AIXM Change Management Charter

Article 1 – Objective

1.1.   The evolution of the Aeronautical Information Exchange Model (AIXM) shall be managed in the interest of the largest number of AIXM stakeholders ("Stakeholders").

1.2.   A Change Control Board ("CCB") with international participation is therefore established, in relation with a Change Control Advisory Board ("CCAB"), both acting under the provision of this Change Management Charter ("Charter").

1.3.   The objective of this Charter is to support the aeronautical information needs of the AIXM user community and of the larger aviation community through a disciplined, inclusive, and transparent approach to developing and approving new AIXM versions.

1.4.   The evolution of the AIXM shall be aligned with the evolution of other ATM information domain models (WXXM, FIXM) and with global ATM information reference model developments[1].

Article 2 – The Change Control Board ("CCB")

2.1.   Tasks

2.1.1. The CCB is the main body that decides on the evolution of the AIXM.

2.1.2. The CCB:

a) schedules the publication of new versions and gives a final approval to the set of changes to be included in new versions;

b) ensures the transparency of the change management process for all Stakeholders;

c) ensures the possibility to contribute in the change management process for all Stakeholders;

d) is responsible for the AIXM maintenance and evolution, which includes both the model and the associated documentation (e.g. Temporality Concept, UML to XSD Conversion, Business Rules, etc.);

e) may also issue and/or endorse implementation guidelines for new AIXM versions, such as:

 (i)   a list of new operational (data encoding) capabilities that are supported by a new AIXM version, thus enabling stakeholders to take informed decisions on their need to migrate an existing system to the new version;

 (ii) a proposed implementation timeline, thus facilitating the synchronization between the different system upgrades, which is necessary for preserving the interoperability of these systems;

 (iii) mapping guidelines between previous versions and the new version, in particular when changes in the model result in a complete restructuring of a concept;

 (iv) sample data sets.

---

[1] Such as the SESAR AIRM and NextGEN OV-7 models

f) may also include in its scope the release[2] of formal conformance testing specifications, which would enable an implementation to check and claim compliance with an AIXM version;

g) will establish relations with similar arrangements that might be put in place for other ATM information domain models (MET, Flight, etc.) or for a global ATM Information Reference Model.

2.1.3. The practical organisation and the support of the CCB activities are done by a CCB Secretariat (CCBS).

2.1.4. The CCB shall be supported by with a Change Control Advisory Board (CCAB).

2.2. Decision making

2.2.1. Decisions by the CCB shall be taken by consensus[3].

2.2.2. Therefore:

a) The adoption of Change Proposals is a silent process. If no objection is formally stated by a CCB Member, the proposal is considered accepted. The minimal consultation period is three weeks, but this could be longer for important or very large changes.

b) In order to prevent that a single CCB Member blocks the adoption of a particular Change Proposal without a solid justification:

- any objection shall be supported with detailed arguments, in particular on the business impact, so that the other CCB Members have the possibility to understand the reason for the opposition and work for solving the issue;

- the current operational reality shall be considered as the prevailing argument in the definition and adoption of Change Proposals. Change Proposals that reflect future operational concepts are adopted only when validated by actual operational implementations.

c) If consensus cannot be achieved, the disagreement will be documented and the Change Proposal will be suspended until new arguments arise, allowing to move it ahead or to definitively abandon it. The provisions of the current AIXM version, if any, remain in place.

2.3. Membership

2.3.1. CCB Members shall be AIXM experts with a technical and/or operational aeronautical information background, on a voluntary basis.

2.3.2. There is no limitation as to the number of CCB Members. However, an excessively large CCB may hinder the efficiency of the change management process. Therefore, CCB Members shall be representatives of Stakeholder groups, not of individual Stakeholders.

2.3.3. Applications for CCB membership shall include the following information:

a) Full name;
b) Contact details: email and telephone number;
c) Organisation represented and department within that organisation;

---

[2] the development of conformance testing specifications might not be done by the CCB

[3] defined as "*group decision making process that seeks the consent, not necessarily the agreement of participants and the resolution of objections*", http://en.wikipedia.org/wiki/Consensus_decision-making

d) Stakeholder group represented: States, ANSP, Military, International Organisation, Service Providers, Airlines, Manufacturing industry, etc.

e) A brief justification of the interest in AIXM of the organisation represented, indicating how the current and future AIXM versions are impacting the activities of the organisation;

f) A brief description of the working experience of the applicant, demonstrating the they have a good knowledge of the AIXM and of the aeronautical information domain;

g) A statement that the applicant and their organisation agree with the Charter.

