MIDANPIRG/18

RASG-MID/8

VIRTUAL MEETINGS

15-22 February 2021

MIDANPIRG/18 and RASG-MID/8 Virtual Meetings

(15 - 22 February 2020)

ICAO MID

MIDANPIRG/18, Agenda item 5.2.6: Specific Air Navigation issues

AIM matters

Presented by the secretariat

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Digital Datasets implementation planning

- The AIM SG/6 meeting reviewed the outcomes/deliverables of the Digital Datasets Implementation Ad-hoc Working Group (DDI Ad-hoc WG).

- The meeting noted that there is a need for a detailed implementation plan for digital datasets outlining technical steps of the implementation, in line with the Global developments.

- The meeting agreed that the composition of the DDI Ad-hoc WG should be reviewed to ensure active participation and contribution by all WG members.

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Digital Datasets implementation planning

- The MSG/7 meeting agreed to the following Decision (MSG DECISION 7/9:) to replace and supersede MIDANPIRG Decision 17/17:

  That, the Digital Datasets Ad-hoc Working Group (DDI Ad-hoc WG):

  a) is tasked to develop a detailed Regional Implementation Plan for Digital Datasets and update MID Doc 008, to be presented to AIM SG/7; and

  b) be composed of: Abdulla Hasan AlQadhi (Bahrain), Moataz Abdel Aziz Ahmed (Egypt), Rouhalah Salehi (Iran), Mohammad Hussien Al Anezi (Kuwait), Bassem Ali Nasser (Lebanon), Faisal Al Busaidi (Oman), Pamela Erice (Qatar), Hind A. Almohaimeed (Saudi Arabia), Sorin Dan. Onitiu (UAE, Rapporteur) ; and ICAO MID Office .

- The *Rapporteur (Sorin Dan. Onitiu)* left GCAA UAE.
- UAE new members of the Working Group (DDI AD-HOC WG) MS. Maram Khaled and Mr. Syed Samiullah

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MIDAD Project

- The MIDANPIRG/17 meeting agreed that the development of a detailed action plan for the implementation of the MIDAD Project Phase B (set-up of MIDAD Manager) should be initiated when at least 7 States complete their migration to EAD.

- The meeting AIM SG/6 noted the concerns related to the costs of migration to the EAD and in particular the charging mechanism. It was agreed that the ICAO MID Office with the support of the MIDAD TF Chairperson should initiate discussion with EAD to review and reconsider the charging mechanism in order to add a lower/upper limit for charging States that are willing to migrate to EAD.

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MIDAD Project

Why	To facilitate migration to EAD
What	To initiate coordination with EUROCONTROL in order to reconsider charging mechanism
Who	MIDAD TF chairman and ICAO MID
When	March 2021

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MIDAD Project

- The AIM SG/6 proposed the following Draft Conclusion to be endorsed by MIDANPIRG/18:

DRAFT MIDANPIRG CONCLUSION 18/XX: EAD CHARGING MECHANISM

That, the ICAO MID Office, with the support of the MIDAD TF Chairperson, initiate discussions with EUROCONTROL/EAD, in order to reconsider the charging mechanism to add a lower/upper limit for charging States that are willing to migrate to EAD.

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MID Region AIM Roadmap

- The AIM SG/6 meeting reviewed and updated the MID Region AIM Implementation Roadmap, as at **Appendix A**.

- Considering the major changes of the MID Region AIM Implementation Roadmap, it was agreed that States should review and update their National AIM Implementation Roadmap, using the template at **Appendix B**.

