International Civil Aviation Organization

MIDANPIRG AIM Sub-Group

Sixth Meeting (AIM SG/6)
(Cairo, Egypt, 21 - 23 January 2020)

Agenda Item 3: Global/Regional Developments related to AIM relevant to AIM

MAIN OUTCOMES OF THE DGCA-MID/5 MEETING

(Presented by the Secretariat)

SUMMARY

This paper presents the main outcomes of the DGCA-MID/5 meeting of relevance to the AIM Sub Group.

Action by the meeting is at paragraph 3.

REFERENCES

- DGCA-MID/5 Report

1. INTRODUCTION

1.1 The DGCA-MID/5 meeting was held in Kuwait from 4 to 6 November 2019. The meeting developed eight (8) Conclusions.

2. DISCUSSION

2.1 The list of DGCA-MID/5 Conclusions of relevance to the AIM Sub Group is at **Appendix A**. It is to be highlighted that, through Conclusion 5/2, the meeting agreed that the MIDANPIRG and RASG-MID meetings be organized concurrently and on a biennial basis. This might have an impact on the frequency of the AIM SG meetings.

2.2 The meeting may wish to note also that the DGCA-MID/5 meeting, through Conclusion 5/7, endorsed the Second Edition of the MID Region NCLB Strategy at **Appendix B**.

2.3 With regard to the MID Region AIM Database (MIDAD) Project, the DGCA-MID/5 meeting recalled that MIDANPIRG/17 through Conclusion 17/1 agreed that the development of a detailed action plan for the implementation of the MIDAD Project Phase B (set-up of MIDAD Manager) be initiated when at least 7 States complete their migration to EAD. The meeting noted that only 1 State completed the migration to EAD. Accordingly, the meeting encouraged the remaining States to take necessary measures to migrate to EAD.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the main outcomes of the DGCA-MID/5 meeting; and take action, as appropriate.

APPENDIX A

DGCA-MID/5 CONCLUSION 5/1 – STATE LETTERS ONLINE MONITORING TOOL (SLOMT)

That,

a) States are urged to take necessary measures to enhance the level of timely reply to the ICAO State Letters,

b) in order to support States in the process of follow-up and effective provision of replies to the ICAO MID Office State Letters, ICAO develop a State Letter Online Monitoring Tool (SLOMT); and

c) States, that have not yet done so, designate Focal Points to support the design, development, testing and implementation of the SLOMT before **31 December 2019**.

DGCA-MID/5 CONCLUSION 5/2 – FREQUENCY OF THE MIDANPIRG AND RASG-MID MEETINGS
That,

a) the MIDANPIRG and RASG-MID meetings be organized concurrently and on a biennial basis; and

b) the outcomes of MIDANPIRG and RASG-MID (and their Steering Group/Committee) be reported to the Council on annual basis.

DGCA-MID/5 CONCLUSION 5/3 – MID FLIGHT PROCEDURE PROGRAMME (MID FPP)

That:

a) the MID FPP be hosted by UAE;

b) States, that have not yet done so, are urged to sign the MID FPP Project Document with ICAO;

c) till the recruitment of a MID FPP Manager, the ICAO MID Office provide full support to run the programme, in close coordination with the Host State;

d) States be invited to designate members to the MID FPP Steering Committee with decision-making authority;

e) the first meeting of MID FPP of the Steering Committee be held in Aqaba, Jordan, on 4 and 5 December 2019; and

f) States and Stakeholders as well as potential Donors be invited to participate in the First Meeting of the MID FPP Steering Committee.

DGCA-MID/5 CONCLUSION 5/7 – MID REGION NCLB STRATEGY (SECOND EDITION)

That:

a) the MID Region NCLB Strategy (Second Edition) at **Appendix 10A** is endorsed;

b) States and Stakeholders are invited to support the implementation of the MID Region NCLB Strategy; and

c) a detailed progress report on the implementation of the MID Region NCLB Strategy be presented to the DGCA-MID/6 meeting.

DGCA-MID/5 CONCLUSION 5/8 – MID REGION AIR TRANSPORT STRATEGIC PLAN 2020 -2035

That, in order to support the sustainable development of air transport in the MID Region, in line with the Strategic Objectives of ICAO and at the same time supporting the achievement of the United Nations Sustainable Development Goals (UN SDGs):

a) States and International Organizations designate Focal Points to support the ICAO MID Office in the drafting of the MID Region Air Transport Strategic Plan 2020 -2035; and

b) the Draft MID Region Air Transport Strategic Plan 2020 -2035 be presented to the DGCA-MID/6 meeting for review and fine-tuning before presentation to a Ministerial Conference for endorsement.

UNITING AVIATION

MID Region NCLB Strategy

Second Edition
November 2019

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MID Region NCLB Strategy

1. Background

1.1 The ICAO Council identified that there is still a large discrepancy among States in the implementation of ICAO Standards and Recommended Practices (SARPs). As a result, the ICAO "No Country Left Behind" (NCLB) Campaign was established by the Council to help ensure that SARPs implementation is better harmonized globally so that all States have access to the significant socio-economic benefits of safe and reliable air transport. To avoid this gap, ICAO should focus its activities on States lacking fundamental oversight capabilities for effective implementation of ICAO SARPs, particularly in the priority areas of safety, air navigation and efficiency, and security. Therefore, particular attention should be given to the assistance of those States with a higher safety and security risk.

1.2 ICAO should find the best way to reduce this gap and increase the regional Effective Implementation (EI), by providing more assistance to developing States, playing a more active coordination role between States and generating the political will to pool resources, participate in regional efforts, earmark voluntary funds and build capacities.

1.3 In accordance with Assembly Resolution A39-23 "No Country Left Behind" (NCLB) Initiative, States should effectively implement ICAO's Standards and Recommended Practices (SARPs) and policies so that all States have safe, secure, efficient, economically viable and environmentally sound air transport systems which support sustainable development and socio-economic prosperity, and which ultimately help to create and preserve friendship and understanding among the nations and peoples of the world. In addition, further progress in improving civil aviation, including the efficient human and financial resources for the implementation of assistance activities that are tailored to the needs of individual States, is best achieved through a cooperative, collaborative and coordinated approach in partnership with all stakeholders.

1.4 The ICAO No Country Left Behind (NCLB) initiative, which was launched in December 2014, aims at providing support to all States and in support of the five ICAO strategic objectives, for the resolution of significant safety concerns (SSCs) and significant security concerns (SSeCs) and for an effective implementation of ICAO's SARPs, policies, plans and programmes, in a globally-harmonized manner; promoting and implementing all ICAO's assistance activities.

1.5 The ICAO Strategic Objectives address thirteen (13) out of the seventeen (17) United Nations Sustainable Development Goals (SDGs), adopted by all United Nations Member States in 2015 through the 2030 Agenda for Sustainable Development, which are an urgent call for action by all Countries - developed and developing - in a global partnership.

1.6 Through the NCLB initiative, ICAO resolves to be more effective in directly supporting all willing States that need assistance to develop and improve the aviation system by implementing ICAO's global Standards and policies. In its role as an advocate for aviation, ICAO will work with States to ensure aviation be given greater importance in the context of development at the Country level.

1.7 The NCLB initiative seeks to improve implementation support delivery to States. Support, collaboration and assistance from States, international organizations, industry and other stakeholders is essential to the success of these ICAO efforts to ensure that no Country is left behind.

1.8 The ICAO MID Regional Office promotes and monitors the implementation of Standards and Recommended Practices (SARPs) in 15 Member States of ICAO to which it is accredited.

1.9 To ensure the success of the assistance/cooperation actions, first ICAO needs to have a deep understanding on the root causes for a State not been able to improve its level of implementation of SARPs. Once this is achieved, it is necessary to select the best candidates States for deploying technical assistance/cooperation projects that will produce a sustainable improvement of the Effective Implementation (EI).

1.10 The design of an effective NCLB Strategy could only be possible by gathering enough information on the organization, structure, formal and informal hierarchy, cultural aspects, etc. This information could be considered as State Profile or as business intelligence, which might be needed for the development of necessary project document and to seek support from donors that might be interested in subsidizing the NCLB initiative.

2. Challenges for States

2.1 The MID Region is faced with a wide variety of geopolitical diversity, airspace features, operational challenges and civil aviation capacity building issues.