2.3.4. All complete CCB membership applications are in principle accepted. However, the existing CCB Members may decide (by consensus) to refuse a particular application, if estimated that it does not meet the requirements stated in Section 2.3.3 above. In such situations, the CCBS will reply to the applicant with a refusal statement, providing a detailed justification of the reasons.

2.3.5. CCB Members shall actively participate in the drafting of the Change Proposal and in the effort to achieve consensus.

2.3.6. The CCB Members shall follow the following code of conduct when participating in the CCB discussions, on-line or off-line:

a) Courteous behaviour;

b) Statements made as specific as possible;

c) Limitation of discussions to AIXM topics.

d) Working language of AIXM CCB is English. If a message is posted in another language, an English translation shall be provided.

e) No information violating third party intellectual property rights may be uploaded.

2.3.7. A CCB Member may be excluded from the CCB in case of serious violation of the Charter or if not following the rules stated in Section 2.3.6 above. The proposal to exclude a CCB Member may be brought forward by any CCB Member and it becomes effective if adopted by consensus by the existing of the CCB members.

2.4. CCB Secretariat ("CCBS")

2.4.1. The CCBS shall provide the technical and human resources for:

a) The actual drafting of the Change Proposals;

b) The maintenance of the AIXM files and associated documentation;

c) The maintenance of the communication means (Web site, AIXM Forum, Change Submission and Tracking System, etc.).

2.4.2. The CCBS shall:

a) facilitate discussions of the CCB with a view to reach consensual solutions;

b) mediate in case of disagreements at the CCB;

c) monitor the ICAO State Letters that announce changes in the ICAO SARPS in order to identify potential changes in the AIXM (with the support of the ICAO AIM Unit);

d) monitor the evolutions in the ATM domain that might trigger changes to AIXM.

2.4.3. Currently, EUROCONTROL and FAA provide the CCBS effort, through their CCB Members.

Article 3 – Change Control Advisory Board ("CCAB")

3.1. Tasks

3.1.1. The CCAB guides and supports the CCB activities (which are at technical/operational level) from a managerial level. It steers the evolution of the AIXM in a way that it can answer the evolving requirements of the Stakeholders.

3.1.2. The CCAB gives a final endorsement for the publication of new AIXM versions and of other CCB deliverables, following an activity report provided by the CCBS.

3.1.3. The CCAB, based on a technical and operational impact analysis provided by the CCB, may issue a recommendation with regard to the implementation schedule of new AIXM versions.

3.2. Membership

3.2.1. CCAB Members shall be members of the management structures of Stakeholder organisations.

3.2.2. The CCAB shall have a maximum of 20 (twenty) Members, with the aim[4] to include at least:

a) 1 representative of the International Civil Aviation Organization (ICAO) (delegated by the ICAO AIM Secretariat);

b) 1 representative of the European Organisation for the Safety of Air Navigation (EUROCONTROL);

c) 1 representative of the Federal Aviation Administration;

d) 1 representative of United States National Geospatial-Intelligence Agency (NGA);

e) 1 representative of Civil Air Navigation Services Organisation (CANSO);

f) 1 representative of ANSPs that are not CANSO members;

g) 2 representatives of Flight Plan and Data Service Providers (from companies with an important market share);

h) 1 representative of Airlines (to be delegated by the International Air Transport Association (IATA));

i) 1 representative of General Aviation (to be delegated by the International Council of Aircraft Owners and Pilot Association (IAOPA))

j) 1 representative of Airports (to be delegated by the Airports Council International (ACI));

k) 1 representative of manufacturing industry (to be delegated by Aviation Domain Working Group of OGC);

l) 2 representatives of other aviation and/or industry standards organisations, such as ISO, RTCA, EUROCAE, ARINC, SAE International, etc.

m) 1 representative of the NATO Aeronautical Data Working Group

3.2.3. The CCBS is responsible to get in contact with the Stakeholder groups/organisations listed above and seek their participation in the CCAB.