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MID Region AIM Roadmap

Why	To foster the transition from AIS to AIM
What	To review and update the National AIM Implementation Roadmap using a standard template
Who	Member States
When	March 2021

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MID Region AIM Roadmap

The AIM SG/6 proposed the following Draft Conclusion to be endorsed by MIDNAPIRG/18:

DRAFT MIDANPIRG CONCLUSION 18/XX: MID REGION AIM IMPLEMENTATION ROADMAP

That,

*a) the MID Region AIM Implementation Roadmap be updated, as at **Appendix A**; and*

*b) States be urged to provide the ICAO MID Office with their updated National AIM Implementation Roadmap, using the template at **Appendix B**.*

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AIR NAVIGATION DEFICIENCY RELATED TO NONIMPLEMENTATION OF TOD AREA 2A

- The MSG/7 meeting recalled that the provision of Terrain and Obstacle Data (TOD) for area 2a, the take-off flight path area and the area bounded by the lateral extent of the aerodrome obstacle limitation surfaces (OLS) at International Aerodromes, has been a standard in Annex 15 (“Shall” provision) since 12 November 2015.

- The MSG/7 meeting agreed to add deficiencies related to the non-implementation of this provision.

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AIR NAVIGATION DEFICIENCY RELATED TO NONIMPLEMENTATION OF TOD AREA 2A

Why	To spur Member States to provide Terrain and Obstacle Data (TOD) for area 2a, the take-off flight path area and the area bounded by the lateral extent of the aerodrome obstacle limitation surfaces (OLS) at International Aerodromes
What	To add deficiencies related to the non provision of Terrain and Obstacle Data (TOD) for area 2a, the take-off flight path
Who	ICAO MID
When	March 2021

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AIR NAVIGATION DEFICIENCY RELATED TO NONIMPLEMENTATION OF TOD AREA 2A

- The MSG/7 meeting proposed the following Draft MIDANPIRG Conclusion 18/XX:

DRAFT MIDANPIRG CONCLUSION 18/XX: ***AIR NAVIGATION DEFICIENCY RELATED TO NON-IMPLEMENTATION OF TOD AREA 2A/TOFP AND OLS***

That, States that have not yet provided Terrain and Obstacle Data (TOD) for area 2a, the take-off flight path area and the area bounded by the lateral extent of the aerodrome obstacle limitation surfaces (OLS) at International Aerodromes, be included in the List of Air Navigation Deficiencies.

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AIM Training and awareness-raising

- The AIM SG/7 expressed the need to further enhance awareness and promote a proper understanding on NOTAM and QMS Functions Systems, agreed that the secretariat consider organizing specific training webinars on the NOTAM System Improvements and AIM/QMS Functions Systems and Processes.

Why	to raise awareness and promote a proper understanding on NOTAM and QMS Functions Systems.
What	To conduct a webinars on NOTAM System Improvements and AIM/QMS Functions Systems and Processes
Who	ICAO MID
When	2021

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AIM Training and awareness-raising

- The AIM SG/7 proposed the following Draft Conclusion to be endorsed by MIDANPIRG/18:

DRAFT MIDANPIRG CONCLUSION 18/XX: AIM WEBINARS

That, Webinars on the NOTAM proliferation and needs for improvement, as well as on the AIM/QMS Functions Systems and Processes be organized in 2021.

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MIDANPIRG/18

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VIRTUAL MEETINGS

15-22 February 2021

NOTAM – a quality problem is becoming a safety concern

Dr. Alexander G Pufahl

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ICAO MID

NOTAM – some numbers

- More than 1.7 mio NOTAM worldwide in 2020
- Every day, about 37,000 NOTAM active
- Every year since 2010, average annual increase of 100,000 NOTAM
- In 2020, first decrease in NOTAM in more than 10 years (-5%)
- North America promulgates about 50% of NOTAM worldwide
- 20% of NOTAM worldwide are old NOTAM (> 3 months)
- 10% of NOTAM worldwide are older than 1 year

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NOTAM – a safety concern

- IFALPA plea to AIS community to help improve quality of NOTAM
- Plea to adhere to international standards and recommended practices
- NOTAM are increasingly becoming a serious safety concern
- Pilots have limited time to review NOTAM during briefing
- Pilots rely on NOTAM for operationally significant information
- One quality problem is out-of-date NOTAM

The International Federation of Air Line Pilots' Associations

IFALPA
The Global Voice of Pilots

22 September 2020

AIS Community

Dear Madam, Dear Sir;

The International Federation of Air Line Pilots' Associations (IFALPA) is the global voice of pilots. An international not-for-profit organization, IFALPA represents over 100,000 airline pilots in nearly 100 countries. The mission of IFALPA is to promote the highest level of aviation safety worldwide.