2.2 States continue to face various challenges regarding the implementation of ICAO's Standards and Recommended Practices (SARPs), which impact a safe, secure, efficient, economically viable and environmentally sound air transport system.

2.3 In order to achieve the objectives of the NCLB Initiative, it is also important to identify and address the challenges facing States to implement ICAO policies, plans and SARPs. The followings are some of the main challenges common to many States in the MID Region:

- rapid and continuing growth of traffic in the MID Region, which places increased demand on airspace capacity and imposes an optimum utilization of the available airspace and airports;

- insufficient financial and human resources capacity;
- retention and training/re-training of personnel;
- changing environment with the development of new technologies and SARPs;
- existing deficiencies;
- political, governance, institutional and legal issues;
- States have other higher priorities than aviation; and
- emergencies – natural disasters, public health, civil unrest, etc.

3. Objectives

3.1 The success of the NCLB initiative will hinge on support and collaboration of resources of partners and donors and requires firm commitment from the States, involving both aviation and non-aviation sectors. One of the priorities of the NCLB is to garner the political will necessary to support aviation improvements. ICAO plays a leadership role in the aviation community to facilitate communication and coordination amongst key stakeholders regarding assistance activities. This will allow the continued growth of a safe, secure, efficient, economically viable and environmentally sound aviation system and well established development frameworks, at both the international and national levels, to engage in providing resources for the effective implementation of aviation global standards and policies.

3.2 The primary objectives of the NCLB initiative include:

a) providing enhanced support for States in the effective implementation of ICAO's SARPs, plans and policies in a more coordinated, comprehensive and globally harmonized manner; and
b) promoting the resolution of significant safety concerns (SSCs) and significant security concerns (SSeCs), if any.

Means to achieve NCLB Objectives:

- advocate the benefits of aviation for States at the highest level;
- prioritize assistance needs and assessing risks for each State;
- facilitate and support implementing capacity-building initiatives;
- establishing and enhancing partnerships;
- mobilizing resources for aviation-related projects;
- develop implementation support tools and services; and
- monitoring and recognizing progress by States.

Safety, Air Navigation and Security Priorities and Targets

3.3 The MID Region Safety and Air Navigation Strategies at **Attachments A** and **B**, respectively, defined regional performance targets for the monitoring of performance at the national and regional levels, in accordance with the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP), aiming at enhancing safety and improving air navigation capacity and efficiency, through a cooperative, collaborative and coordinated approach in partnership with all stakeholders under the leadership of ICAO. The RASG-MID and the MIDANPIRG are the governing bodies responsible for the review and update of the MID Region Safety and Air Navigation Strategies, respectively.

3.4 In the aviation security and facilitation (AVSEC/FAL) field, the Middle East Regional Aviation Security and Facilitation Group (MID-RASFG), established by the DGCA-MID/4 meeting (Muscat, Oman, 17-19 October 2017) endorsed the MID SECFAL Plan, developed in line with the Global Aviation Security Plan (GASeP) and which includes the SECFAL priorities. The MID SECFAL Plan includes also the MID SECFAL Targets at **Attachment C**.

3.5 The MID Region NCLB Strategy aims to foster the achievement of the regional targets, through assistance activities that are tailored to the needs of selected States, in cooperation with other States and stakeholders, as appropriate. This will be achieved through:

- identification of States lacking fundamental oversight capabilities for effective implementation of ICAO SARPs;
- prioritization of States in term of provision of required assistance;
- selection of the best candidates States for deploying technical assistance/cooperation projects that will produce a sustainable improvement of the Effective Implementation (EI);
- proactive approach to foster political will and senior level commitment;
- agreement with concerned States, as part of specific Plan of Actions, on measureable outcomes and clear definition of accountability for the achievement of the set goals; and
- identification of Champions (State, ICAO or stakeholder) to provide required assistance.

4. Prioritization of States

4.1 The priority for the provision of technical assistance under the MID Region NCLB Strategy should be for the States lacking fundamental oversight capabilities for the effective implementation of ICAO SARPs. In order to select the best candidate States for deploying technical assistance/cooperation projects that will produce a sustainable improvement of the Effective Implementation (EI) in a specific field (safety, security, etc), the following should be taken into consideration:

1- States with SSC or SSeC;
2- States with no audit results or with EI below 60% (in safety USOAP and in Security USAP);
3- State willingness/commitment to receive assistance;
4- Security and political stability;
5- Level of aviation activities in the State;
6- Gross Domestic Product (GDP) per capita; and
7- Ongoing or planned assistance projects.

4.2 Specific prioritization criteria might be developed for each area (safety and capacity & efficiency, security, environment, etc), taken into consideration the above, as well as additional criteria/factors, including but not limited to:

a) EI per Area and per Critical Element (CE);
b) SSP foundation;
c) SSP implementation plan;
d) Air navigation deficiencies (including the deficiencies related to aerodrome certification);
e) Level of progress made by State in the development and implementation of Corrective Action Plans (CAPs); and
f) Non-implementation of specific ICAO provisions, such as, Advanced Passenger Information (API) or State Action Plan for the reduction of CO2 emission, etc.

4.3 Based on the above criteria, NCLB Plans are developed for the selected States, in accordance with the MID Region NCLB Strategy. A NCLB Plan Sample/Template is at **Attachment D**.

5. MID Region NCLB Strategy – Phases

5.1 The MID Region NCLB Strategy is composed of three (3) phases as follows:

Phase I – Selection: Selection of the best candidates States for deploying assistance that will produce a sustainable improvement of the effective implementation of SARPs, in accordance with agreed prioritization criteria; and communication with States (Executive Level) for the development and implementation of an NCLB Plan/Plan of Actions.

During this phase, the ICAO MID Office plays the main role in the selection of the best candidate States and ensuring necessary leadership, commitment, political will and accountability for the development and implementation of State's NCLB Plan/Plan of Actions.

Phase II – Development: Development of detailed NCLB Plan of Actions (for the identified priority area(s)) or similar plans, such as, Aviation Security Improvement Plan (ASIP), in coordination with concerned State(s) and stakeholders, as required. The Plan of Actions is to be appended to the NCLB Plan and should include measurable outcomes with specific timelines. This phase includes also the communication of the Plan of Actions to the State Executive Level.

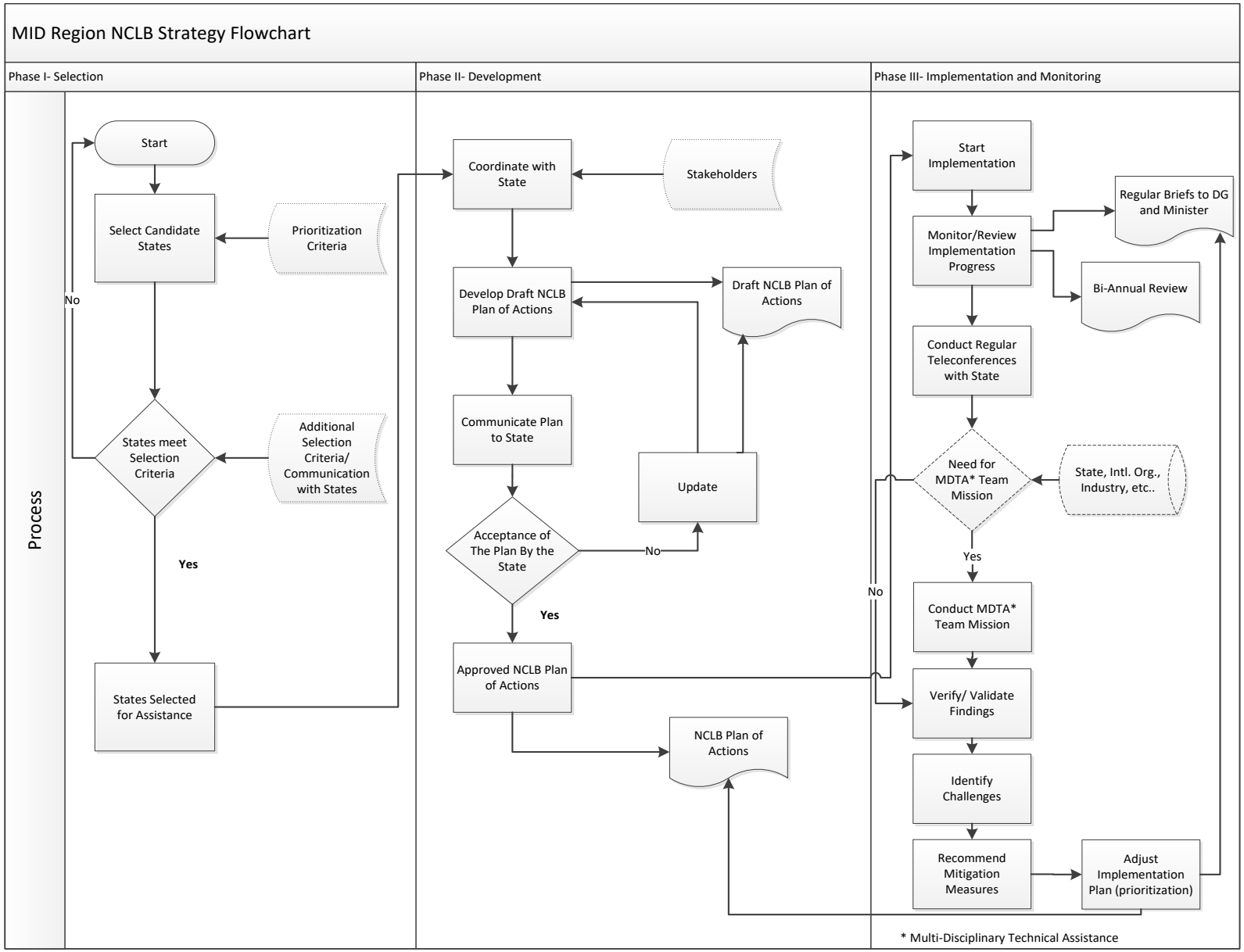
Phase III – Implementation and Monitoring: Implementation of the agreed actions in coordination with concerned stakeholders; and continuous monitoring of the implementation process to ensure the achievement of the agreed objectives and targets.

