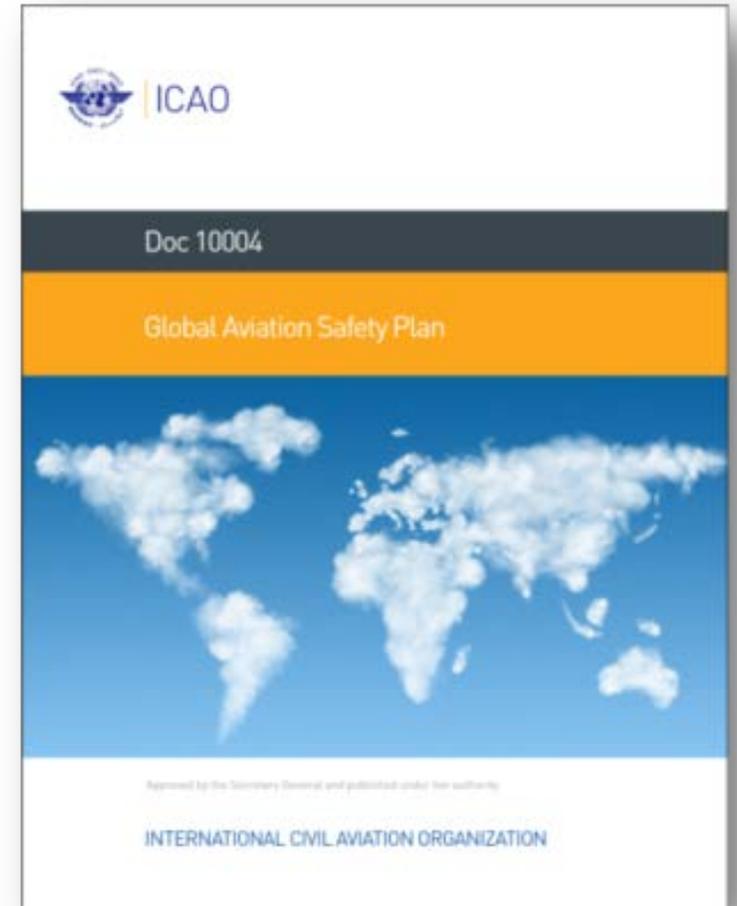
In 2023, MID had an accident rate of **0** trending down. The 5-year sliding average of the region is also trending down

Overview of Targets for 2023-2025

Target	Date of Completion	Description
T1.1	Decreasing trend	Maintain a decreasing trend of global accident rate
T2.1	2024/2026/2030	75% , 85% and 95% EI score of CEs
T3.1	2023	All States to implement foundation of SSP
T3.2	2024	All States to publish NASP
T3.3	2025/2028	All States to work towards effective SSP (present; present & effective)
T4.1	2023	States seek assistance
T4.2	2023	All Regions to publish RASP
T4.3	2025	All States to contribute information to RASGs
T5.1	Increasing trend	Industry's contribution in safety info sharing networks
T6.1	2025	States with AN and aerodrome infrastructure that meets ICAO standards

Work Towards 2026-2028 GASP

- Revision underway by GASP-SG
 - 2026-2028 marks new GASP cycle = major revision
- 5 G-HRCs remain unchanged
 - Additional categories of occurrences added
- Most GASP goals remain unchanged
 - Several new targets added (previous ones deleted)
- Focus global safety issues
 - With specific targets
- Presentation of proposals to AN-Conf/14
 - WP to include GASP Questionnaire