On behalf of the global pilots represented by IFALPA, we are reaching out to you with deep concerns regarding aviation safety through information management and presentation, because we believe you play a crucial role in this matter.

NOTAMs (Notices to Airmen) contain information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations. Pilots depend on this information for the safe conduct of our operations and the safety of our passengers.

Within the last 10 years, there has been a significant increase in the volume of published NOTAMs which has led to a situation where the volume of NOTAMs overwhelms the capacity of the end users i.e. pilots and dispatch officers, to review and assess the information in a timely manner. This has resulted in several incidents where safety-critical information was missed. NOTAMs are supposed to support situational awareness but currently, they do the exact opposite. This simply cannot continue; it is unacceptable.

ICAO is working with all relevant stakeholders to design the future System Wide Information Management (SWIM) network and this should improve the NOTAM situation significantly. However, before the new system is in place, there needs to be a reduction of the burden caused by NOTAM proliferation by collaborating with different stakeholders and authorities.

One factor contributing to the increasing cumulative number of NOTAMs is authorizing the publication of NOTAMs which remain in effect in excess of 150 days. As per ICAO Annex 15, NOTAMs should be used only to promulgate information which is *essential* and *temporary* in nature. The widely accepted principle is that information published in NOTAMs should not be valid in excess of 90 days, but the validity can be extended up to 150 days. If the information is valid for this long, in most cases, the information is not of temporary nature, and it should be incorporated into AIPs (or other manuals) or at the very least, should be replaced by an AIP Supplement.

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WG-A Focus Group NOTAM

- IMP/WG-A reviewed AIS Manual (Doc 8126)
- Revised NOTAM chapter in Doc 8126, Volume III
- Focus group NOTAM conducted a global NOTAM questionnaire
- Developing a concept of operations for NOTAM replacement system
- Planned applicability is 2028
- New system cannot solve SARP non-compliance or quality problem

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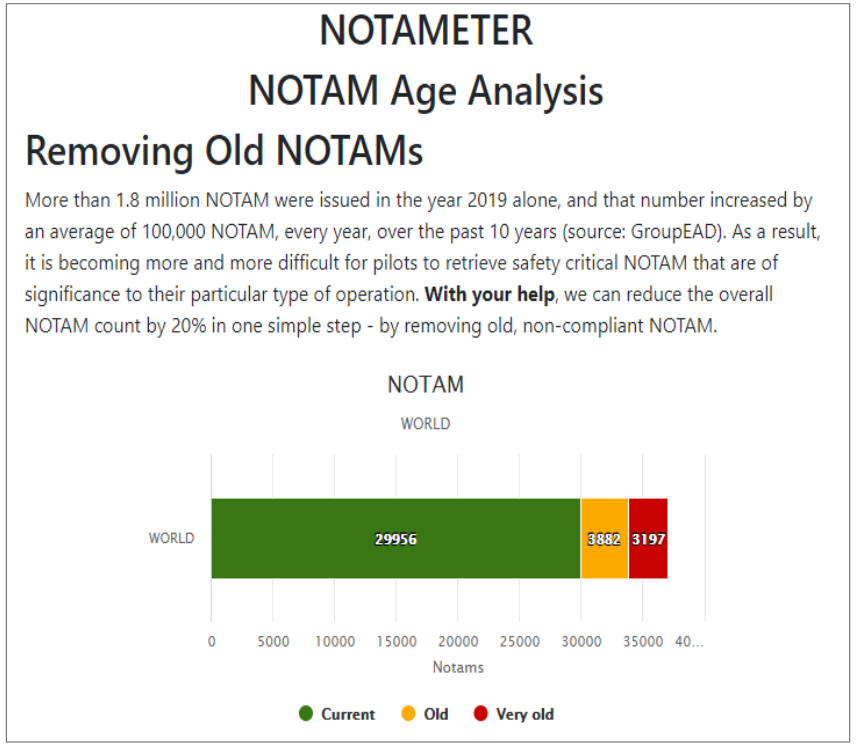
Global campaign on old NOTAM