The implementation of the different activities included in the Plan of Actions could be supported by different stakeholders. During the implementation process, visit(s) by a multi-disciplinary Technical Assistance Team composed of Experts from ICAO and other stakeholders (States, International Organizations, Industry, etc.) might be needed to advance and expedite the implementation of the agreed actions in a prioritized manner, verify/validate the evidences related to the resolution of previously identified findings, provide necessary assistance, identify the main challenges and agree on necessary mitigation measures.

During this phase, regular teleconferences with the concerned technical experts will be held and regular briefs will be provided to the DG/Minister.

MID Region NCLB Strategy – Flowchart

5.2 The following Flowchart helps understand the process and activities related to each phase of the MID Region NCLB Strategy:


MID Region NCLB Strategy Flowchart
Phase I- Selection
Phase II- Development
Phase III- Implementation and Monitoring
Process
Start
Select Candidate States
Prioritization Criteria
No
States meet Selection Criteria
Additional Selection Criteria/ Communication with States
Yes
States Selected for Assistance
Coordinate with State
Stakeholders
Develop Draft NCLB Plan of Actions
Draft NCLB Plan of Actions
Communicate Plan to State
Update
Acceptance of The Plan By the State
No
Yes
Approved NCLB Plan of Actions
NCLB Plan of Actions
Start Implementation
Regular Briefs to DG and Minister
Monitor/Review Implementation Progress
Bi-Annual Review
Conduct Regular Teleconferences with State
Need for MDTA* Team Mission
State, Intl. Org., Industry, etc..
Yes
No
Conduct MDTA* Team Mission
Verify/ Validate Findings
Identify Challenges
Recommend Mitigation Measures
Adjust Implementation Plan (prioritization)
* Multi-Disciplinary Technical Assistance

ICAO SAFETY

REGIONAL AVIATION SAFETY GROUP – MIDDLE EAST (RASG-MID)

MID REGION

SAFETY STRATEGY

EDITION 6, APRIL 2019

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MID Region Safety Strategy

1. Strategic Safety Objective

1.1 Continuous improvement of aviation safety through a progressive reduction of the number of accidents and related fatalities in the MID Region to be in line with the global average, based on reactive, proactive and predictive safety management practices.

2. Safety Objectives

2.1 States and Regions must focus on their safety priorities as they continue to foster expansion of their air transport sectors.

2.2 The ICAO Global Aviation Safety Plan (GASP) establishes targeted safety objectives and initiatives while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.

2.3 The 2017-2019 GASP introduced a global aviation safety roadmap to ensure that safety initiatives deliver the intended benefits of the GASP objectives through enhanced coordination, thus reducing inconsistencies and duplication of efforts.

2.4 The GASP roadmap outlines specific safety initiatives supported by a set of actions associated with each of the four safety performance enablers (standardization, resources, collaboration and safety information exchange) which, when implemented by stakeholders, will address the GASP objectives and global safety priorities. These specific safety initiatives targeted to the different streams of stakeholders (States, regions and industry) at different levels of maturity.

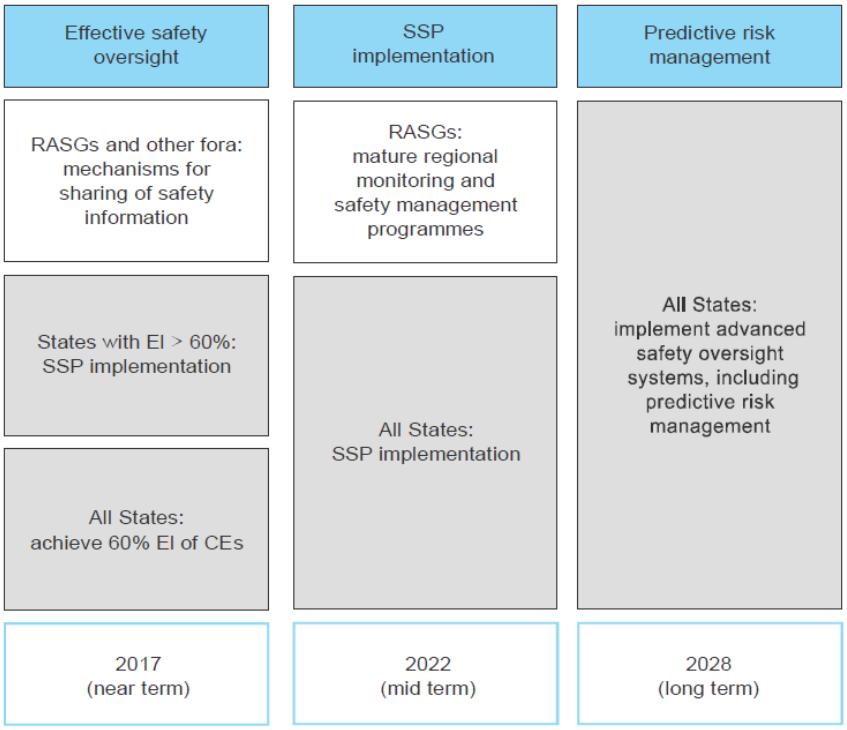
2.5 States, Regions (supported primarily by the RASGs) and industry are expected to use the roadmap individually and collectively as the basis to develop action plans that define the specific activities which should take place in order to improve safety at the regional or sub-regional and national levels.

2.6 The Draft 2020-2022 Edition of the GASP would set forth ICAO's Safety Strategy in support of the prioritization and continuous improvement of aviation. The plan guides the implementation of regional and national aviation safety plans.

2.7 The 2020-2022 Edition of the GASP includes a new set of goals, targets and indicators, in line with the United Nations' 2030 Agenda for Sustainable Development.

2.8 The global aviation safety roadmap, presented in the Draft 2020-2022 Edition of the GASP, would serve as an action plan to assist the aviation community in achieving the GASP goals.

2.9 The MID Region safety objectives are in line with the GASP objectives and address specific safety risks identified within the framework of the Regional Aviation Safety Group-Middle East (RASG-MID), based on the analysis of available safety data.



2017-2019 GASP Objectives

2.10 The enhancement of communication and information exchange between aviation Stakeholders and their active collaboration under the framework of RASG-MID would help achieving the MID Region safety objectives in an expeditious manner.

