



International Civil Aviation Organization
Eastern and Western African Office

**Thirteenth Meeting of the Air Traffic Management/Aeronautical
Information Management/Search and Rescue Sub-Group
(ATM/AIM/SAR SG/13)
(Nairobi, Kenya, 16 - 19 September 2013)**

**Agenda Item 4: Communications, Navigation, Surveillance/Air Traffic
Management Coordination Issues**

**COMMUNICATIONS, NAVIGATION, SURVEILLANCE/AIR TRAFFIC
MANAGEMENT COORDINATION ISSUES**

(Presented by the Secretariat)

SUMMARY

This paper presents the status of coordination issues relating to CNS/ATM identified in the previous meetings of APIRG and its subsidiary bodies, for review and necessary action by the meeting.

Action by the meeting is at **paragraph 3**.

REFERENCES

APIRG/18 Report

This working paper is related to Strategic Objectives: **A & C**

1. INTRODUCTION

1.1 On 18 September 2013, the ATM/AIM/SAR SG/13 and the CNS/5 Meetings will meet in a joint session (08:30 to 13:00) in order to discuss issues that required coordination between the two Sub-Groups, including CNS/ATM expertise. The session will be co-chaired by the Chairpersons of the two Sub-Groups.

1.2 The summary of items for deliberations by the joint session of the two Sub-Groups is reflected hereunder. Reference should also be made to the report of the CNS SG/5 Meeting (Nairobi, Kenya, 16-19 September 2013).

2. DISCUSSION

Operational requirements for surveillance

2.1 The third meeting of the Performance-Based Navigation Route Development Network Working Group (PRND WG/3) held in Dakar, Senegal, from 5-8 August 2013 was provided with an update by participating States/ANSPs on the status and plans for surveillance implementation in their areas of responsibility. In addition, the Working Group

was provided with a presentation by the Secretary of the AFI Aeronautical Surveillance Implementation Task Force (AFI AS/I TF) on the AFI surveillance strategy and the status of implementation captured by the AS/I TF/3 meeting in July 2013.

2.2 It was noted that the current strategy for implementation left significant room for improvement in terms of harmonization and sharing of surveillance (particularly radar) data. In addition, fragmentation in the implementation of the surveillance infrastructure did not support the planning and implementation of operational improvements to take logical advantage of the infrastructure investments. Advancement to RNAV 5 PBN specification for en-route, RNAV 1 in the terminal area and user preferred routing (UPR) (free routing) could be accessed depending on consultation as well as coordinated planning and implementation between Stakeholders.

2.3 Concern was raised that there was limited consultation between the ANSPs and users with regard to planned investments in surveillance systems. It was also noted that even though radar surveillance has existed for many years in many States, the technology had been used primarily for traffic monitoring and safety back up, and not for the purpose of radar separation. The PRND WG/3 meeting agreed that this matter should be taken to the ATM/AIM/SAR Sub-Group for review.

2.4 In view of the above, the ATM/AIM/SAR and CNS Sub-Groups may wish to increase their effort towards a more coordinated implementation of the Surveillance Strategy and urge States and ANSPs to embark on an effective process of collaborative decision making (CDM). While there is insufficient information on the justifications as to why States prefer to invest in radar technology for “monitoring” of traffic, it is clear that such investments can be further applied to enhance safety, efficiency and environmental protection. In this regards, States and ANSP are requested to:

- Review and take necessary action to ensure that existing surveillance capabilities can be applied to support air traffic control separation and the application of PBN specifications that increase efficiency, airspace capacity, safety and environmental protection;
- Ensure that the planning and implementation of surveillance technologies are harmonized on sub-regional and regional levels, in order to support ATM operational improvements on a wider, seamless scale.
- Reconsider the issue of sharing of surveillance data. In this case, it may be acknowledged that pursuant to ICAO policies on air navigation and other charges, investments in surveillance technologies for civil aviation purposes for which cost recovery is expected from users, should be considered as investment on behalf of users. Accordingly, presentations based on ICAO policies should be made to authorities to sensitize them that investment for national security data should be separate.

