Change Proposal	
ID:	**AIXM-147**
target version:	**AIXM 5.1.1**
version:	**1.0**
last updated:	**21 APR 2015**
status:	**Implemented**

AIXM
Aeronautical Information Exchange Model

Change Control Board

Add ILS Cat III operational performance values

Description

Add to the CodeSignalPerformanceILSType three new values: IIIA, IIIB and IIIC to reflect the ILS Cat III operational performance categories

Rationale for change

See https://aixmccb.atlassian.net/browse/AIXM-131

The current AIXM 5.1 model provides in the feature Navaid an attribute, signalPerformance, with an enumeration (I, II, III, OTHER). The distinction for ILS Cat III with the operational performances A (DH < 100', RVR >= 175m), B (DH < 50', 50m <= RVR < 175m) or C ("0/0") is missing.

The courseQuality should not be confused with these performance categories, as it refers to a different data, ILS reference points for the course alignment signals (ICAO Annex 10, Vol 1, Chapter 3, 3.1.1).

Impact assessment

AIXM 5.1 files remain valid against the AIXM 5.1.1 schema. In addition, this change would enable AIXM 5.1 Data Providers to encode the missing values as "OTHER:IIIA", etc. and these values to be automatically converted into proper values (without the "OTHER:" prefix) in AIXM 5.1.1..

AIXM 5.1.1 files that use the new values would be invalid against the AIXM 5.1 schema and will need to be converted, using the data type extension mechanism - prefix with "OTHER:". The conversion is straight-forward.

Change Proposal details

In the UML model, add to the data type CodeSignalPerformanceILSType the following values:

- IIIA = "ILS Cat III with the operational performances A (DH < 100', RVR >= 175m)"
- IIIB = "ILS Cat III with the operational performances B (DH < 50', 50m <= RVR < 175m)"
- IIIC = "ILS Cat III with the operational performances C (DH = 0, RVR = 0m)"

Mapping AIXM 5.1 to AIXM 5.1.1 (forward)

The following algorithm shall be applied:

- For each Navaid.signalPerformance that has one of the values "OTHER:IIIA","OTHER:IIIB" or "OTHER:IIIC":

- ○ replace the value "OTHER:IIIA" with "IIIA"
- ○ replace the value "OTHER:IIIB" with "IIIB"
- ○ replace the value "OTHER:IIIC" with "IIIC"
- For any other XML elements/attributes - copy identical in the output

This algorithm will be implemented in an XSLT script that will be provided together with the AIXM 5.1.1 Schema.

Mapping AIXM 5.1.1 to AIXM 5.1 (backward)

The following algorithm shall be applied:

- For each Navaid.signalPerformance that has the value one of the values "IIIA","IIIB" or "IIIC":
  - ○ replace the value "IIIA" with "OTHER:IIIA"
  - ○ replace the value "IIIB" with "OTHER:IIIB"
  - ○ replace the value "IIIC" with "OTHER:IIIC"
- For any other XML elements/attributes - copy identical in the output

This algorithm will be implemented in an XSLT script that will be provided together with the AIXM 5.1.1 Schema.

- END -