Thirty-third MEVA Technical Management Group Meeting (MEVA/TMG/33)
Willemstad, Curaçao, 29 – 31 May 2018

Agenda Item 3:   **New Challengers (Services, Aeronautical Information Management (AIM), Air Traffic Flow Management (ATFM), System Wide Information Management (SWIM) and Automatic Dependent Surveillance – Broadcast (ADS- B) Satellite).**
3.3   Proposal of an Action Plan for the next two years

NEW COMMUNICATIONS NEEDS

(Presented by Secretary)

<table>
<tr><td colspan="2" align="center">EXECUTIVE SUMMARY</td></tr>
<tr><td colspan="2">This working paper presents an introduction of the future needs of Air Traffic Services and new challenges that our regions are facing.</td></tr>
<tr><td>Action:</td><td>Suggested actions are listed in Section 3.</td></tr>
<tr><td>Strategic Objectives:</td><td>•   Safety
•   Air Navigation Capacity and Efficiency</td></tr>
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1.   Introduction

1.1   In accordance with the air traffic statistical analysis, it is expected that for 2034 the current aviation operations will be duplicated, this new challenge demands a more complex air traffic control to satisfy the security and efficiency needs demanded by aviation. Additionally, external factors that normally affect aviation must be incorporated into this need, such as security (cybersecurity), environment (solar storms, volcanic eruptions, and hurricanes), economical resources and other factors.

1.2   The Global Air Navigation Plan (GANP) (Doc 9750), the Aviation System Block Upgrades (ASBUs) and the Global Air Traffic Management Operational Concept (Doc 9854), present a technology implementation perspective and the vision of an interoperable global system of air traffic management during all phases of the flight.

1.3   The interoperability in all phases demands the implementation of many different systems and the availability of the information to provide necessary data to take decision during the operations.

Each day, the need to implement systems that provide quality information in real time to all those involved in order to take decisions based on the same information becomes greater.
Promote situational awareness
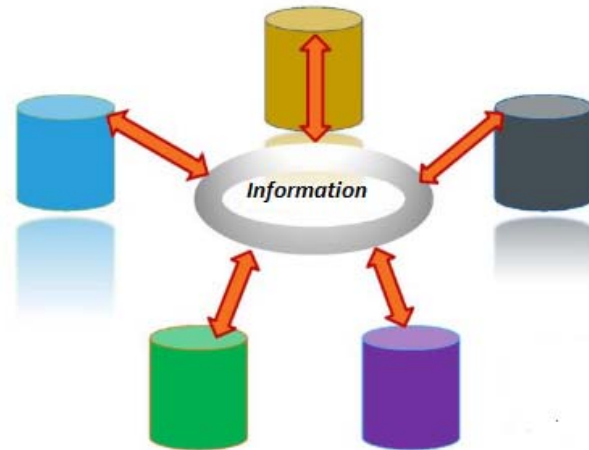
2.   Analysis

2.1   Our Region has the same needs and implementation requirements of systems and mechanisms, which allow exchanging information and taking decisions based on quality and real time information

2.2   The technology and communications infrastructure that the region possesses, will be the mechanism that supports the implementation of many services as SWIM/AIM, ATFM, SAR and others and could determine the quality of the information shared and that will serve as a platform to promote the security mechanisms and efficiency required to promote decision-making based on the same situational awareness.

2.3   Regarding the information that we actually manage for decision-making, problems have been identified due to duplicity, origin issues, and lack of verification and integrity of the information, inconsistency, among others.

2.4   The Manual on the Air Traffic Management System Requirements (Doc 9882) identifies the SWIM implementation as a requirement for the next ATM system and the Manual on System Wide Information Management (SWIM) Concept (Doc 10039), provides a vision for the management of interoperable global information while addressing the transition to a mixed operational environment.

2.5   Annex 19 – *Safety Management* provides the qualities that the information must have regarding quality and security.

2.6   Many of the NAM/CAR States already have the user-level systems and application to start sharing, however, the lack of an adequate communications infrastructure causes that different users seek external communications companies that can provide the necessary communication channels to share data between them. These data share resources and technology with other companies, non-aviation users that are not focused on the security and operational needs that aviation requires, in addition to the high cost of leasing.

2.7   Just as MEVA became the communication infrastructure to support conventional voice and data communication channels among its Member States, it is necessary to expand its infrastructure so that it can support the communication channels for the aeronautical services required by the States in accordance with their communications needs, data exchange, among others presented and in this way support the ATM management.

2.8   In this sense, it is necessary to create a new phase of the MEVA network that integrates an ATN network IP-based, which complies with availability requirements, security, efficiency and low cost.

3.   Suggested Actions

3.1   The Meeting is invited to

a)   Take note of the information provided in this working paper;

b)   take note of the discussion that will be discussed under Agenda Item 3 of this meeting;

c)   endorse the implementation need of a new development phase of the MEVA network and take the needed actions for its execution;

d)   integrate an Ad-hoc, part of MEVA to develop a Technical/operational requirement for the new platform of IP-Communication for the new services; and

e)   develop an action plan for its execution in the next two years.

— END —