



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Fourth Meeting (ATM SG/4)

(Amman, Jordan, 29 April – 3 May 2018)

Agenda Item 6: ATM Safety Matters

**COORDINATION BETWEEN RASG-MID AND MIDANPIRG FOR SAFETY
RELATED ISSUES TO ATM**

(Presented by the Secretariat)

SUMMARY

This paper provides an update on some activities coordinated between RASG-MID and MIDANPIRG relevant to the ATM SG.

Action by the meeting is at paragraph 3.

REFERENCES

- ATM SG/3 Report
- MIDANPIRG/16 Report
- MRC/4 Minutes
- RASG-MID/6 Report
- RSC/5 Report

1. INTRODUCTION

1.1 The RASG-MID and MIDANPIRG have been coordinating safety-related issues based on the outcome of the PIRG-RASG Global Coordination meeting (Montreal, 5 February 2015) and in accordance with the Handbooks of each Group.

1.2 The meeting may wish to note that the Fourth MIDANPIRG/RASG-MID Coordination meeting (MRC/4) was held in Bahrain on 25 September 2017 as a side meeting of the RASG-MID/6 meeting. The MRC/4 meeting reviewed and updated the table listing the subjects in which both MIDANPIRG and RASG-MID have interest with an assignment of the leading Group as at **Appendix A**.

2. DISCUSSION

2.1 The following section provide an update on some air navigation subjects of common interest to MIDANPIRG and RASG-MID that are not addressed in separate working papers.

Remotely Piloted Aircraft (RPAS)

2.2 In 2017 the subject was addressed by the RSC/5, MIDANPIRG/16 and the ATM SG/3 meetings. The three meetings encouraged States to use the guidance material related to RPAS provided in the ICAO Doc 10019 and the information available on the RPAS webpage: <https://www4.icao.int/rpas>

2.3 The MIDANPIRG/16 meeting encouraged States to consider the developments related to RPAS, and take necessary measures for the amendment of the relevant civil aviation regulations and procedures in a timely manner, in order to ensure safe integration of the RPA into the non-segregated airspace. In accordance with the RASG-MID Conclusion 5/18, the meeting urged States to report any safety occurrence related to RPA operations to the ICAO MID Regional Office on regular basis.

2.4 The ATM SG/3 meeting was apprised of the measures implemented by UAE in order to manage the use of drones within Emirates FIR, which includes awareness campaign launched jointly with the Ministry of Interior, development of Mobile Application, complete set of Regulations related to RPAS, procedures for tactical risk assessment, issuance of safety Alerts, etc.

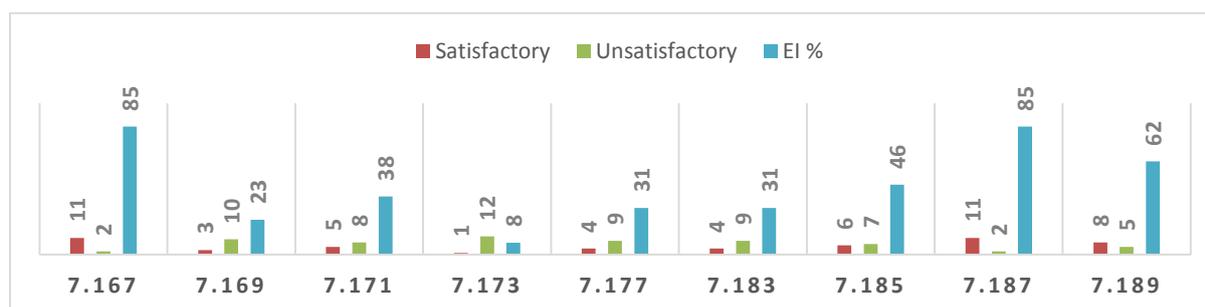
2.5 The ATM SG/3 meeting was briefed about the CANSO RPAS activities. CANSO's RPAS and Emerging Technologies Workgroup (RPAS/ET WG) members from the ANSPs and the Industry worked together and developed the CANSO Document "the ANSP Considerations for RPAS Operations" and completed the training module to provide ANSPs with a high-level overview of RPAS operations from an ANSP perspective. The training module includes information on the operation of RPAS, unique terminology, contingency operations, etc.