ICAO-OACI-OMC
ICAO

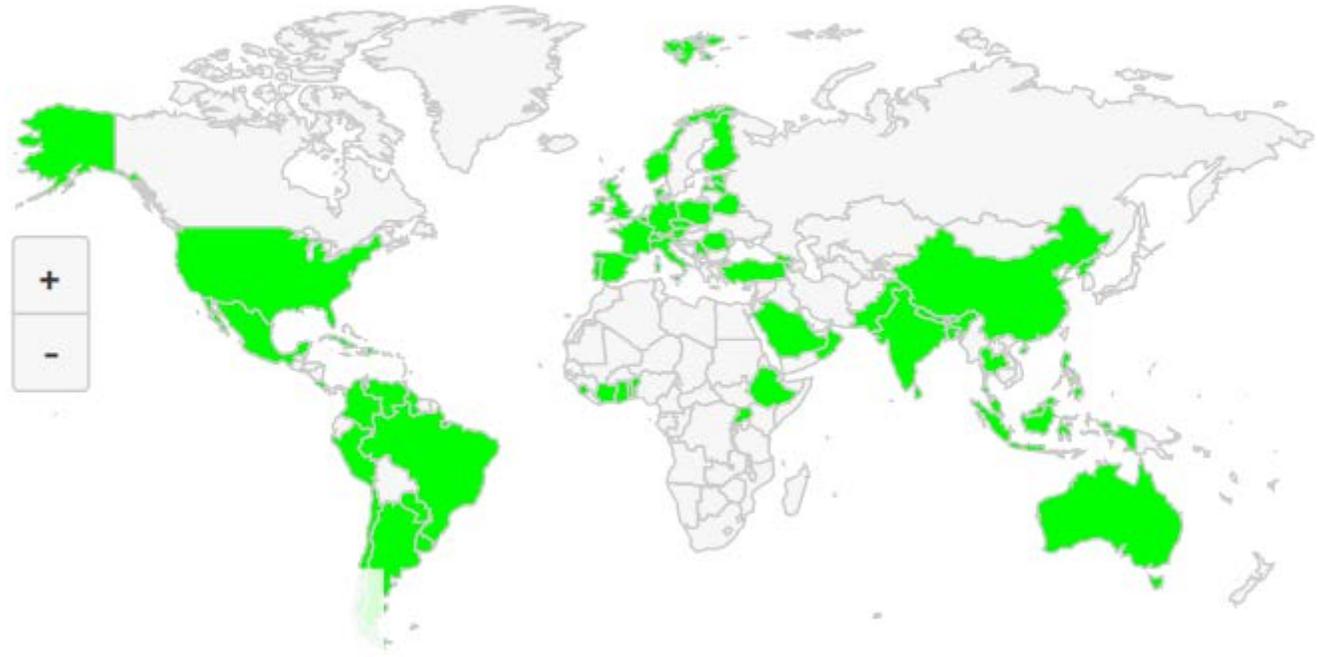
GOAL

Accidents
↓

Percentage

C
1.
14

NASP



● Target Reached

Year-to-Date

132
+28

RI
4.7%
28.6%

<https://soa.icao.int/gasp>

AIR NAVIGATION



Driving AN Performance Improvements

- There are operational improvements that **can benefit the environment** but are **not being implemented**
- These, mainly ATM procedures, are **available today**.
- When it comes to climate change, just as with safety, we must **never stop asking what else we can do**.
- Two global Air Navigation events were conducted in 2023 to support implementation:

AIR NAVIGATION WORLD 2023

Shaping the Skies of Tomorrow

28 - 31 August 2023 | Montréal, Canada

Performance-Based Aerodrome Operating Minima

Evolution of Aerodromes for Future Needs

Improving Safety of Helicopter Operations

Cross-Border Transferability of Aircraft

Future Meteorological Information and Services

NOTAM Replacement

Aviation Medicine

Electronic Certificates (Personnel Licences)

Future of Pilot Training

Higher Airspace Operations (HAO)

Future of the Air Navigation System

Modern Approaches to Aviation Safety



Performance Improvement Options for all flight phases

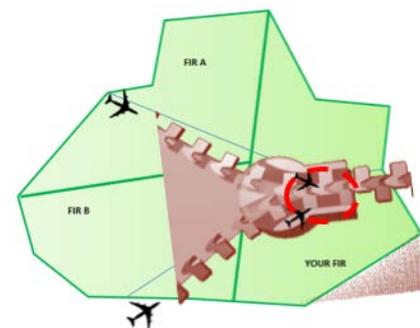
- SID and CCO
- Reduced divergence departure procedures
- Reduced longitudinal and lateral separations in the oceanic and remote areas
- STAR and CDO
- PBN instrument approaches
- Parallel approach procedures
- Enhanced wake turbulence separation minima



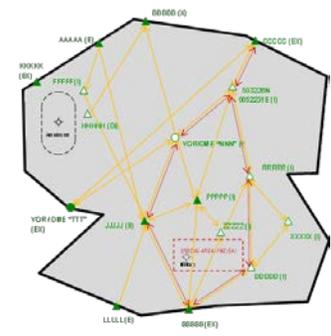
Data Link



FF-ICE



Global ATFM



Free route airspace

How to prepare for/respond to crises and contingencies

Global Air Navigation Plan

Eight Edition

Performance Framework

- Environment
- Resilience
- Performance Assessment of the Aviation System Block Upgrades framework
- Integrate new concepts(Unmanned Traffic Management, High Altitude Operations, Artificial Intelligence/Machine Learning, New flight rules)

Develop credible benefit driven approach

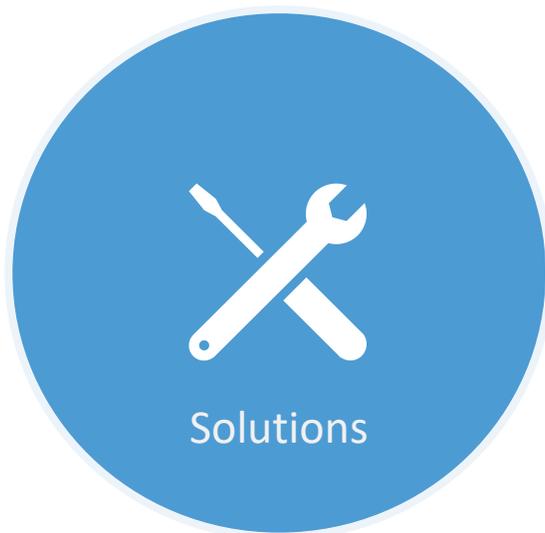
- How to package improvements?
- How to assess investments against monetized benefits?
- Operational incentives for Aviation System Block Upgrade elements
- Identify Quick Wins