3. Measuring and monitoring Safety Performance:

3.1 The first version of the MID Region Safety Strategy was developed by the First MID Region Safety Summit (Bahrain, 28-29 April 2013) and endorsed by the DGCA-MID/2 meeting (Jeddah, Saudi Arabia, 20 -22 May 2013).

3.2 The monitoring of safety performance and its enhancement is achieved through identification of relevant Goals and Safety Indicators, taking into consideration the Draft GASP 2020-2022 and regional specific objectives and priorities, as well as the adoption and attainment of Safety Targets with a specific timeframe.

3.3 The MID Region Safety Strategy includes the following Goals:

- Aspirational Goal: Zero fatality by 2030
- Goal 1: Achieve a continuous reduction of operational safety risks
- Goal 2: Strengthen States' safety oversight capabilities/Progressively increase the USOAP-CMA EI scores/results
- Goal 3: Improve aerodrome safety
- Goal 4: Expand the use of Industry Programmes
- Goal 5: Implementation of effective SSPs and SMSs
- Goal 6: Increase Collaboration at the Regional Level to enhance safety
- Goal 7: Ensure the appropriate infrastructure is available to support safe operations
- Goal 8: Monitor the fleet age

3.4 The MID Region Safety Goals, Indicators and Targets are detailed in the Table below:

MID Region Safety Targets

Aspirational Goal: Zero Fatality by 2030

Goal 1: Achieve a Continuous Reduction of Operational Safety Risks

Safety Indicator	Safety Target	Timeline
Number of accidents per million departures	Regional average rate of accidents to be in line with the global average rate	2016
Number of fatal accidents per million departures	Regional average rate of fatal accidents to be in line with the global average rate	2016
Number of fatalities per million departures	Number of fatalities per billion passengers carried (fatality rate) to be in line with the global average rate	2018
Number of Runway Excursion accidents per million departures	Regional average rate of Runway Excursion accidents to be below the global average rate	2016
Number of Runway Incursion accidents per million departures	Regional average rate of Runway Incursion accidents to be below the global average rate	2018
Number of LOC-I related accidents per million departures	Regional average rate of LOC-I related accidents to be below the global rate	2016
Number of CFIT related accidents per million departures	Regional average rate of CFIT related accidents to be below the global rate	2016
Number of Mid Air Collision (accidents)	Zero Mid Air Collision accident	2018
Number of Near Mid Air Collision (serious incidents)	Regional average rate of Near Mid Air Collision (serious incidents per million departures) to be less than **0.1** All States to reduce the rate of Near Mid Air Collision (AIRPROX) within their airspace	2020

Goal 2: Strengthen States' Safety Oversight Capabilities/Progressively Increase the USOAP-CMA EI Scores/Results:

Safety Indicator	Safety Target	Timeline
USOAP-CMA Effective Implementation (EI) results: a. Regional average EI b. Number of States with an overall EI over 60% c. Regional average EI by area d. Regional average EI by CE	a. Regional average EI to be above 70% b. 11 MID States to have at least 60% EI c. Regional average EI for each area to be above 70% d. Regional average EI for each CE to be above 70%	a. 2020 b. 2020 c. 2020 d. 2020
Number of Significant Safety Concerns (SSC)	a. No Significant Safety Concern (SSC) b. SSC, if identified, to be resolved as a matter of urgency, and in any case within 12 months from its identification	2016

Goal 3: Improve Aerodrome Safety:

Safety Indicator	Safety Target	Timeline
Number of certified International Aerodrome as a percentage of all International Aerodromes in the MID Region	a. 50% of the International Aerodromes certified b. 75% of the International Aerodromes certified	a. 2015 b. 2017
Number of established Runway Safety Team (RST) at MID International Aerodromes.	50% of the International Aerodromes having established a RST	2020

Goal 4: Expand the use of Industry Programmes:

Safety Indicator	Safety Target	Timeline
Use of the IATA Operational Safety Audit (IOSA), to complement safety oversight activities.	a. Maintain at least 60% of eligible MID airlines to be certified IATA-IOSA at all times. b. All MID States with an EI of at least 60% use the IATA Operational Safety Audit (IOSA) to complement their safety oversight activities	a. N/A b. 2018
Use of the IATA Safety Audit for Ground Operations (ISAGO) certification, as a percentage of all Ground Handling service providers	The IATA Ground Handling Manual (IGOM) endorsed as a reference for ground handling safety standards by all MID States. Pursue at least 50% increase in ISAGO registration (baseline 2017)	2020
Use of the ACI Airport Excellence (APEX) in Safety programme	At least 1 ACI APEX in Safety conducted in 1 Airport of the Region per year	N/A

Goal 5: Implementation of Effective SSPs and SMSs:

Safety Indicator	Safety Target	Timeline
Number of MID States that use ECCAIRS for the reporting of accidents and serious incidents.	a. 9 States b. 12 States	a. 2019 b. 2020
Number of States that have completed the SSP Gap Analysis on iSTARS	13 States	2020
Number of States that have developed an SSP implementation plan	13 States	2020
Regional Average SSP Foundation (in %)	70%	2022
Number of States that have fully implemented the SSP Foundation	10 States	2022
Number of States that have established an ALoSP	10 States	2025
Number of States that have implemented an effective SSP	7 States	2025
Number of States that have established a process for acceptance of individual service providers' SMS	2 States	2020
Number of States providing information on safety risks, including SSP SPIs, to the RASG-MID	7 States	2020
Establishment of a Regional mechanism for regional data collection, sharing and analysis	Regional Mechanism established	2018

Goal 6: Increase Collaboration at the Regional Level to Enhance Safety:

Safety Indicator	Safety Target	Timeline
Number of States attending the RASG-MID meetings	At least 12 States from the MID Region	2019
Number of States providing required data related to accidents, serious incidents and incidents to the MID-ASRT	All States from the MID Region	2020
Number of States requiring and actively seeking assistance/support Number of States that received assistance/support through the RASG-MID, MENA RSOO and/or other NCLB mechanisms	All States having an EI below 60% to be member of the MENA RSOO All States having an EI below 60% to have an approved NCLB Plan of Actions for safety (agreed upon with the ICAO MID Office) SEI or Technical Assistance Mission/Project implemented for each assistance need identified by the RASG-MID	2019 2019
Number of States, having an EI below 60% in some areas, delegating certain safety oversight functions to the MENA RSOO or other State(s)	Percentage of States, having an EI below 60% in some areas, delegating certain safety oversight functions to the MENA RSOO or other State(s), to be at least **50%**	2022
Number of States that contribute to the implementation of SEIs and Technical Assistance Missions/Projects	7 States	2020
Percentage of SEIs implemented in accordance with the agreed timeframe	80% of the SEIs	N/A

Goal 7: Ensure the Appropriate Infrastructure is available to Support Safe Operations:

Safety Indicator	Safety Target	Timeline
Number of Air Navigation Deficiency Priority “U” identified by MIDANPIRG	No Air Navigation Deficiency Priority “U”	2022

Goal 8: Monitor the Fleet Age:

Safety Indicator	Safety Target
*Average Fleet Age.	States are required to monitor their fleet age. No regional Safety Targets are defined.
*Percentage of fleet above 20 years of age.	

4. Governance

4.1 The MID Region Safety Strategy will guide the work of RASG-MID and all its member States and partners.

4.2 The RASG-MID will be the governing body responsible for the review and update of the Strategy, as deemed necessary.

4.3 Progress on the implementation of the MID Region Safety Strategy and the achievement of the agreed Safety Targets will be reported to the ICAO Air Navigation Commission (ANC), through the review of the RASG-MID reports; and to the stakeholders in the Region during the MID Region Safety Summits.

MID DOC 002

INTERNATIONAL CIVIL AVIATION ORGANIZATION

MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (MIDANPIRG)

MID REGION

AIR NAVIGATION STRATEGY

EDITION APRIL, 2019

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontier or boundaries.

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1. Introduction

1.1 As traffic volume increases throughout the world, the demands on air navigation service providers in a given airspace increase, and air traffic management becomes more complex.

1.2 It is foreseen that the implementation of the components of the ATM operational concept will provide sufficient capacity to meet the growing demand, generating additional benefits in terms of more efficient flights and higher levels of safety. Nevertheless, the potential of new technologies to significantly reduce the cost of services will require the establishment of clear operational requirements.

