



WORKING PAPER

TWELFTH AIR NAVIGATION CONFERENCE

Montréal, 19 to 30 November 2012

Agenda Item 1: Strategic issues that address the challenge of integration, interoperability and harmonization of systems in support of the concept of “One Sky” for international civil aviation

1.1: Global Air Navigation Plan (GANP) – framework for global planning

ASBU METHODOLOGY AND CONTENTS

(Presented by Colombia on behalf of the SAM Region States)

SUMMARY

The new aviation system block upgrades (ASBUs) methodology approach in the draft *Global Air Navigation Plan* (Doc 9750, GANP) would be useful in achieving the strategic objectives of the region with regard to operational improvements, related technology and greater certainty on required investments. This approach requires the establishment of metrics as a tool for impact measures on implementation of a set of solutions for ATM improvement towards an effectively harmonization to ensure seamlessness of airspace.

Action: The Conference is invited to agree to the action in paragraph 3.

1. BACKGROUND

1.1 Within the global harmonization and interoperability framework, the aviation system block upgrades (ASBUs) methodology has been proposed, through documentation explaining the progressive advance of each performance objective, parting from operational requirements block modules, and accompanied by a technological roadmap.

1.2 Upon applying the ASBU methodology in some Block 0 Modules, one finds it is essential to establish the metrics to serve as an instrument to measure the degree of positive impact upon a particular improvement area (KPA).

2. ANALYSIS

2.1 Understanding that a metric is an instrument to measure the degree of advance made in a determined KPA intervention, to evaluate in terms of efficiency or reference for the decision-making upon a particular performance objective and foreseen within the ASBU methodology, the following analysis has been carried out:

a) it would be very useful to add the following in every metric, with the aim of completely establishing the metric:

1) measurement formula or calculus;

- 2) frequency;
 - 3) measuring unit;
 - 4) goal; and
 - 5) baseline;
- b) each performance objective can contribute towards various KPA, and many KPA can be applicable to various modules. Therefore, it is complex to establish the implementation contribution of each module in that KPA only from the indicators (i.e. capability, safety, etc.), in cases where it is possible to quantify a result through a metric.

For example, a capability increase in a baseline, such as, 30 aircraft/hour to 35 aircraft per hour at an aerodrome where many improvements are in progress (B0-105, B0-..) it makes difficult to identify the contribution of each module regarding the mentioned capability increase.

Therefore, the manner in which the metrics to be established within the ASBU methodology should be further studied in depth, as well as facilitate a useful metric chart for the success of the specific operational objectives.

- c) it would also be advisable to provide within the ASBU methodology, examples already used in each module, at least Block 0, for better illustrate the spirit of its definition; and
- d) finally, promulgate a regional mechanism for each State to be able to include its metrics, update its measuring and, from a regional chart view, become aware of the regional implementation status.

3. ACTION SUGGESTED

3.1 Given that in a) above the ASBU approach is based on operational results, b) measurements is essential to manage the ATM improvements towards regional harmonization and interoperability (at first step) of airspace as a contribution to the global, the Conference is invited to take under consideration the ASBU methodology analysis and additional proposals, with regard to the metric definition and calculus.

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