

ICAO Aeronautical Information Management Steering Group

Aeronautical Chart Subgroup

Presented to: Aero Charting Meeting

By: George P. Sempeles

Date: 25 April 2018



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ICAO: The BIG Picture

ICAO's No Country Left Behind initiative is focused on implementation of Standards and Recommended Practices.

The ICAO Secretariat will conduct a broad evaluation of the standards making process to include moving forward with a project management methodology.



ICAO: The BIG Picture



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гражданской
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منظمة الطيران
المدني الدولي

国际民用
航空组织

President of the Air Navigation Commission

January 31st, 2018

Dear Panel Chairs, Vice-Chairs, Members, Advisers, and Observers,

As we start the year, the Air Navigation Commission thanks you for your continued dedication to ICAO's work. We understand that this important work is in addition to your day job, and we're all very appreciative of you and your State's willingness to share your expertise in order to improve safety and regularity of civil aviation.

You are of course aware of ICAO's [No Country Left Behind](#) initiative, and the Organisation's focus on implementation. In support, the ANC is conducting our work with an additional focus on **Implementation and Communication**. Key questions that should lead the way to this focus may be: are the proposed requirements implementable and how can we, in the work we do, facilitate optimum implementation? How can we best gather relevant feedback from States and Industry to enable this?

This theme of implementable SARPs is very much in the fore, as we begin our preparations for the Air Navigation Conference, slated for Oct 8th to 19th, where States will discuss and endorse proposals for possible additions to your work and ours.

As such, it is our goal that we can continue to work closely together with you to ensure that our collective work programme, and priorities, are built on a shared situational awareness of the needs of the States and the travelling public we all serve. You, as Panel Chairs, Vice-Chairs, Members, Observers, and Advisers, along with the dedicated Secretariat officers who guide us, are the key to delivering on our implied promise of having effective, widely implementable SARPs. After all, ICAO SARPs and PANS mean nothing if they are not implemented and having the desired effect!

The ICAO Secretariat is embarking this year on a broad evaluation of the standard making process, which will surely yield interesting insights into our collective work. As well, the Secretariat is exploring how to best move forward with project management methodologies, so as to ensure, perhaps, a fuller understanding of the possible impacts to States and Industry of our proposals, and how to prioritize our limited resources.

As we embark down this path, we will continue to look forward to your feedback and suggestions on the work itself, of course, but also on how best we can tackle the challenges ahead, together.

Wishing you all the best for 2018 and beyond,

Happy landings,

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Aeronautical Information Management Steering Group

With the adoption of amendment 40 to Annex 15, the focus now from an ICAO perspective is implementation of the SARPs using this projects management methodology.

As a result, ICAO invited members of the former AIS-AIM Study Group to participate in an Aeronautical Information Management-Steering Group (AIM-SG) meeting last week in Montreal



Aeronautical Information Management Steering Group



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Ref.: Off file

12 March 2018

Dear AIM experts,

I have the honour to invite you to an ICAO Aeronautical Information Management Steering Group (AIM-SG) Meeting, to be convened at the ICAO Headquarters in Montréal, from 16 to 20 April 2018.

With the adoption of amendment 40 to Annex 15 — *Aeronautical Information Services* by Council, the focus of ICAO is now on implementation. As part of the “No Country Left Behind” initiative, the theme of implementable Standards and Recommended Practices (SARPs) is very much in the fore and actions are being taken to work collaboratively with the relevant stakeholders to make sure that the collective work, programme and priorities are built on a shared situational awareness of the needs of the States.

This AIM-SG will bring together AIM experts from Member States, international organizations and industry to examine how to support and facilitate the implementation of (SARPs), procedures and guidance for the aeronautical information management domain.

The main objective of the AIM-SG meeting is to discuss the scope of “AIM Projects” that were identified during the brain storm sessions that could be the basis for an AIM programme. The AIM programme will be described in an implementation strategy that will serve as a reference document for ICAO to plan the future activities and properly support Regions and States in implementation

Please be aware that the meeting will be held in English only.

Please confirm your attendance by 31 March 2018 to RLuccioli@icao.int and NSoltani@icao.int.

I look forward to seeing you at the meeting.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Roberta Luccioli', is written over a faint circular stamp.

Roberta Luccioli



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AIM-Steering Group Projects

The main objective of the AIM-SG is to discuss the scope of AIM Projects that will form the basis of an ICAO AIM Program

An AIM Program will be described in an implementation strategy that will serve as a reference document for ICAO to plan future activities and properly support Regions and States in implementation



Aero Chart Project: The What

ICAO Annex 4 was published during a time when aeronautical charts were created by manual methods, using analog and semi-automated data. Numerous charting products for specific, non-digital aviation purposes were then manually created from this data according to Annex 4 and Doc 8697 specifications. Today, there are different types of chart users with different requirements, which are not accounted for in Annex 4 or Doc 8697. Advances in technology allows both the collection of data and the creation of information products digitally from a set of features available in databases or data sets. Therefore, aeronautical charts have become by-products of data collection and storage. Current aeronautical charts are “views” designed for human interpretation in an age where aircraft performance is highly dependent upon exacting digital data and information, which brings into question the function or the actual need for the legacy aeronautical charts in Annex 4 and Doc 8697 for modern aircraft and modern flight planning.



Aero Chart Project: The Why

Annex 15 Ed. 16 and PANS-AIM Ed. 1 made a step towards digital data-sets AIM and enhanced the data origination requirements by rationalising ICAO Annex and PANS wide data quality requirements.

Aeronautical Charting and Instrument Flight Procedure Design must now keep up with these new SARPs to fully exploit these new capabilities. An holistic approach (no media break) to data origination, instrument procedure design, aeronautical data-set provision, is needed by taking performance requirements/limitations publication requirements and aircraft performance calculation more into account.



Aero Chart Project: Impacts

To States:

Need of ammendment to national regulatory framework (legislation, regulation and/or directives)

Need for ammendments to the procedures or manuals for safety inspectors



Aero Chart Project: Impacts

To Industry:

- **Need for any changes to the systems of ANSPs (AIS, AIM, MAP, FPD), data providers, aircraft operating agencies, airports, with associated costs.**
- **Need for any changes to the operations manuals/procedures for ANSPs, data providers, and operators.**
- **Operational benefit to all, ANSPs, data providers, and operators from the perspective of safety and efficiency.**



Conclusions

- **ICAO survey charts with regional offices**
- **ICAO consult with relevant panels**
- **Project team is to**
 - Simplify the problem statement
 - Analyze the various chart types
 - Analyze existing chart functions
 - Analyze who uses what charts
 - Make considerations on which charts to keep and which can be replaced by digital data



Thank You!

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