1.3 Taking into account the benefits of the ATM operational concept, it is necessary to make many timely decisions for its implementation. An unprecedented cooperation and harmonization will be required at both global and regional level.

1.4 ICAO introduced the Aviation System Block Upgrades (ASBU) framework as a systemic manner to achieve a harmonized implementation of the air navigation services. An ASBU designates a set of improvements that can be implemented globally from a defined point in time to enhance the performance of the ATM system.

1.5 Through Recommendation 6/1 - *Regional performance framework – planning methodologies and tools*, AN-Conf/12 urged States and PIRGs to harmonize the regional and national air navigation plans with the ASBU methodology in response to this, the MID region developed the MID Region Air Navigation Strategy, which is aligned with the GANP and ASBU Framework.

1.6 Stakeholders including service providers, regulators, airspace users and manufacturers are facing increased levels of interaction as new, modernized ATM operations are implemented. The highly integrated nature of capabilities covered by the block upgrades requires a significant level of coordination and cooperation among all stakeholders. Working together is essential for achieving global harmonization and interoperability.

2. Strategic Air Navigation Capacity and Efficiency Objective

2.1 To realize sound and economically-viable civil aviation system in the MID Region that continuously increases in capacity and improves in efficiency with enhanced safety while minimizing the adverse environmental effects of civil aviation activities.

3. MID Air Navigation Objectives

3.1 The MID Region air navigation objectives are set in line with the global air navigation objectives and address specific air navigation operational improvements identified within the framework of the Middle East Regional Planning and Implementation Group (MIDANPIRG).

3.2 Block ‘0’ features Modules are characterized by operational improvements, which have already been developed and implemented in many parts of the world. The MID Region priority 1 Block 0 Modules are reflected in **Table 1** below.

3.3 The MID Region Air Navigation Strategy aims to maintain regional harmonisation. The States should develop their National ASBU Implementation Plan, including action plans for the implementation of relevant priority 1 ASBU Modules and other Modules according to the States’ operational requirements.

3.4 The implementation of the ASBU Block 0 Modules in the MID Region started in 2013 and is continuing.

3.5 Blocks 1 features Modules are characterized by both existing and projected performance area solutions, with availability milestones beginning in 2019.

3.6 The Block Upgrades incorporate a long-term perspective matching that of the Regional Air Navigation Plan (eANP). They coordinate clear aircraft- and ground-based operational objectives together with the avionics, data link and ATM system requirements needed to achieve them. The overall strategy serves to provide industry wide transparency and essential investment certainty for operators, equipment manufacturers and ANSPs.

3.7 The implementation of Block 2 and Block 3 Modules is planned for 2025 and beyond.

4. MID Region ASBU Block 0 Modules Prioritization and Monitoring

4.1 On the basis of operational requirements and taking into consideration the associated benefits, **Table 1** below shows the priority for implementation of the 18 Block "0" Modules**,** as well as the MIDANPIRG subsidiary bodies that will be monitoring and supporting the implementation of the Modules:

Table 1. MID REGION ASBU BLOCK 0 MODULES PRIORITIZATION AND MONITORING

Module Code	Module Title	Priority	Start Date	Monitoring		Remarks
				Main	Supporting	
Performance Improvement Areas (PIA) 1: **Airport Operations**						
B0-APTA	Optimization of Approach Procedures including vertical guidance	1	2014	PBN SG	ATM SG, AIM SG, CNS SG	
B0-WAKE	Increased Runway Throughput through Optimized Wake Turbulence Separation	2				
B0-RSEQ	Improve Traffic flow through Runway Sequencing (AMAN/DMAN)	2				
B0-SURF	Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)	1	2014	ANSIG	CNS SG	Coordination with RGS WG
B0-ACDM	Improved Airport Operations through Airport-CDM	1	2014	ANSIG	CNS SG, AIM SG, ATM SG	Coordination with RGS WG
Performance Improvement Areas (PIA) 2 Globally Interoperable Systems and Data Through Globally Interoperable System Wide Information Management						
B0-FICE	Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration	1	2014	CNS SG	AIM SG, ATM SG	
B0-DATM	Service Improvement through Digital Aeronautical Information Management	1	2014	AIM SG		
B0-AMET	Meteorological information supporting enhanced operational efficiency and safety	1	2014	MET SG		

Performance Improvement Areas (PIA) 3 Optimum Capacity and Flexible Flights – Through Global Collaborative ATM						
B0-FRTO	Improved Operations through Enhanced En-Route Trajectories	1	2014	ATM SG		
B0-NOPS	Improved Flow Performance through Planning based on a Network-Wide view	1	2015			
B0-ASUR	Initial capability for ground surveillance	2	2014	CNS SG		
B0-ASEP	Air Traffic Situational Awareness (ATSA)	2				
B0-OPFL	Improved access to optimum flight levels through climb/descent procedures using ADS-B	2				
B0-ACAS	ACAS Improvements	1	2014	CNS SG		
B0-SNET	Increased Effectiveness of Ground-Based Safety Nets	1	2017	ATM SG		
Performance Improvement Areas (PIA) 4 Efficient Flight Path – Through Trajectory-based Operations						
B0-CDO	Improved Flexibility and Efficiency in Descent Profiles (CDO)	1	2014	PBN SG		
B0-TBO	Improved Safety and Efficiency through the initial application of Data Link En-Route	2		ATM SG	CNS SG	
B0-CCO	Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)	1	2014	PBN SG		

Priority 1: Modules that have the highest contribution to the improvement of air navigation safety and/or efficiency in the MID Region. These modules should be implemented where applicable and will be used for the purpose of regional air navigation monitoring and reporting for the period 2015-2018.

Priority 2: Modules recommended for implementation based on identified operational needs and benefits.

5. Measuring and Monitoring Air Navigation Performance

5.1 The monitoring of air navigation performance and its enhancement is achieved through identification of relevant air navigation Metrics and Indicators as well as the adoption and attainment of air navigation system Targets. The monitoring of the priority 1 ASBU modules is carried out through the MID eANP Volume III.

5.2 MIDANPIRG through its activities under the various subsidary bodies will continue to update and monitor the implementation of the ASBU Modules to achieve the air navigation targets.

5.3 The priority 1 Modules along with the associated elements, applicability, performance Indicators, supporting Metrics, and performance Targets are shown in the **Table 2** below.

***Note**: The different elements supporting the implementation are explained in detail in the ASBU Document which is attached to the Global Plan (Doc 9750).*

6. Governance

6.1 Progress report on the status of implementation of the different priority 1 Modules and other Modules, as appropriate, should be developed by the Air Navigation System Implemenation Group (ANSIG) and presented to the MIDANPIRG Steering Group (MSG) and/or MIDANPIRG on regular basis.

6.2 The MIDANPIRG and its Steering Group (MSG) will be the governing body responsible for the review and update of the MID Region Air Navigation Strategy.

6.3 The MID Region Air Navigation Strategy will guide the work of MIDANPIRG and its subsidary bodies and all its member States and partners.

6.4 Progress on the implementation of the MID Region Air Navigation Strategy and the achievement of the agreed air navigation targets will be reported to the ICAO Air Navigation Commission (ANC), through the review of the MIDANPIRG reports, MID Air navigation Report, etc.; and to the stakeholders in the Region within the framework of MIDANPIRG.

Table 2. MONITORING THE IMPLEMENTATION OF THE ASBU BLOCK 0 MODULES IN THE MID REGION

B0 – APTA: Optimization of Approach Procedures including vertical guidance

Description and purpose:

The use of performance-based navigation (PBN) and ground-based augmentation system (GBAS) landing system (GLS) procedures will enhance the reliability and predictability of approaches to runways, thus increasing safety, accessibility and efficiency. This is possible through the application of Basic global navigation satellite system (GNSS), Baro vertical navigation (VNAV), satellite-based augmentation system (SBAS) and GLS. The flexibility inherent in PBN approach design can be exploited to increase runway capacity.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
Y	Y	Y	Y	Y

Applicability consideration:

This module is applicable to all instrument, and precision instrument runway ends, and to a limited extent, non-instrument runway ends.