- Global kick-off webinar on 8 April 2021
- Bi-monthly progress meetings until Dec 2021
- Further details to be announced soon
- Goal is to remove old NOTAM
- NOTAMeter – a web-based analysis tool
  - Old NOTAM: > 3 months but < 1 year
  - Very old NOTAM: > 1 year



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NOTAMeter

- Demonstration of prototype…

Select a region, or click **WORLD** for all:

WORLD | APAC | ESAF | EUR/NAT | MID | NACC | SAM | WACAF

Total NOTAM

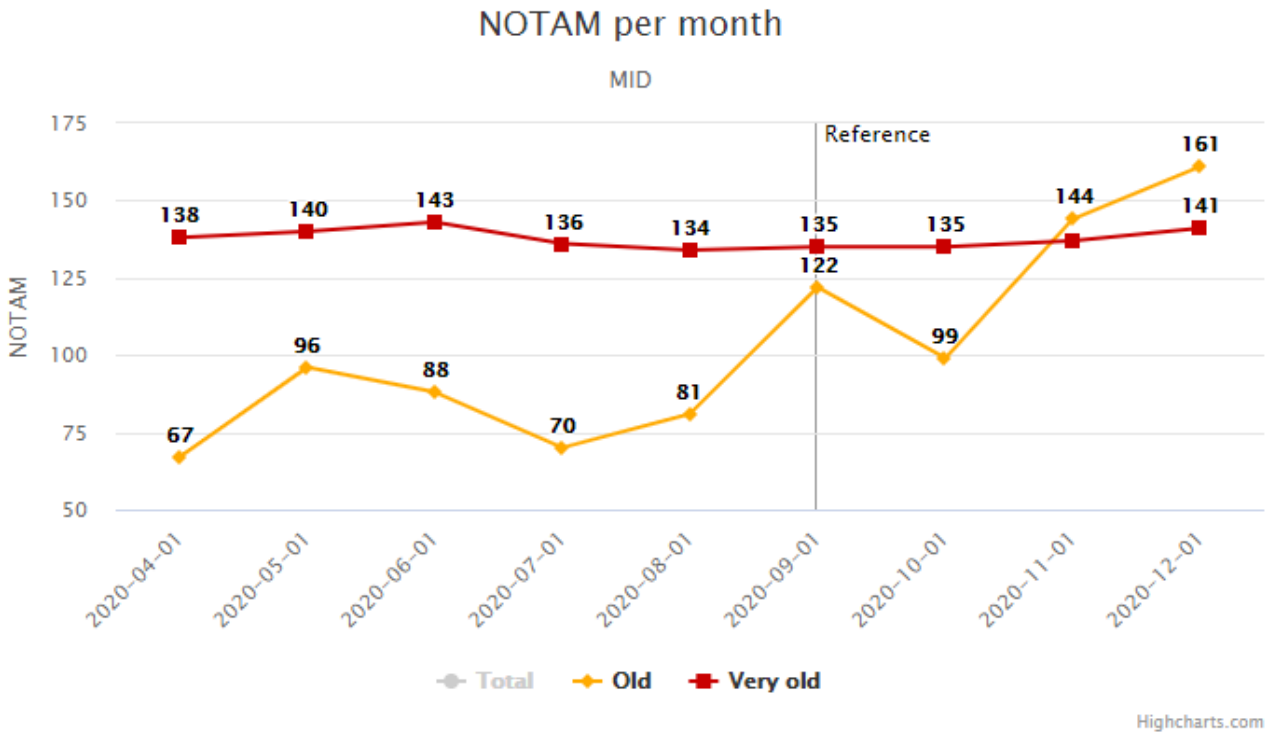
1188

Old NOTAM

161 (13.6%)