2.6 The ICAO MID Remotely Piloted Aircraft Systems (RPAS) Workshop was held at the Sheraton Dubai Creek Hotel and Towers, Dubai, UAE, from 20 to 22 November 2017. The Workshop was jointly organized by ICAO and the World Food Programme (WFP), sponsored by the Middle East Business Aviation Association (MEBAA) and supported by the General Civil Aviation Authority-UAE. The Workshop was attended by twenty-three (23) participants from 3 States (Algeria, Kuwait and UAE) and 2 Organizations (CANSO and IATA).

2.7 The RPAS Workshop provided States, international organizations, operators and stakeholders with first-hand information on RPAS provisions and guidance material. This would assist State regulatory and administrative personnel involved in the development and implementation of their RPAS regulations as well as the certification and oversight of such activities.

SMS Implementation for ATM

2.8 The SSP/SMS is addressed under the framework of RASG-MID. However, the MIDANPIRG ATM SG is the responsible body to follow-up on the implementation of SMS for ATS. The level of Effective Implementation (EI) of the ICAO USOAP CMA Protocol Questions (PQs) related to SMS with reference mainly to Doc 4444 and Doc 9859 is reflected in **Graph 1** and the PQs are detailed in **Table 1**:



Graph 1

7.167	Has the State promulgated regulations to require ATS providers to implement an SMS that is acceptable to the State responsible for the provider's designation?
7.169	Does the State ensure that the air traffic service (ATS) provider has established and implemented SMS acceptable to the State?
7.171	Does the State, as part of its surveillance programme, periodically assess ATS providers' SMS, including its hazard identification and safety risk management processes and its safety performance indicators (SPIs) and their relevant alert and target levels?
7.173	Has the State established an acceptable level of safety performance to be achieved in the provision of Air Traffic Services (ATS)?
7.177	Does the State ensure that the service provider carries out safety assessments, with respect to significant airspace reorganizations, a) for significant changes in the provision of ATS procedures applicable to an airspace or an aerodrome, and b) for the introduction of new equipment, systems or facilities?
7.183	Does the State ensure that safety reviews are conducted regularly by the ATS service provider?
7.185	Does the State ensure that the ATS provider has appropriately qualified personnel to conduct safety reviews?
7.187	Has the State established and implemented a system for reporting and following up air traffic incidents?
7.189	Has the State promulgated a regulation requiring the establishment of a runway safety programme and has such a programme been implemented?

Table 1

2.9 The meeting may wish to recall that the ATM SG/3 meeting was apprised of the status of implementation of SMS by the ANSPs in the MID Region and the work carried out by CANSO as Champion of the RASG-MID Safety Enhancement Implementation (SEI) related to SMS Implementation for ATM. The meeting noted that CANSO was developing a plan with a clear objective, goal and detailed actions with clear deliverables and targets that will lead to the achievement of the SEI.

2.10 As a follow-up to the ATM SG/3 meeting, the meeting ICAO MID Office circulated the EUROCONTROL/CANSO SMS Maturity Survey to the MID States. However, few reply were received.

2.11 The meeting may wish to note that the CANSO Middle East SMS Training Workshop for ATS was gratefully hosted by the Public Authority of Civil Aviation –PACA in Muscat, Oman from 27 to 29 November 2017. The Workshop was organized by CANSO in coordination with ICAO MID Office and supported by NAV CANADA. The Workshop was attended by twenty-eight (28) participants from Oman, Qatar, Saudi Arabia, Sudan and UAE.

2.12 The Workshop objectives were to review the analysis results of the above survey and focus on effective implementation of an SMS, mapping the CANSO Standard of Excellence in Safety Management Systems as per ICAO Annex 19 provisions. This event proved to be a valuable opportunity to learn, and share experience and best practice.

English Language Proficiency for ATCOs and SAR experts

2.13 The subject was addressed by the ATM SG/3 meeting, which was apprised of the provisions related to ELP and the outcome of the Interregional English Language Proficiency (IELP) Workshop (Kuwait, 9 - 11 November 2015).

