

**Change ID: 5.1-34**

## ***Surface material and preparation***

### ***Summary***

Following a recent mapping exercise between AIXM 5.0 and the ED 199 (AMDB) standard, a number of changes are proposed to the AIXM lists of material and surface preparation. This will increase the harmonisation between AIXM and the AMDB standard and will also improve the capability of the model to represent the real-world data.

### ***Background***

AIXM has two attributes in the class [SurfaceCharacteristics](#) , separately for composition (material) and surface preparation.

### ***Rationale for the change***

The NGA model, which covers world-wide aeronautical data, has a similar approach to AIXM, but with a third attribute for "overall pavement situation" - with values such as PAVED, MOSTLY PAVED, NATURAL, etc. Both AIXM and NGA have more values for material and preparation than currently supported by ED 199, which triggered a number of change proposals being submitted to the RTCA/EUROCAE AMDB Committee.

However, in order to increase the capacity of the AIXM model to represent the real-world data and to increase the compatibility between AIXM 5.1 and the AMDB standard, some changes are also proposed to the surface composition list of values in AIXM.

### ***Change proposal details***

In the CodeSurfaceCompositionType data type:

- modify the definition of the GRASS value to say " *Grass including portions of turf or bare earth*"
- correct spelling of the value PEIRCED\_STEEL, to read PIERCED\_STEEL
- remove value "GRADE", it is a type of preparation not a type of material
- add value NON\_BITUM\_MIX, meaning " *Non Bituminous mix*"
- Add 'NON GROOVED' to the CodeSurfacePreparationType enumeration. This covers such items as 'APSHALT NON GROOVED'