B0 – APTA: Optimization of Approach Procedures including vertical guidance				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
LNAV	All RWYs Ends at International Aerodromes	Indicator: % of runway ends at international aerodromes with RNAV(GNSS) Approach Procedures (LNAV) Supporting metric: Number of runway ends at international aerodromes with RNAV (GNSS) Approach Procedures (LNAV)	100% (All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches)	Dec. 2016
LNAV/VNAV	All RWYs ENDs at International Aerodromes	Indicator: % of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV) Supporting metric: Number of runways ends at international aerodromes provided with Baro-VNAV approach procedures (LNAV/VNAV)	100% (All runway ends at Int'l Aerodromes, either as the primary approach or as a back-up for precision approaches)	Dec. 2017

Module B0-SURF: Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)

Description and purpose:

Basic A-SMGCS provides surveillance and alerting of movements of both aircraft and vehicles on the aerodrome thus improving runway/aerodrome safety. ADS-B information is used when available (ADS-B APT).

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
Y	Y	Y	Y	Y

Applicability consideration:

A-SMGCS is applicable to any aerodrome and all classes of aircraft/vehicles. Implementation is to be based on requirements stemming from individual aerodrome operational and cost-benefit assessments. ADS-B APT, when applied is an element of A-SMGCS, is designed to be applied at aerodromes with medium traffic complexity, having up to two active runways at a time and the runway width of minimum 45 m.

B0-SURF: Safety and Efficiency of Surface Operations (A-SMGCS Level 1-2)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
A-SMGCS Level 1*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEDF, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 1 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 1	70%	Dec. 2017
A-SMGCS Level 2*	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEJN, OERK, OMDB, OMAA, OMDW	Indicator: % of applicable international aerodromes having implemented A-SMGCS Level 2 Supporting Metric: Number of applicable international aerodromes having implemented A-SMGCS Level 2	50%	Dec. 2017

**Reference: Eurocontrol Document – "Definition of A-SMGCS Implementation Levels, Edition 1.2, 2010".*

B0 – ACDM: Improved Airport Operations through Airport-CDM

Description and purpose:

To implement collaborative applications that will allow the sharing of surface operations data among the different stakeholders on the airport. This will improve surface traffic management reducing delays on movement and maneuvering areas and enhance safety, efficiency and situational awareness.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	Y	N

Applicability consideration:

Local for equipped/capable fleets and already established airport surface infrastructure.

B0 – ACDM: Improved Airport Operations through Airport-CDM				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
A-CDM	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEJN, OERK, OMDB, OMAA	Indicator: % of applicable international aerodromes having implemented improved airport operations through airport-CDM Supporting metric: Number of applicable international aerodromes having implemented improved airport operations through airport-CDM	50%	Dec. 2018

B0 – FICE: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration

Description and purpose:

To improve coordination between air traffic service units (ATSUs) by using ATS Inter-facility Data Communication (AIDC) defined by the ICAO *Manual of Air Traffic Services Data Link Applications* (Doc 9694). The transfer of communication in a data link environment improves the efficiency of this process particularly for oceanic ATSUs.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	N	Y

Applicability consideration:

Applicable to at least two area control centers (ACCs) dealing with enroute and/or terminal control area (TMA) airspace. A greater number of consecutive participating ACCs will increase the benefits.

B0 – FICE: Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
AMHS capability	All States	Indicator: % of States with AMHS capability Supporting metric: Number of States with AMHS capability	90%	Dec. 2020
AMHS implementation /interconnection	All States	Indicator: % of States with AMHS implemented (interconnected with other States AMHS) Supporting metric: Number of States with AMHS implemented (interconnections with other States AMHS)	90%	Dec. 2020
Implementation of AIDC/OLDI between adjacent ACCs	As per the AIDC/OLDI Applicability Table*	Indicator: % of priority 1 AIDC/OLDI Interconnection have been implemented Supporting metric: Number of AIDC/OLDI interconnections implemented between adjacent ACCs	70%	Dec. 2020

** Note – the required AIDC/OLDI connection is detailed in the MID eANP Volume II Part III*

B0 – DATM: Service Improvement through Digital Aeronautical Information Management

Description and purpose:

The initial introduction of digital processing and management of information, through aeronautical information service (AIS)/aeronautical information management (AIM) implementation, use of aeronautical information exchange model (AIXM), migration to electronic aeronautical information publication (AIP) and better quality and availability of data

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	N	Y	Y	Y

Applicability consideration:

Applicable at State level, with increased benefits as more States participate

B0 – DATM: Service Improvement through Digital Aeronautical Information Management				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
AIXM	All States	Indicator: % of States that have implemented an AIXM-based AIS database Supporting Metric: Number of States that have implemented an AIXM-based AIS database	80%	Dec. 2018
eAIP	All States	Indicator: % of States that have implemented an IAID driven AIP Production (eAIP) Supporting Metric: Number of States that have implemented an IAID driven AIP Production (eAIP)	80%	Dec. 2020
QMS	All States	Indicator: % of States that have implemented QMS for AIS/AIM Supporting Metric: Number of States that have implemented QMS for AIS/AIM	90%	Dec. 2018
WGS-84	All States	Indicator: % of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Supporting Metric: Number of States that have implemented WGS-84 for horizontal plan (ENR, Terminal, AD) Indicator: % of States that have implemented WGS-84 Geoid Undulation Supporting Metric: Number of States that have implemented WGS-84 Geoid Undulation	Horizontal: 100% Vertical: 90%	Dec. 2018 Dec. 2018
Agreement with data originators	All States	Indicator: % of States that have signed Service Level Agreements (SLA) with at least 50% of their AIS data originators Supporting Metric: Number of States that have signed Service Level Agreements (SLA) with at least 50% of their AIS data originators	80%	Dec. 2020

B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety

Description and purpose:

Global, regional and local meteorological information:

a) forecasts provided by world area forecast centres (WAFC), volcanic ash advisory centres (VAAC) and tropical cyclone advisory centres (TCAC);
b) aerodrome warnings to give concise information of meteorological conditions that could adversely affect all aircraft at an aerodrome including wind shear; and
c) SIGMETs to provide information on occurrence or expected occurrence of specific en-route weather phenomena which may affect the safety of aircraft operations and other operational meteorological (OPMET) information, including METAR/SPECI and TAF, to provide routine and special observations and forecasts of meteorological conditions occurring or expected to occur at the aerodrome.

This module includes elements which should be viewed as a subset of all available meteorological information that can be used to support enhanced operational efficiency and safety.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	Y	Y

Applicability consideration:

Applicable to traffic flow planning, and to all aircraft operations in all domains and flight phases, regardless of level of aircraft equipage.

B0 – AMET: Meteorological information supporting enhanced operational efficiency and safety				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
SADIS FTP	All States	Indicator: % of States having implemented SADIS FTP service Supporting Metric: Number of States having implemented SADIS FTP service	100%	Dec. 2018
QMS	All States	Indicator: % of States having implemented QMS for MET Supporting metric: number of States having implemented QMS for MET	80%	Dec. 2018
SIGMET	All States with MWOs in MID Region	Indicator: % of States having implemented SIGMET Supporting metric: number of States having implemented SIGMET	100%	Dec. 2018
OPMET	All States	Indicator: % of States having implemented METAR and TAF Supporting metric: number of States having implemented METAR and TAF	95%	Dec. 2018
WIND SHEAR	TBD	Indicator: TBD Supporting metric: TBD	TBD	TBD

B0 – FRTO: Improved Operations through Enhanced En-Route Trajectories

Description and purpose:

To allow the use of airspace which would otherwise be segregated (i.e. special use airspace) along with flexible routing adjusted for specific traffic patterns. This will allow greater routing possibilities, reducing potential congestion on trunk routes and busy crossing points, resulting in reduced flight length and fuel burn.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
Y	Y	Y	Y	N/A

Applicability consideration:

Applicable to en-route and terminal airspace. Benefits can start locally. The larger the size of the concerned airspace the greater the benefits, in particular for flex track aspects. Benefits accrue to individual flights and flows. Application will naturally span over a long period as traffic develops. Its features can be introduced starting with the simplest ones.