2.14 The ATM SG/3 meeting noted that the following Safety Enhancement Initiative (SEI) was developed aiming at improving the implementation of ELP requirements in the MID Region:

<i>SEI: Improve implementation of ELP requirements in the MID Region</i>	
Actions	Champion
Develop a questionnaire to be used as the basis of a survey to assess the implementation of ELP requirements.	UAE in coordination with the ICAO MID Office
Disseminate the questionnaire to the MID States.	ICAO
Analyse the survey results and agree on next course of actions.	MID-SST in coordination with the ATM SG

2.15 Based on the above, the ATM SG/3 meeting agreed that the ICAO MID Office coordinate with UAE for the development and circulation of the ELP Questionnaire. The meeting may wish to note that the work on the Questionnaire is still ongoing and may be circulated by June 2018.

GNSS Vulnerabilities

2.16 The challenges associated with GNSS Vulnerabilities (Jamming, spoofing, interferences) were addressed by the PBN SG meeting and presented to the MIDANPIRG/15 and MIDANPIRG/16 meetings.

2.17 The MIDANPIRG/16 meeting agreed that the subject should be presented to the RASG-MID/6 meeting in order to agree on measures to ensure effective reporting of GNSS interferences, which could be mandated by the States' regulatory authorities. The subject is also addressed by the CNS SG, which is working on the development of Guidance Material related to GNSS.

2.18 The RASG-MID/6 meeting (Bahrain, 26-28 September 2017) noted with concern that IATA members have experienced incidents of interference to GPS navigation during en-route as well as on descent towards precision approach at international airports. The meeting agreed that IATA and ICAO MID Office to develop a RSA on GNSS vulnerabilities taking into consideration the outcome of the ACAC/ICAO Workshop.

2.19 The meeting may wish to note that the ACAC/ICAO Joint Workshop on GNSS was held in Rabat, Morocco from 7 to 8 November 2017. The outcome of the Workshop will be presented in PPT/13.

Air Safety Reports

2.20 The subject was addressed by the ATM SG/3 meeting, which noted the issue related to the provision of feedback in a timely manner by the ANSPs regarding the ASRs reported by pilots. The meeting recalled that the subject was addressed by the Fifth Meeting of the RASG-MID Steering Committee (RSC/5, Amman, Jordan, 23-25 January 2017), which urged States to:

- a) publish in their AIPs (GEN 1.1) the contact details of the entity responsible for ASRs investigation, including the email addresses; and
- b) expedite the investigation process and the provision of feedback to IATA in a timely manner.

2.21 The meeting urged States to provide feedback to IATA in a timely manner regarding the reported ASRs.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) urge States to:

- i. take necessary measures to improve SMS implementation and comply with the ICAO provisions related to ELP;
- ii. implement the recommendations emanating from the ACAC/ICAO GNSS Workshops; and
- iii. provide feedback to IATA in a timely manner regarding the reported ASRs; and

b) encourage States to:

- i. consider the developments related to RPAS;
- ii. take action as appropriate regarding the coordination of activities between MIDANPIRG and RASG-MID; and
- iii. support the RSAs development and Initiatives addressing the ATM Safety issues.

APPENDIX A

Coordination between MIDANPIRG and RASG-MID

Subjects of interest for MIDANPIRG and RASG-MID	Responsible/Leading Group	
	RASG-MID	MIDANPIRG
Aerodrome Operational Planning (AOP)		X
Runway and Ground Safety	X	
AIM, CNS and MET safety issues		X
CFIT	X	
SSP Implementation	X	
SMS implementation for ANS and Aerodromes	X	
Accidents and Incidents Analysis and Investigation	X	
English Language Proficiency	X	
RVSM safety monitoring		X
SAR and Flight Tracking		X
PBN		X
Civil/Military Coordination		X
Airspace management		X
Call Sign Similarity and Confusion		X
Conflict Zones		X
Contingency Planning		X
USOAP-CMA	X	
COSCAP, RSOO and RAIO	X	
Air Navigation Deficiencies		X
Training for ANS personnel		X
Training other civil aviation personnel	X	
Laser attack	X	
Fatigue Risk Management	X	
RPAS		X
GPS Jamming GNSS vulnerability		X
Aeromedical	X	
Airborne Collision Avoidance System (ACAS)		X

- END -