3.2.4. The CCAB Members shall elect a Chairman in order to act as contact point.

---

[4] The list of desired CCAB Members is based on the past and current involvement of various AIXM Stakeholders in the definition and evolution of the model

Article 4 – Meetings

4.1.   CCB Meetings

4.1.1. All CCB activities are conducted using on-line tools, in particular a change proposal submission and tracking tool based on JIRA ("JIRA Tool"), to which all CCB Members shall have access.

4.1.2. Occasional CCB Meetings may take place in conjunction with AIXM events, where a significant number of CCB Members is likely to be present. The conclusions of such CCB Meetings shall be recorded in the JIRA Tool, as individual issues/change proposals. No decision shall be taken outside the JIRA Tool.

4.2.   CCAB Meetings

4.2.1. CCAB Meetings may take place in conjunction with AIM events, where a significant number of CCAB Members is likely to be present. The CCAB Meetings shall be supported by video-conference, in order to enable remote participation.

4.2.2. The CCAB Meetings shall be prepared and supported by the CCBS, who will also draft the minutes of these CCAB Meetings.

4.2.3. The minutes of the CCAB Meetings shall be sent no later 3 (three) weeks after the CCAB Meeting to the CCAB Members for approval. The CCAB Members shall approve the minutes no later than 3 (three) weeks after the receipt. Silence of a CCAB Member shall be deemed as approval of the minutes.

Article 5 – Change Management Process

5.1.   In order to effectively apply the provisions of the Charter, a change management process is put in place and supported by the JIRA Tool. The state diagram below indicates the main steps in the lifecycle of a Change Proposal.
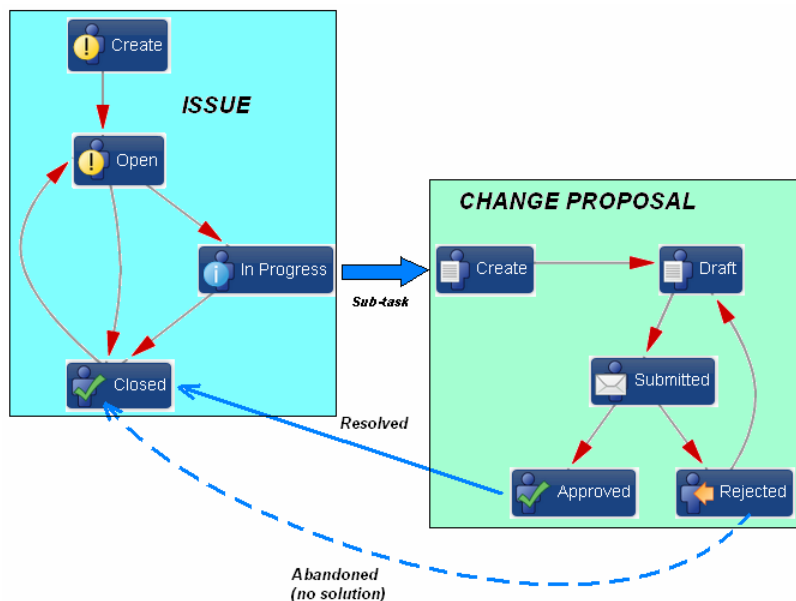
Article 6 – Intellectual Property Rights

6.1.   New versions of the AIXM Model and the associated documentation produced by the CCB shall become and remain intellectual property of EUROCONTROL and FAA and shall be released under the following BSD license:

"Copyright (c) 20…., EUROCONTROL & FAA
==
All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:
        * Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
        * Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
        * Neither the names of EUROCONTROL or FAA nor the names of their contributors may be used to endorse or promote products derived from this specification without specific prior written permission.

THIS SPECIFICATION IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
===
Editorial note: this license is an instance of the BSD license template as provided by the Open Source Initiative:

http://www.opensource.org/licenses/bsd-license.php"

Article 7 – Changes to the AIXM Change Management Charter

7.1.   This Charter may be changed at any time by agreement of the CCB Members.

* * *