Very Old NOTAM

141 (11.9%)



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ACTION BY THE MEETING

The meeting is invited to:

- agree on the new composition and the rapporteur of the Digital Datasets Ad-hoc Working Group (DDI Ad-hoc WG);
- endorse All Draft Conclusions in slides 7,10, 13 and 15;
- urge States to:
  a) take immediate action to reduce the large number of old NOTAM (> 3 months); and
  b) actively participate in the ICAO global campaign's kick-off and progress webinars aimed at raising awareness to improve quality of NOTAM;
- invite ICAO MID office and AIM SG to engage with States AISP to assist hem in taking appropriate actions for a significant reduction of old NOTAM (e.g. EST, PERM, NOTAMR,etc.).

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MID REGION AIM IMPLEMENTATION ROADMAP

Light Green: Timeframe for implementation (implemented / ongoing)
Dark Green: Implementation completed (by all States)

Steps/Elements	2019 & before	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031+	Priority	Remarks
AIXM database (AIXM 5.1+)														1	
eAIP														1	
Terrain area 1, 2a and 4 Datasets														1	Terrain area 2a dataset (and its supplementary areas according to Annex 15, 5.3.3.3.3)
Obstacle area 1, 2a and 4 Datasets														1	Obstacle area 2a dataset (and its supplementary areas according to Annex 15, 5.3.3.4.5)
Terrain area 2b, 2c, 2d and 3 Datasets														2	Based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs
Obstacle area 2b, 2c, 2d and 3 Datasets														2	Based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs
AIP datasets														1	(sub-datasets/grouping TBD)
Aerodrome Mapping Dataset(s)														2	Based on the States' decision to be reflected in the States' national Regulations and AIM National Plans, in accordance with operational needs
Instrument Flight Procedure (IFP) Dataset(s)														1	
Agreement with data originators														1	
Provision of quality-assured aeronautical data and information														1	
Training														1	Continuous
NOTAM Improvements														2	Step 1: identification of operational conditions under which a NOTAM shall or shall not be originated Step 2 (TBD): replacement of current NOTAMs by a digital version through the use of AIXM
Aeronautical Data Exchange														2	Continuous trials between States' AISs should be ongoing
Dissemination of Aeronautical Information in SWIM environment														2	

Light Green: Timeframe for implementation (implemented / ongoing)
Dark Green: Implementation completed (by all States)

Steps/Elements	2019 & before	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031+	Priority	Remarks
Electronic Aeronautical Charts														**2**	
Interoperability with MET														**2**	
Aeronautical Information Briefing														**2**	(Digital briefing)

DRAFT

NATIONAL AIM IMPLEMENTATION ROADMAP

STATE	
DATE	

Phase/Step	**Timeline**														**Start**	**End**	**Remarks**
	2019-	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032+**			
WGS-84																	
AIRAC																	
QMS																	
AIXM database (AIXM 5.1+)																	
eAIP																	
Terrain Area 1																	
Obstacle Area 1																	
Terrain Area 2a (plus TKOF flight path and OLS)																	
Obstacle Area 2a (plus TKOF flight path and OLS)																	
Terrain Area 2b, 2c, 2d																	
Obstacle Area 2b, 2c, 2d																	
Terrain Area 3																	
Obstacle Area 3																	
Terrain Area 4																	
Obstacle Area 4																	
AIP Datasets																	

Aerodrome Mapping Datasets																	
IFP Datasets																	
Agreement with data originators																	
Provision of quality-assured aeronautical data and information																	
Training																	
NOTAM Improvements																	
Aeronautical data exchange																	
Dissemination of Aeronautical Information in SWIM environment																	
Electronic aeronautical charts																	
Interoperability with MET products																	
Aeronautical information briefing																	

Legend		Not Started
		In Progress
		Implemented

- END -