

S-100 Maintenance - Change Proposal Form

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Change Proposal Type *Select only one option*

1. Clarification

2. Correction

3. Extension

Y

Location *Identify all change proposal locations*

S-100 Version No.	Part No.	Section No.	Proposal Summary
1.0.0	3	2	harmonise terminology relating to conformance with ISO 19109
	3	2	various changes to the list of differences from ISO 19109 arising from the new GFM, and miscellaneous editorial corrections
	3	3	editorial correction
	3	5.2.1	UML diagram updated to conform to changes agreed at TSMAD22
	3	5.2.1	changes to the UML model agreed at TSMAD22 implementing action items from TSMAD25 (optional roles)
	3	5.2.1	navigability of association end "includes" now bi-directional
	3	5.2.4 – 5.2.12 (Ed. 1.0.0), 5.2.4 - 5.2.15 (new)	text and tables updated in conformance with the new GFM agreed at TSMAD22; table format made consistent with TSMAD22-DIPWG03-03D and similar tables in the rest of Edition 1.0.0; insertions for S100_GF_ObjectType, S100_GF_FeatureAssociationType, S100_GF_InformationAssociationType, all new metaclasses defined in TSMAD22 paper
	3	5.2.11 (new)	Multiplicity of roleName changed from 1..2 to 0..2 compared to TSMAD22 paper; Item 2 in added above table to explain this change. These changes give effect to TSMAD25 agreement to make roles optional and define default roles source/target.
	3	5.2.12 (new)	Role "association" renamed "linkBetween" compared to TSMAD22 paper
	3	5.2.14 (new)	Role "supplementaryInformation" renamed "includes" compared to TSMAD22 paper.
	3	5.3.2, 5.3.5	Tables added (from TSMAD22 paper)
	3	5.4.2	Figure updated to conform to new GFM
	3	5.4.4	make additionalInformation the default role for information associations instead of fixed

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	3	5.4.5 (new)	new clause on default role names
	3	6.3.1	Rules for application schema updated to conform to new GFM agreed at TSMAD22
	3	various	editorial changes by WG chair?
	3	5.2.4 – 5.2.15 and 5.3.2 – 5.3.5	Change header of column 1 in the tables documenting the model from “Role name” to “Element type” (TODO)
	11	7.1	product specifications must describe whether and how they use default roles

Change Proposal

Please provide a detailed change proposal.

Part 3 § (All): Refer to accompanying redlined Part 3 for details.

Part 11 § 7.1: Text reminding specification writers to describe how default or fixed roles are used in this particular product specification is added. (See redline Part 11)

Change Proposal Justification

Please provide a suitable explanation for the change and where applicable supporting documentation.

The GFM in S-100 Version 1.0.0 does not allow modelers to associate information types by means of association types. In addition the feature association types are not allowed to carry thematic attributes. Both are required for the modeling of nautical publications. Since workarounds were not satisfying the situation, the GFM was modified. One side effect of these changes is that the model of the feature catalogue needs to be changed as well. These modifications were discussed at TSMAD22 (ref. TSMAD22-DIPWG03-03D).

Roles “linkBetween” and “supplementaryInformation” are renamed (compared to TSMAD22-DIPWG03-03D) to clarify and harmonise with ISO 19109 since these associations realize (and are effectively subtypes of) the GF_Feature/GF_AssociationType association in ISO 19109. Also the possibilities introduced for application schemas by allowing associations to have thematic attributes need a more expressive name. The navigability is changed to bi-directional because some application domains need navigability that is different from the S-101 domain model. The fixed role “additionalInformation” is made a default instead of fixed role so that application domains can use a more meaningful role if needed but schema compatibility with Edition 1.0.0 is retained.

TSMAD25 discussed making roles optional and using default roles (ref. TSMAD 25 minutes and TSMAD25-4.3.2 “Revisions and Extensions to S-100 Edition 1.0.0”). Changes arising from this are making the role name optional in application schema and explaining that in that case the semantics must be obvious from the application schema’s definitions of the association and participating classes. The effect of the proposals implementing this change is to suppress role names which do not contribute to the semantics or clarity of an UML diagram but retain names as defaults should they be needed for encoding format specifications or implementations.