

International Civil Aviation Organization

The Seventh Meeting of the Asia/Pacific Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/7)

Ha Noi, Viet Nam, 13 – 16 March 2012

Agenda Item 3: Review of Air Navigation Deficiencies in the AIS Field

TIMELINESS, ACCURACY & QUALITY OF AIS PROMULGATION INCLUDING CONSIDERATION OF IMPACT ON GLOBAL DATABASES

(Presented by IATA)

SUMMARY

This paper presents issues associated with the promulgation of AIS changes that require update of the various Global Databases critical to safe operations of the aviation industry. Changes and their promulgation must be made in a timely manner to ensure current accurate information is available to all aviation stakeholders. ICAO guidance is available and states that promulgation via AIRAC cycle is preferred unless extenuating circumstances exist. This paper relates to –

Strategic Objectives:

- *A:* Safety Enhance global civil aviation safety
- C: Environmental Protection and Sustainable Development of Air Transport Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment

Global Plan Initiatives:

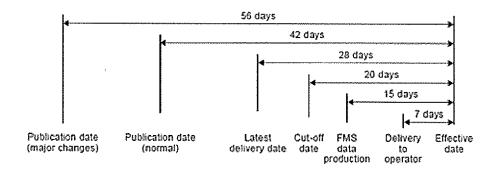
- GPI-12 Functional integration of ground systems with airborne systems
- GPI-18 Aeronautical information
- GPI-20 WGS-84

1. INTRODUCTION/BACKGROUND

- 1.1 Today, the aviation industry; especially airline operations, rely heavily on the timeliness and accuracy of the information in automated databases for their day to day operation. These can include Charting, Weather, Air Navigation Service Provider and NOTAM to name a few.
- 1.2 It is imperative that any operational changes impacting the wider aviation community that require the updating of databases are communicated well advance prior to the change taking effect.
- 1.3 This will enable all stakeholders to update critical operational databases and assist to avoid any risk to the safe operation of aircraft. Most airline systems require at least 2 AIRAC cycles to properly update their systems and ensure promulgation to the end users of the information (pilots etc.)

2. DISCUSSION

- 2.1 ICAO guidance material is available. Which clearly state adequate lead time must be given to worldwide agencies to adjust databases and should be notified to coincide with AIRAC cycles where possible.
- 2.2 **Doc 8126** (Figure 2-2) gives a diagrammatic "Processing Cycle for Airborne Navigation Databases"



- 2.3 **Annex 15, Appendix 4,** the following information to be Notified by AIRAC
 - 1. The establishment and withdrawal of, and premeditated significant changes (including operational trials) to:
 - 1.3 Holding and approach procedures, arrival and departure procedures, noise abatement procedures and any other pertinent ATS procedures.
 - 1.5 Meteorological facilities (including broadcasts) and procedures.

2.4 Doc 8126/ Aeronautical Information Services Manual, para 2.6.3 states

Essentially, implementation dates other than AIRAC effective dates must not be used for preplanned, operationally significant changes requiring cartographic work and/or updating of navigation databases.

- 2.5 In this particular example **Doc 7910/ Location Indicators Para E3**Provides guidance on the Change in the Assignment of Location Indicators as follows:
 - 3.1 Location Indicators once assigned should only be amended after paying due regard to the worldwide repercussions of such changes upon all users of the communication services.
 - 3.2 A Location indicator should not be reassigned to another location for a period of at least six months after cancellation of its previous assignment
 - 3.3 Changes in the assignment of location indicators should be promulgated by NOTAM or AIP as far in advance of the effective date as practicable
- 2.6 Some recent regional examples of non adherence to either ICAO guidelines and/or quality and accuracy of information are:
 - 1 Location designator change via NOTAMN. While NOTAM is an appropriate method for the actual notification of the change, the timing of the change did not take into account lead time required to update international data bases.

This created the undesirable situation; and associated safety hazards; where:

- NOTAM were current under both the new and 'old' designator, but a search on the new (or old) designator did not bring up all NOTAM for the location.
- Charting contained in FMS was now out of date until next update could be produced and loaded
- Weather data
- 2 Second example (different state) of change of designator with two days' notice rectified with intervention postponed until AIRAC cycle notice complied with.
- Issue of AIP SUPP x2 revising the flight procedures for two airports Dated 1 November 2011; promulgated on the 15th November 2011 effective on the 17th November 2011. Industry given the two days' notice of these changes!:
 - Pilots operating into these airports may not have the revised information.
 - Flight Management Systems would NOT be updated
- 4 Promulgation of new route and omitting update of STARs & SIDs to destination airport
 - Effectively renders new route unusable for flight planning purposes until rectified
- Issue of change of FIR designator without update of CPDLC logon address and guidance
 led to much confusion for operators
- 2.7 The above are only some examples of recent regional issues in this area.
- 2.8 With ever increasing airspace complexity; traffic density and the sheer volume of aeronautical information required together with increased reliance by both ANSPs and operators on computerized databases **timeliness** of publication is absolutely critical and States should ensure they publish information in <u>at least</u> in conformance with the ICAO guidelines.
- 2.9 The **accuracy** of this information is also critical to safe operations and States have a responsibility to ensure quality control processes ensure information is correct and accurate.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to discuss:
 - a) The critical importance that timely& accurate promulgation of change information has on the safe operations both airline and ANSP
 - b) Issues relating to publishing information in conformance with <u>at least</u> ICAO guidelines
 - c) The need for adequate quality systems (check & balances) & training are in place to ensure accuracy of promulgated information