B0 – FRTO: Improved Operations through Enhanced En-Route Trajectories				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
Flexible Use of Airspace (FUA) Level 1 Strategic	All States	Indicator: % of States that have implemented FUA Level 1 Supporting metric*: number of States that have implemented FUA Level 1	50%	Dec. 2019
FUA Level 2 Pre-tactical	All States	Indicator: % of States that have implemented FUA Level 2 Supporting metric*: number of States that have implemented FUA Level 2	60%	Dec. 2020
FUA Level 3 Tactical	All States	Indicator: % of States that have implemented FUA Level 3 Supporting metric*: number of States that have implemented FUA Level 3	60%	Dec. 2022

B0 – NOPS: Improved Flow Performance through Planning based on a Network-Wide view

Description and purpose:

Air Traffic Flow Management (ATFM) is used to manage the flow of traffic in a way that minimizes delay and maximizes the use of the entire airspace. ATFM can regulate traffic flows involving departure slots, smooth flows and manage rates of entry into airspace along traffic axes, manage arrival time at waypoints or Flight Information Region (FIR)/sector boundaries and re-route traffic to avoid saturated areas. ATFM may also be used to address system disruptions including crisis caused by human or natural phenomena.

Experience clearly shows the benefits related to managing flows consistently and collaboratively over an area of a sufficient geographical size to take into account sufficiently well the network effects. The concept for ATFM and demand and capacity balancing (DCB) should be further exploited wherever possible. System improvements are also about better procedures in these domains, and creating instruments to allow collaboration among the different actors**.**

Guidance on the implementation of ATFM service are provided in the ICAO Doc 9971– Manual on Collaborative Air Traffic Flow Management

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
Y	Y	Y	Y	N/A

Applicability consideration:

Applicable to en-route and terminal airspace. Benefits can start locally. The larger the size of the concerned airspace the greater the benefits. Application will naturally span over a long period as traffic develops.

B0 – NOPS: Improved Flow Performance through Planning based on a Network-Wide view				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
ATFM Measures implemented in collaborative manner	All States	Indicator: % of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision Supporting metric: number of States that have established a mechanism for the implementation of ATFM Measures based on collaborative decision	100%	Dec. 2018
ATFM Structure	All States	Indicator: % of States that have established an ATFM Structure Supporting metric: number of States that have established an ATFM Structure	100 %	Dec. 2019

B0 – ACAS: ACAS Improvements

Description and purpose:

To provide short-term improvements to existing airborne collision avoidance systems (ACAS) to reduce nuisance alerts while maintaining existing levels of safety. This will reduce trajectory deviations and increase safety in cases where there is a breakdown of separation

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N/A	N/A	Y	N/A	Y

Applicability consideration:

Safety and operational benefits increase with the proportion of equipped aircraft.

B0 – ACAS: ACAS Improvements				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
Avionics (TCAS V7.1)	All States	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons	100%	Dec. 2017

B0 – SNET: Increased Effectiveness of Ground-based Safety Nets

Description and purpose:

To enable monitoring of flights while airborne to provide timely alerts to air traffic controllers of potential risks to flight safety. Alerts from short-term conflict alert (STCA), area proximity warnings (APW) and minimum safe altitude warnings (MSAW) are proposed. Ground-based safety nets make an essential contribution to safety and remain required as long as the operational concept remains human centered.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N/A	N/A	Y	N/A	Y

Applicability consideration:

Benefits increase as traffic density and complexity increase. Not all ground-based safety nets are relevant for each environment. Deployment of this Module should be accelerated.

B0 – SNET: Increased Effectiveness of Ground-based Safety Nets				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
Short-Term Conflict Alert (STCA)	All States	Indicator: % of States that have implemented Short-term conflict alert (STCA) Supporting metric*: number of States that have implemented Short-term conflict alert (STCA)	80 %	Dec. 2018
Minimum Safe Altitude Warning (MSAW)	All States	Indicator: % of States that have implemented Minimum safe altitude warning (MSAW) Supporting metric*: number of States that have implemented Minimum safe altitude warning (MSAW)	80 %	Dec. 2018

B0 – CDO: Improved Flexibility and Efficiency in Descent Profiles (CDO)

Description and purpose:

To use performance-based airspace and arrival procedures allowing aircraft to fly their optimum profile using continuous descent operations (CDOs). This will optimize throughput, allow fuel efficient descent profiles and increase capacity in terminal areas.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	Y	Y

Applicability consideration:

Regions, States or individual locations most in need of these improvements. For simplicity and implementation success, complexity can be divided into three tiers:

a) least complex – regional/States/locations with some foundational PBN operational experience that could capitalize on near term enhancements, which include integrating procedures and optimizing performance;

b) more complex – regional/States/locations that may or may not possess PBN experience, but would benefit from introducing new or enhanced procedures. However, many of these locations may have environmental and operational challenges that will add to the complexities of procedure development and implementation; and

c) most complex – regional/States/locations in this tier will be the most challenging and complex to introduce integrated and optimized PBN operations. Traffic volume and airspace constraints are added complexities that must be confronted. Operational changes to these areas can have a profound effect on the entire State, region or location.

B0 – CDO: Improved Flexibility and Efficiency in Descent Profiles (CDO)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
PBN STARs	OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OISS, OIKB, OIMM, OIFM, ORER, ORNI, OJAM, OJAI, OJAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNN, HSOB, HSSS, HSPN, OMAA, OMAD, OMDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with PBN STAR implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with PBN STAR implemented as required.	100% (for the identified Aerodromes/TMAs)	Dec. 2018
International aerodromes/TMAs with CDO	OBBI, HESH, HEMA, HEGN, OIIE, OIKB, OIFM, OJAI, OJAQ, OKBK, OLBA, OOMS, OTHH, OEJN, OEMA, OEDF, OERK, HSSS, HSPN, OMAA, OMDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with CDO implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with CDO implemented as required.	100% (by for the identified Aerodromes/TMAs)	Dec. 2018

B0 – CCO: Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)

Description and purpose:

To implement continuous climb operations in conjunction with performance-based navigation (PBN) to provide opportunities to optimize throughput, improve flexibility, enable fuel-efficient climb profiles and increase capacity at congested terminal areas.

Main performance impact:

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N/A	N/A	Y	Y	Y

Applicability consideration:

Regions, States or individual locations most in need of these improvements. For simplicity and implementation success, complexity can be divided into three tiers:

a) least complex: regional/States/locations with some foundational PBN operational experience that could capitalize on near-term enhancements, which include integrating procedures and optimizing performance;

b) more complex: regional/States/locations that may or may not possess PBN experience, but would benefit from introducing new or enhanced procedures. However, many of these locations may have environmental and operational challenges that will add to the complexities of procedure development and implementation; and

c) most complex: regional/States/locations in this tier will be the most challenging and complex to introduce integrated and optimized PBN operations. Traffic volume and airspace constraints are added complexities that must be confronted. Operational changes to these areas can have a profound effect on the entire State, region or location.

B0 – CCO: Improved Flexibility and Efficiency Departure Profiles - Continuous Climb Operations (CCO)				
Elements	**Applicability**	**Performance Indicators/Supporting Metrics**	**Targets**	**Timelines**
PBN SIDs	OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OISS, OIKB, OIMM, OIFM, ORER, ORNI, OJAM, OJAI, OJAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNN, HSOB, HSSS, HSPN, OMAA, OMAD, OMDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with PBN SID implemented as required. Supporting Metric: Number of International Aerodromes/ TMAs with PBN SID implemented as required.	100% (for the identified Aerodromes/TMAs)	Dec. 2018
International aerodromes/TMAs with CCO	OBBI, HESN, HESH, HEMA, HEGN, HELX, OIIE, OIKB, OIFM, ORER, ORNI, OJAM, OJAI, OJAQ, OKBK, OLBA, OOMS, OOSA, OTHH, OEJN, OEMA, OEDF, OERK, HSNN, HSOB, HSSS, HSPN, OMAA, OMDB, OMDW, OMSJ	Indicator: % of International Aerodromes/TMA with CCO implemented as required. Supporting Metric: Number of International Aerodromes/TMAs with CCO implemented as required.	100% (for the identified Aerodromes/TMAs)	Dec. 2018

AVIATION SECURITY AND FACILITATION TARGETS FOR THE MID REGION

The MID Region SECFAL Targets are detailed in the Table below:

	Indicator	Target
1	USAP-CMA regional Average / - EI of the CEs / - Annex 17 compliance	Increase/Maintain the USAP-CMA regional average EI of the CEs to 75% by 2021
2	Number of MID States with an overall USAP-CMA EI below 70%	The number of MID States with an overall USAP-CMA EI below 70% to be less than 3 by 2021
3	Number of Significant Security Concerns (SSeCs)	No MID State with a SSeC Any new SSeC to be resolved within 6 months
4	% CE-4: Personnel Qualifications and Training	The regional average for CE-4 to be 70% by 2021The number of States that scored below 70% in CE-4 be a maximum of 3 MID States by 2021
5	% CE-7: Quality Control Obligation	The regional average of CE-7 to be 70% by 2021 The number of States that scored below 70% in CE-7 to be a maximum of 3 MID States by 2021

	Indicator	Target
6	% CE-8: Resolution of Security Concerns	The regional average CE-8 to be 70% by 2021 The number of States that scored below 70% in CE-8 to be a maximum of 3 MID States by 2021
7	Number of States that have established a National Civil Aviation Security Committees (NCASC) and National Air Transport Facilitation Committees (NATFC)	All MID States to establish a National Civil Aviation Security Committees (NCASC) and National Air Transport Facilitation Committees (NATFC) by 2020
8	Number of States that have established a Risk Management framework taking into account ICAO's Risk Context Statement and crisis response procedures	A Risk Management framework taking into account ICAO's Risk Context Statement and crisis response procedures is established by at least 11 of the MID States by 2020
9	Number of States joining the ICAO Public Key Directory (PKD)	10 MID States to be members of the ICAO PKD by 2020
10	Number of States signing the USAP-CMA Memorandum of Understanding (MoU)	All MID States to sign the USAP-CMA MoU by 2019
11	Number of States using/contributing to the INTERPOL SLTD database	All MID States to utilize/contribute to the SLTD database by 2020
12	Number of States joining the ICAO Aviation Security Point of Contact (PoC) Network	All MID States to join the PoC Network by 2019

	Indicator	Target
13	Number of States issuing only Machine Readable Passports (MRPs) in conformance with ICAO Doc 9303	All MID States to issue only Machine Readable Passports (MRPs) by 2019
14	Number of States revoking non-MRPs in conformance with ICAO Doc 9303	All MID States to revoke non-MRPs by 2019
15	Number of States implementing Advanced Passenger Information (API)	All MID States to implement Advanced Passenger Information (API) by 2021
16	Number of States joining the CASP-MID Programme	CASP-MID membership to include at least 6 States by 2021

INTERNATIONAL CIVIL AVIATION ORGANIZATION

MIDDLE EAST REGIONAL OFFICE

NO COUNTRY LEFT BEHIND PLAN

[State X]

1. MID NCLB BACKGROUND

1.1 In accordance with Assembly Resolution A39-23 "No Country Left Behind" (NCLB) Initiative, States should effectively implement ICAO's Standards and Recommended Practices (SARPs) and policies so that all States have safe, secure, efficient, economically viable and environmentally sound air transport systems which support sustainable development and socio-economic prosperity, and which ultimately help to create and preserve friendship and understanding among the nations and peoples of the world.

1.2 The key success of the NCLB initiative is the collaborative support and assistance that would be provided by States, international organizations and industry under the ICAO umbrella.

1.3 The MID Region NCLB Strategy addresses the ICAO's Five (5) Strategic Objectives:

1.4 In return, the ICAO Strategic Objectives address thirteen (13) out of the seventeen (17) United Nations Sustainable Development Goals (SDGs), adopted by all United Nations Member States in 2015 through the 2030 Agenda for Sustainable Development, which are an urgent call for action by all Countries - developed and developing - in a global partnership.

1.5 The MID Region NCLB Strategy is composed of three (3) phases as follows:

Phase I – Selection: Selection of the best candidates States for deploying assistance that will produce a sustainable improvement of the effective implementation of SARPs, in accordance with agreed prioritization criteria.

Phase II –Development: Development of detailed NCLB Plan of Actions (for the identified priority area(s)) or similar plans, such as, Aviation Security Improvement Plan (ASIP), in coordination with concerned State(s) and stakeholders, as required. The Plan of Actions is to be appended to the NCLB Plan and should include measurable outcomes with specific timelines. In order to ensure effective implementation, each action should be associated with an accountable person, timeframes, contributors, etc. This phase includes also the communication of the NCLB Plan/Plan of Actions to the State Executive Level.

<u>Phase III – Implementation and Monitoring</u>: Implementation of the agreed actions will be continuously monitored by the ICAO MID Office and progress reports will be provided to the officials concerned on regular basis.

2. NCLB PLAN FOR [STATE X]

2.1 Provide a short description of the history/background, identified challenges, deficiencies, milestones, etc.; then area by area (safety and capacity & efficiency, security and facilitation, economic development of air transport and environmental protection) provide specific details, if any, and the assistance activities (NCLB Plan of Actions, Aviation Security Improvement Plan (ASIP), Remedial Actions, etc); this might be also in the form of Appendices (Tables, etc).

SAFETY AND CAPACITY & EFFICIENCY

2.2 (history of USOAP-CMA audits, results, areas of concern, Plan of Actions, etc)

2.3 Plan of Actions is at **Appendix A**

SECURITY AND FACILITATION

2.4 (history of USAP-CMA audits, results, areas of concern, ASIPs, etc)

2.5 Aviation Security Improvement Plan (ASIP) is at **Appendix B**

ECONOMIC DEVELOPMENT (AIR TRANSPORT)

2.6 TBD

ENVIRONMENTAL PROTECTION

2.7 TBD

Appendix A

Aviation Safety and Capacity & Efficiency
Plan of Actions

Ref	Key Activity	Actions	Link to USOAP Critical Elements, or AN Deficiency	Audit Area	State POC	Accountable	Supported by	Deliverables	Timeline	Source of Funds/ amount	Remarks/Status
	Air Navigation Services										
1.	Development and implementation of Procedures and mechanisms including supporting documentation (guidance material, forms, templates, etc.) *Procedures should address the following: Who does what, how, when and in coordination with whom*	6.1. Develop an Inspector handbook for ANS	CE 5 CE 7 CE 8	ANS	Director ANS	DG		ANS inspector Handbook	Apr 2019	CAA	
		6.2. Develop Template for Audit report	CE 5 CE 7 CE 8	ANS	Director ANS	DG		Template for Audit/inspection reports	Apr 2019	CAA	
		6.3.Develop comprehensive Checklist to be used by ATS, PANS-OPS, AIS, Charting, CNS, MET and SAR inspectors	CE 5 CE 7 CE 8	ANS	Director ANS	DG	State X	Comprehensive Checklist to be used by ANS inspectors	Apr 2019	CAA	
		6.4. Mechanism and Forms to be used for communication between ANS inspectorate and ANSP such as the outcome of audits/inspection, findings, provisions of CAPs, resolution of findings, etc.)	CE 5 CE 7 CE 8	ANS	Director ANS	DG		Mechanism and Forms for communication between ANS inspectorate and ANSP	Apr 2019	CAA	

Appendix B

Aviation Security and Facilitation
Aviation Security Improvement Plan (ASIP)

ACTIVITY	CONDITIONS	OBJECTIVES	PERFORMANCE INDICATORS	QUALITY ASSURANCE MEASURES	ROLES AND RESPONSIBILITIES	STATUS
PHASE 1: National Civil Aviation Security programme *Estimated timeframe of completion: 6 months*						
Activity #1: **NCASP Workshop**	Formulation of a NCASP drafting team.	Provide the designated NCASP drafting team with the skills and understanding needed to update and maintain a NCASP that meets, at a minimum, ICAO SARPs.	Completion of the workshop Short term: completion of a draft NCASP Mid to long term: Adoption of the NCASP Mid to long term: Dissemination and implementation of the NCASP	Participant evaluation forms Verification that a draft NCASP has been submitted for approval by the appropriate government authority Verification that the approved NCASP has been disseminated to the appropriate stakeholders.	The State will identify a resource able to adapt the training material to local requirements and complete the review prior to course delivery; The State is responsible for identifying 10 to 15 individuals who meet the NCASTP requirements for instructing aviation security material on behalf of the State; The State will be responsible for all local logistics related to hosting the training event (see 7.2); ISD-SEC will identify one or two existing instructors to teach the course under the supervision of an ICAO Certified Instructor; and ICAO will provide facilitators and training materials.	**Conducted**

- END -