Missing Flight Plans

2.5 The ESAF Regional Office had facilitated two Air Traffic Management Coordination Meetings (ATM/CM-SAF, Johannesburg, South Africa, 17-19 June 2013, and ATM/CM-EAF, 15-17 July 2013, Mahe, Seychelles) where both meetings discussed operational issues regarding the processing of flight plans since the implementation of the

new ICAO flight plan template on 15 November 2012. It was noted that even though remarkable success had been achieved, the rate of missing flight plans was considered to be still high, while the rate of response by communication centres receiving supplementary messages such as Request Flight Plan Messages (RQP) was very low. As a result of this situation, flights were being handled by air traffic control (ATC) without the required flight plans details being made available, while air traffic controllers were burdened with capturing flight information through airborne flight plans on VHF and HF radios.

2.6 Based on information provided by the Johannesburg communication centre, it was noted that since the implementation of ICAO FPL 2012, the prevalence of missing flight plans from November 2012 to January 2013 had remained fairly constant. It was also noted that as of February 2013, the situation involving missing flight plans had deteriorated. Comparing the statistics collected for 2012, which averages 109 missing flight plans per month with the average so far for 2013 which is 157 per month, it was evident that the missing flight plan prevalence was increasing at a significant rate.

2.7 South Africa had also been monitoring the prevalence of rejected flight plans which contributed approximately to 7-10% of the missing flight plans on a monthly basis. The rejections were mainly due to the following reasons:

- a) Incorrect entry of equipage in items 10a and 10b. Not conforming to Amendment 1 of Doc 4444;
- b) Syntax errors. Not including the waypoint entry/exit point on/off a route, incorrectly formatted co-ordinates, using "Oscar" instead of "Zero" and vice versa;
- c) Route errors. Using withdrawn or non-existent navigational aids and waypoints as well as incorrect route names;
- d) Mismatch with requested flight level and intended ATS route. That is requested flight level is too high (or too low) for the requested ATS route designator;
- e) Non-provision of critical data in item 18. Missing estimated elapse times (EET) to flight information region (FIR) boundaries, missing or incorrect PBN capability data, missing Communication (COM), Navigation (NAV) and/or Data (DAT) information when this is required as indicated in item 10a and 10b; and
- f) Missing or incorrect nomination of search and rescue requirements.

2.8 AFI States were urged to give priority attention to issues of missing flight plans, in particular those for which the causal factors had been identified. States were urged to review the procedures that could lead to the use of outdated information from their AIPs and ICAO Documents, such as Doc 7910, and ensure that operational staffs were provided with the necessary awareness.

CNS support towards the provision of air traffic services

2.9 The AFI Tactical Action Group (TAG), during its monthly teleconferences conducts a review of air safety reports (ASRs/UCRs) submitted by users and ANSPs to the group. In most cases, it was noted that many of the ASRs/UCRs were caused by lack of/or deficiencies in communication facilities that were needed to support the safe provision of

ATS, especially in the upper airspace.

2.10 In many instances, near misses (AIRPROX) were occurring because of lack of reliable air/ground communication (VHF/HF) in Area Control Centres, or lack of reliable ATS/DS between ATC units for safe coordination of air traffic between them. This was considered as a major area of concern for the TAG as the lack of effective two-way communication was preventing safe ATC clearances from being passed from ATC to concerned aircraft. It was also preventing the effective and timely coordination of air traffic between ATC units when transferring aircraft from one airspace to another. This was resulting in frequent loss of separation between aircraft, even when they were operating in controlled airspace.

2.11 Based on the above information, the meeting may wish to call upon the CNS Sub-Group to review the air/ground communication requirements and implementation plans for AFI States, and propose areas of improvements to support the safe and effective provision of ATS, in order to reduce the number of ASRs/UCRs occurring in many AFI FIRs.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information provided in this working paper;
- b) endorse the work of the two Sub-Groups; and
- c) ensure follow-up action as necessary.
