Paper for Consideration by S-100WG

S-1xx Exchange Catalogue file naming

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Executive Summary:	
Related Documents:	S-100 4.0.0, S-101 (1.0.0), S-102 (1.1.0), S-104 (0.0.5), S-111 (1.0.0), S-122 (1.0.0), S-123 (1.0.0), S-127 (0.2) S-129 (0.1.1)
Related Projects:	

Introduction / Background

Some S-100 derived products are now being made available as official IHO Product specifications. Several more will follow in the near future.

Definitions of the Exchange Catalogue name varies between available S-1xx Product Specifications. The naming could provide end user systems the availability to find preferred catalogue files without searching the contents of possibly several available files and in different directories on the media. Further on the naming could also help systems immediately see the difference between versions of a product.

A common naming convention for the Exchange Catalogues should be defined.

Analysis

The naming of the exchange catalogues seems to differ between the various S-1xx Product Specifications. Within the Product Specifications references to the naming of the exchange catalogue appears two places:

1. In the textual description of the catalogue (Data Product Delivery chapter (chapter 11) and
2. In the metadata class S100_ExchangeCatalogue attribute exchangeCatalogueName.

This table displays the naming defined for 8 different Product Specifications

Product Specification	Metadata class S100_ExchangeCatalogue attribute exchangeCatalogueName	Data Product Delivery chapter (chapter 11): Exchange Catalogue
S-101	CATALOG.XML	CATALOG.XML
S-102	CATALOG.102	S102ed2.CAT
S-104	CATALOG.104	S104ed01CAT.XML
S-111	In S-101 it would be CATALOG.101	S111ed1.CAT
S-122	CATALOG.122.XML	CATALOG.122.XML
S-123	CATALOG.123.XML	CATALOG.123.XML
S-127	CATALOG.XML	CATALOG.XML
S-129	CATALOG.XML	CATALOG.XML

As the table shows, there are inconsistencies within some specifications and also between specifications.

S-100 is quite limited as to how the Exchange Catalogue should be named:
S-100 4.0.0 Appendix 4a-D S100_ExchangeCatalogue:

Role Name	Name	Description	Mult	Type	Remarks
Attribute	exchangeCatalogueName	Catalogue filename	1	CharacterString	In S-101 it would be CATLOG.101

Remarks states: In S-101 it would be CATALOG.101.

S-100 4.0.0 10c-12 states: The files (including exchange set catalogues) must be named as follows:
CATALOG.XML(or .xml) Exchange catalogue XML file

Discussion
Too allow for end user systems to find preferred catalogue file without searching the content of available XML files it would be beneficial with intuitive information being available in the file name.

One could also discuss whether it would be beneficial to use the extension .CAT instead of XML to clearly distinguish the catalogue files from other files.

To be able to instantly see which version of a product specification the catalogue file is conformant to, a reference to this could also be expressed within the file name. This would help the system to decide whether it is compliant with the versioned file, and to pick the correct file if several versions of one product specification are operative. The exchange catalogue name could contain the name of the product (S-number) and could specify the product specification new editions, revisions and clarifications.

Example of naming:
Product specification S-101 edition 1.0.0: **S101e1_0_0.CAT**
Product specification S-101 edition 1.1.0: **S101e1_1_0.CAT**
Product specification S-101 edition 1.1.1: **S101e1_1_1.CAT**
Product specification S-102 edition 2.0.0: **S102e2_0_0.CAT**
Product specification S-10x edition 8.0.0: **S10xe8_0_0.CAT**

It could be discussed whether it is necessary to express all 3 levels (new edition, revision, clarification), or if for instance clarification may not be necessary.

The benefits for using a predefined naming as proposed:
- End user systems do not need to access the file to decide which product the file is referring to.
- End user system will immediately know if it is compatible with catalogue file.
- For multiple product delivery, several exchange catalogues will be stored within the file structure of the Exchange set – probably at the same location (directly under the EXCH_ROOT folder). Individual naming is therefore necessary to separate the files.

To better support delivery of different products in the future, we also recommend agreeing on a common name for the exchange set root folder, e.g. EXCH_ROOT. All the catalogue files for the different products will be located in this folder.

As S-100 information on this topic is limited there may need to be some clarification added in relevant location(s) in the next updated version of the standard.

Conclusions
A common Exchange Catalogue naming convention is proposed.
Clarification of this issue within S-100 Appendix 4A and chapter 10c should be considered.

Action Required of S-100WG/ENCMWG
The S-100WG is invited to:
Note this paper and discuss if proposals are acceptable.