Paper for Consideration by S-100WG7

Management of external resources extended description

Submitted by: PRIMAR

Executive Summary: Extended descriptions related to management and intended updating of

external resources (support files) in end user systems are needed in S-100

17-4.3

Related Documents: S-100 5.0.0, S-101 1.1.0

Related Projects:

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 a support file referenced by features in multiple datasets is needed.

Analysis/Discussion

- 1. In S-100 one single support file can be referenced by feature attributes in multiple datasets. This creates some complexity in a scenario where the support file content is updated, and the changes does not apply to all the datasets referencing the support file.
- 2. The solution to the above scenario is described in S-101 Product Specification, where guidance is given for how a producer should handle such a situation to ensure that the new support file information is only applicable to the intended datasets (Annex A).
- 3. It is proposed to add the information in Annex A to S-100 to ensure a common approach on support file management for the situation described across all S-100 derived products.

Conclusions

• The proposed description in Annex A should be added to S-100 17-4.3.

Action Required of S-100WG5

The S-100WG is invited to:

Note the report and discuss proposed changes

Annex A – Proposed addition to S-100 17-4.3

If a New Edition of a support file contains changes not applicable to all previous associated features, a completely new file must be created instead. This is to maintain the support file information in the associated features not effected by the last changes. The associations to the old file must then be removed and new associations created for the new support file. Features where changes were not applicable will continue to use the old support file.

The following scenario (using ENCs as examples of dataset files) demonstrates the rules related to versioning and issuing of new support files:

Three Caution areas are encoded within three different ENCs. All of them references the same support file A:

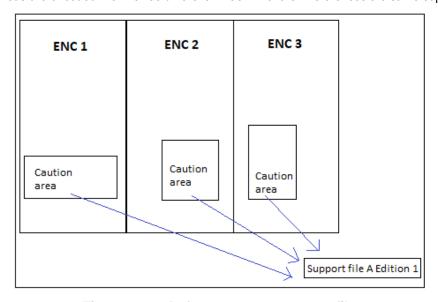


Figure 11-2 - Reference to new support file

Changes occur making it necessary to issue a New Edition of support file A. Edition 1 is no longer valid, and all 3 caution areas refer to the New Edition of support file A (Edition 1 of the support file is deleted from the system if referenced by no features):

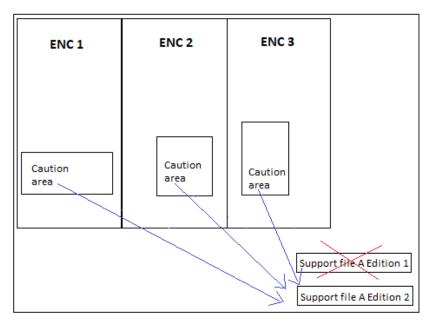


Figure 11-3 – Reference to New Edition of a support file

Changes occur that are only applicable to the Caution areas in ENC 1 and ENC 2. Consequently, these ENCs can no longer refer to support file A Edition 2:

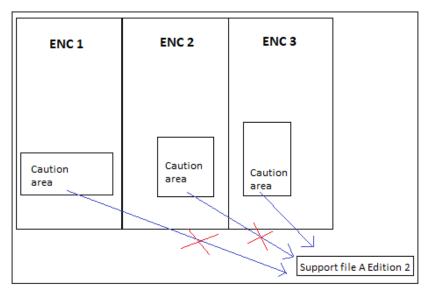


Figure 11-4 – Changes to support file affecting limited referenced features

A new support file B must be created for ENC 1 and ENC 2 to use as reference:

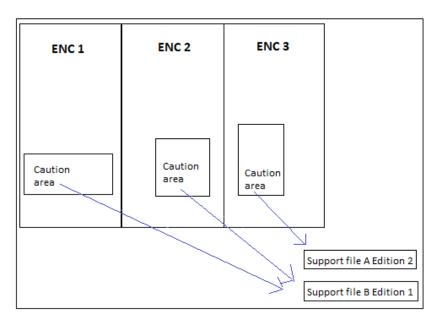


Figure 11-5 – New support file affecting limited referenced features