

[AIXM-481] Correction of TAA sector procedure turn requirement

ID:	AIXM-481
target version:	AIXM 5.2
version:	1.0
last updated:	25 FEB 2021
status:	PROPOSED



Description

For the **TerminalArrivalAreaSector** attribute "**procedureTurnRequired**" the definition is modified to express that coding of "NO" justifies the NoPT label for a particular TAA sector.

Rationale for change

See: <https://aixmccb.atlassian.net/browse/AIXM-417>

The **TerminalArrivalAreaSector** has an attribute called **procedureTurnRequired** defined as "Indicates that a course reversal is not required. If the code is Yes, then the products will indicate 'NoPT'."

This "negative" in the definition can be easily misunderstood as the name of the attribute is "positive" ("**ProcedureTurnRequired**").

The definition includes a second sentence which reinforces the negative meaning "If the code is Yes, then the products will indicate NoPT". However, it is very likely that in practice it was used in the reverse sense - **procedureTurnRequired**=NO -> "NoPT required".

This ambiguity should be corrected.

Therefore the definition of the "**procedureTurnRequired**" is modified to:

"The attribute is used to indicate whether or not a course reversal is necessary/authorised when flying within a particular TAA sector. When the course reversal is not necessary/authorised, this attribute will carry an NO. When the course reversal is necessary/authorised, the field will carry a YES."

If coded "NO" it would justify the NoPT label for that TAA sector (see image below of Aeronautical Information Manual, Effective: December 31, 2020) .

If coded "YES" or not coded, a course reversal when flying in that TAA sector is necessary/authorized.

This is in line with ARINC 424 which provides a field named Procedure Turn Indication for the TAA record. Since ARINC 424-19 it is used as follows. When the course reversal within a TAA sector is not necessary, this field will carry an N. When the course reversal is necessary, the field will carry a Y.

Mapping AIXM 5.2 to AIXM 5.1.1 (backward)

[MAPC-00] The following algorithm shall be applied:

- In case a ***TerminalArrivalAreaSector*** feature instance contains the attribute ***procedureTurnRequired*** with a value create a ***Note*** for the feature with ***propertyName*** = "procedureTurnRequired" and ***purpose*** = "WARNING": "The attribute definition has changed. The AIXM 5.2. definition is: 'The attribute is used to indicate whether or not a course reversal is necessary/authorised when flying within a particular TAA sector.' When the course reversal is not necessary/authorised, this attribute will carry an NO. When the course reversal is necessary /authorised, the field will carry a YES."

Mapping example

(Note: for mapping test data see: https://github.com/aixm/mapping_52_511/tree/master/AIXM-xxx)

AIXM 5.2	AIXM 5.1(.1)
...	...