

## Paper for Consideration by S-100WG7

## S100\_SupportFileRevisionStatus clarification

<b>Submitted by:</b>	PRIMAR
<b>Executive Summary:</b>	The need for S100_SupportFileRevisionStatus attribute when there is already an editionNumber mechanism defined, is unclear. As the S100_SupportFileRevisionStatus attribute seems to be more like a system attribute it is proposed to be removed from S-100. Also, a better description of the intended use of support file editionNumber in end user systems should be added to S-100.
<b>Related Documents:</b>	S-100 5.0.0
<b>Related Projects:</b>	

**Introduction / Background**

PRIMAR is preparing for the S-100 future. As part of this, the new support file management regime introduced with S-100 has raised some concerns, and a clarification on the use of S100\_SupportFileRevisionStatus is needed.

**Analysis/Discussion**

1. S-100 5.0.0 introduces the concept of revision status – as a mandatory part of the support file discovery metadata.

**S100\_SupportFileDiscoveryMetadata**

Role Name	Name	Description	Mult	Type	Remarks
Class	S100_SupportFileDiscoveryMetadata	Metadata about the individual support files in the Exchange Catalogue	-	-	-
Attribute	fileName	Name of the support file	1	URI	See Part1, clause 1-4.6
Attribute	revisionStatus	The purpose for which the support file has been issued	1	S100_SupportFileRevisionStatus	For example new, replacement, etc
Attribute	editionNumber	The Edition number of the support file	1	Integer	When a data set is initially created, the Edition number 1 is assigned to it. The Edition number is increased by 1 at each new Edition. Edition number remains the same for a re-issue
Attribute	issueDate	Date on which the data was made	0..1	Date	

**S100\_SupportFileRevisionStatus**

Role Name	Name	Description	Code	Remarks
Enumeration	S100_SupportFileRevisionStatus	The reason for inclusion of the support file in this Exchange Set	-	-
Value	new	A file which is new	1	Signifies a new file
Value	replacement	A file which replaces an existing file	2	Signifies a replacement for a file of the same name
Value	deletion	Deletes an existing file	3	Signifies deletion of a file of that name

2. We cannot find any descriptive information in Part 17 (17-4.3) related to the use of S100\_SupportFileRevisionStatus. Our understanding of this metadata information is that it provides a mechanism to indicate for the end user system whether a support file should be treated as new, replaced or deleted.

Based upon the above assumption the end user system is anticipated to conduct the following operations:

**S100\_SupportFileRevisionStatus = 1 (new)**

The support file is included in the system file directory for support files – to be used upon query from end user in ECDIS interface.

**S100\_SupportFileRevisionStatus = 2 (replacement)**

The support file will override/replace an earlier version of the file already existing in the end user system file directory (if previous versions have been purchased) or the support file will be included in the system file directory (if previous versions have not been purchased).

S100\_SupportFileRevisionStatus = 3 (deletion)

The support file will be removed from the end user system file directory (if previous versions have been purchased - If not – the support file will be ignored)

3. There is no description in S-100 related to how S100\_SupportFileRevisionStatus is intended to be used. If the intention of S100\_SupportFileRevisionStatus is as described above, we believe the attribute should be treated as an end user system attribute rather than including it in S-100. The proposal would be to remove this attribute from S-100, and instead consider incorporating it in IEC61174 describing the operational and performance requirements in S-100 ECDIS.

Within an end user system, when receiving new support file content, we would anticipate that the received content is compared against existing content already installed on the end user system from previous deliveries. Then the encoding of editionNumber would tell the ECDIS what to do (so this would be where the above mentioned system attribute is intended to be used).

4. There is already a mechanism available based upon the edition numbering of support files, with a proposed addition, that we think could be used instead of the S100\_SupportFileRevisionStatus as described above in section 2. The proposed addition is the definition of editionNumber = 0 for indicating a deletion instruction (only for support file use).

As shown in the 1<sup>st</sup> S-100 excerpt above – all support files must be encoded with editionNumber. Based upon the fact that this is a mandatory requirement, editionNumber could be used to tell the end user system how to treat a support file:

Edition 1

The support file is included in the system file directory for support files – to be used upon query from end user in ECDIS interface.

Edition nnn (where n is in the range 2<nnn<=999)

A simple comparison against previous versions editionNumber (if previous edition has been purchased) should tell the system to override/replace an earlier version of the file already existing in the end user system file directory.

And new proposed:

Edition 0

To be used as delete instruction to delete the support file. (Maybe there should be a system check ensuring that none of current data holdings refer the support file in question).

5. The intended use of editionNumber information in end user system should be further described in S-100, as proposed. Especially it is important to clarify that editionNumber=0 means that the support file must be removed from the end user system.

### Conclusions

- The attribute S100\_SupportFileRevisionStatus, defined in S-100 Part 17 S100\_SupportFileDiscoveryMetadata should be removed.
- Consider incorporating the functionality of above described system attribute in IEC61174 describing the operational and performance requirements in S-100 ECDIS.
- Description of the intended use of editionNumber information in end user system should be described in S-100, as proposed.

### Action Required of S-100WG5

The S-100WG is invited to:

Note the report and discuss proposed changes