Upcoming ICAO Provisions



aircraft address assignment as a part of the registration process	RPAS inflight handing over control	remove the prohibition to duplicate information in the AIPs	space weather information service	updates to WAFS forecasts	GADSS data and information	Use of RNAV on conventional routes and procedures	Global Aeronautical Distress and Safety System (GADSS)
Time-based separation (TBS) minima for wake turbulence	Enhanced provisions related to safety performance management	relocate paragliding and hang gliding activities from NOTAM code	Enhanced provisions related to safety intelligence.	Publication of Final Reports	CHARTING NAVIGATION SPECIFICATIONS AND ACCURACIES	Investigations involving unmanned aircraft	free aircraft from the requirement to operate on specified tracks or ATS route
Increasing State allocation of aircraft addresses	clarify the intent of the instances where the term "altitude" is used	The in-flight weather contingencies procedure	Remote air traffic services - minor editorial	Restructured Annex 3 and the new PANS-MET	RAPS ELTs	Deletion of unused registers F1 and F2	C2 Link resilience
RPAS Take-off and landing	Enhanced provisions related to State safety programmes (SSPs)	quality assurance material in PANS-OPS, Volume II	AIRCRAFT WITH FOLDING WING TIPS.	clarify the existing definition for "meteorological authority"	IFP FOR HELICOPTER PBN OPERATIONS	Enhanced provisions related to safety management systems (SMS)	Deployable drift measurement devices
FF-ICE	RAPS Detect and Avoid	SAR point of contact responsiveness	first edition of PANS-IM	Global deficiencies in SAR	how to identify multi-part NOTAM	Consultation period of Final Reports	lower threshold MCTOM value for FDAP
Release of investigative information	dissemination of WAFS forecasts and VONA in IWXXM format	Quantitative volcanic ash information and IAVW updates	C2 Link switchovers	UAS Categories	CBTA methodology for AIM	Overlap between AOC and ROC processes	RPAS changed responsibilities for States



There are new solutions coming on line next year. Many of you will have seen these work through the amendment process.

ICAO experts provide a broad set of solutions because the system is complex and there is no one-size-fits-all.

Each of you have a unique aviation sector.

Your paths towards Net Zero with Zero Accidents will, and should, be different.

So we provide you with the tools to make the right selections

Example of ICAO Air Navigation and Safety products/services



Integrate Safety and Trend Analysis and Reporting System (iSTARS 4.0)

iSTARS 4.0

- Web-based Modern Analytical Platform.
- Simple and convenient interface to safety and efficiency datasets.
- Web applications to carry out safety, efficiency, and risk analyses.
- Provides global and regional unique views.
- Customized regional analysis, targets and views.
- Better insights into aviation activities supporting decision-making based on national and regional data.



iSTARS

Quick and convenient interface to a collection of web applications to make safety, efficiency and risk analyses.



Regional iSTARS 4.0 Portal

Unique gateway for all ICAO regions.



Workshops

We can help you build business intelligence platforms.

<https://istars.icao.int>

Upcoming Global Air Navigation EVENTS – 2024





Aviation Safety and Aircraft Accident and Incident Investigation Symposium
Abu Dhabi, United Arab Emirates, 19 to 21 November 2024



Theme: Performance Improvement Driving Sustainability

- 1. Prioritization and long-term strategic planning**
- 2. Timely and safe use of new technologies**
 - 2.1: Evolving aircraft technologies contributing to LTAG
 - 2.2: Addressing safety risks related to evolving aviation technologies
 - 2.3: 2026-2028 Edition of the Global Aviation Safety Plan (GASP)
- 3. Air Navigation System Performance Improvement**
 - 3.1 Proposals to improve the efficiency of Air Navigation Services contributing to LTAG
 - 3.2 Phasing out legacy systems
 - 3.3 Eighth Edition of the Global Air Navigation Plan (GANP)
- 4. Hyper-connectivity of air navigation system**
 - 4.1 Connected aircraft concept and associated challenges
 - 4.2 Cybersecurity and information system resilience





A few closing remarks...

Consider the below in your planning at national and regional levels:

1. Traffic recovery and growth
2. Impact of Aviation on the Environment
3. ICAO reprioritization activities and Priority Focus Areas
4. ANW2023 and AN-Conf/14
5. Upcoming SARPs and PANS amendments
6. Implement available ICAO air navigation procedures
7. Take advantage of iSTARS 4.0 and other ICAO products and tools



Thank You