International Civil Aviation Organization

WORKING PAPER

THIRTEENTH AIR NAVIGATION CONFERENCE

Montréal, Canada, 9 to 19 October 2018

COMMITTEE A

Agenda Item 3:   **Enhancing the global air navigation system**
            3.4: Civil/military cooperation

MILITARY DIMENSION IN ATM REGIONAL SYMPOSIUM

(Presented by Brazil)

EXECUTIVE SUMMARY

This paper presents a proposal for the realization of regional civil-military symposiums in support of updating "military dimension" features and its system-wide information management (SWIM) correlation with the purpose to provide the implementation of plans and concepts to the ongoing civil-military cooperation developments by ICAO.

Action: The Conference is invited to agree to the recommendations in paragraph 3.4:

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1.   **INTRODUCTION**

1.1   A collaborative cooperation starts with an understandable communication between partners and it is not different in civil/military cooperation to improve air traffic management (ATM).

1.2   Aiming to achieve this kind of cooperation, ICAO established a working group to provide a concept that delineates a way to implement the "military dimension" within the *Global Air Navigation Plan* (GANP, Doc 9750) and, consequently, within the aviation system block upgrade (ASBU) structure.

1.3   However, the military stakeholder presents some different features in relation to the civil partner, even within the same State, and most of it is related to security issues, such as cyber security and national security.

1.4   In Brazil, since the 1970s when the conception of the Integrated Air Defense and Air Traffic Control Center took place, the civil-military cooperation has been considered normal, as most air traffic control units involve military air traffic control officers (ATCOs). Nevertheless, even in such an environment, communication among partners can sometimes pose certain constraints.

1.5   It could be considered that the main constraint of this relationship is the traffic information flow between military and civilian air traffic control units, which can be made even worse if the other party is a fully civilian air traffic service provider.

1.6   The SWIM concept, as planned, has been developed in order to mitigate the problem amongst airspace stakeholders in order to share transparent, efficient and applicable information. Indeed, the implementation of SWIM seeks to provide quality information to the right people with the right systems at the right time. However, it is understandable that the military use of SWIM will largely depend on adequate security provisions.

1.7   Civil-military cooperation must be transparent (when appropriate), efficient and applicable, from the strategic to the tactical and post operational levels of airspace management (ASM), which is aligned with the SWIM concept.

1.8   Notwithstanding this scenario, even as SWIM and civil-military cooperation are worldwide issues, it is a fact that different regions have different constraints when civil-military cooperation is at stake. Perhaps, it must be avoided to conduct this subject in a wide range and in a general way, so a better methodology can be reached.

2.   DISCUSSION

2.1   An effective traffic information flow between military and civil air traffic control units will provide a better support to civil-military cooperation in ATM.

2.2   Military partners could provide a more accurate evaluation of restrictions within the military airspace used, and provide an overview on what could be implemented in SWIM and how a better airspace use in ATM could be supported.

2.3   From a worldwide point of view, different regions do not present the same main constraint, such as regarding SWIM implementation, related to civil-military cooperation in ATM. For example, the issue of High Seas airspace use within the European community is not a major problem in the Caribbean (CAR)/South American (SAM) Regions.

2.4   As indicated in the draft version of the *Manual on Civil-Military Cooperation in Air Traffic Management* (Doc 10088), the use of SWIM for military purposes will largely depend on adequate security provisions. On this matter, it is important to add that the SWIM concept considers that security will become a critical factor, therefore the global SWIM concept encompasses aspects such as authentication, authorization, encryption, intrusion detection, security policies, which are aligned with the demands of the civil-military cooperation concept.

2.5   As regional airspace use constraints are not similar at all, regarding its global aspect, regional security issues present the same correlation.

3.   CONCLUSION

3.1   The collaborative communications between military and civilian air traffic control units are paramount to improve civil-military cooperation and to improve ATM.

3.2   The SWIM concept is totally aligned with the aforementioned issues and could be an important tool to achieve what is delineated in GANP and ASBU documents.

3.3   The "military dimension" presents regional features and it might not be interesting to consider this matter in a global way.

3.4   By considering the information above, the Conference is invited to agree to the following recommendations:

a)   recommend States and international organizations to support ICAO to continue the development of civil-military cooperation in air traffic management (ATM);

b)   recommend all interested States to share the knowledge obtained from civil-military cooperation initiatives; and

c)   request the ICAO Regional Offices to coordinate with the States at the regional level for the execution of civil-military cooperation in ATM symposiums also comprising of SWIM issues.

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