



5th S-100 Working Group (S-100WG) Meeting

Proposed Change to S-100 FC Model

Republic of Korea (**KHOA**)

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S-100WG5, Taunton, UK 3 – 6 March 2020

1. Introduction

- Linkage between FC and Registry
 - Feature Catalogue is created with specific versions of the Registry content.
 - Even if the version of the Registry content is changed, there is no version information in S-100 FC model.
 - There is not a proper linkage between feature catalogue and registry content.
 - **Proposes a change to S-100 FC model to support linkage between a feature catalogue and a specific version of the Registry content.**



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2. Proposal to change S-100 FC model

- The change consists of
 - ✓ adding the **attribute versionDate** to the classes S100_FC_Item and S100_FC_ListedValue.
 - ✓ The intent is to capture the date of the source item in the FDD in the Registry.
 - ✓ The attributes have been made optional with a multiplicity of 0..1 since it is not mandatory for S-100 based items to have a definition from a registry.

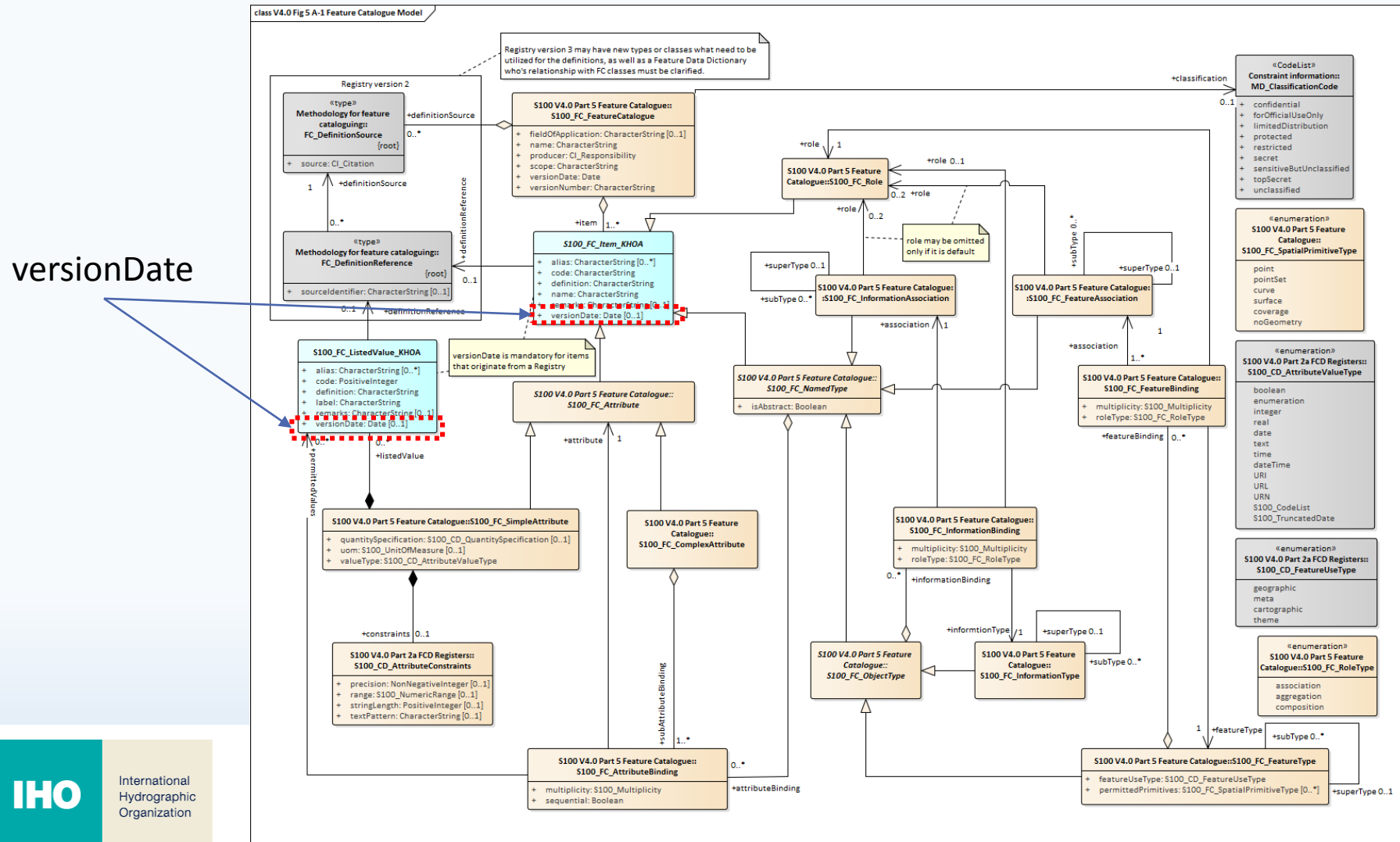


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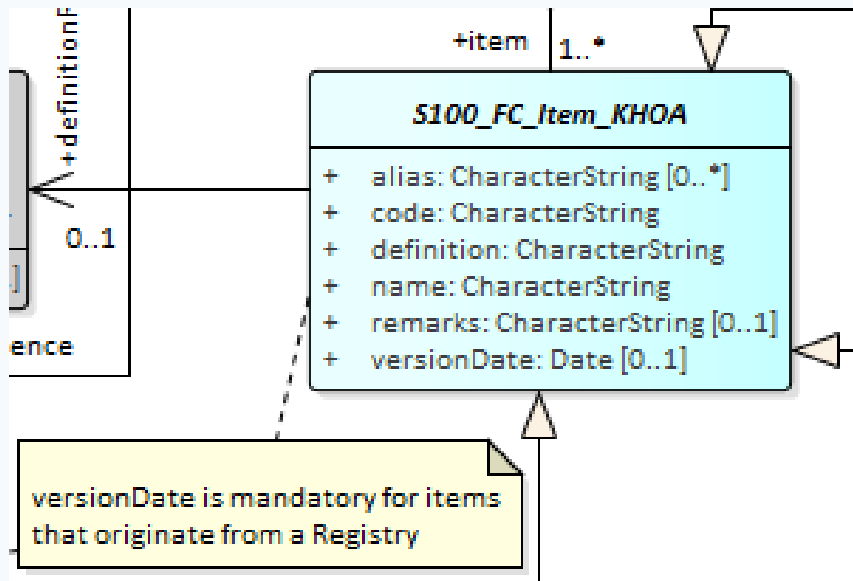
2. Proposal to change S-100 FC model

- Details of the changed S-100 FC model



2. Proposal to change S-100 FC model

- Details of the changed S-100 FC model



Role Name	Name	Description	Mult	Type	Remarks
Class	<i>S100_FC_Item</i>	Abstract base class that defines the common properties of all items in the feature catalogue; items are feature types, information types, feature associations, information associations, attributes and roles	-	-	Abstract class
Attribute	name	Name of the item	1	CharacterString	
Attribute	definition	Definition of the named type in a natural language	1	CharacterString	
Attribute	code	Code that uniquely identifies the named type within the feature catalogue	1	CharacterString	
Attribute	remarks	Further explanation about the item	0..1	CharacterString	
Attribute	alias	Equivalent name(s) of this item	0..*	CharacterString	
Attribute	versionDate	Date of the Feature Data Dictionary item that this item originated from.	0..1	Date	Mandatory for items that originate from a Registry
Role	definitionReference	The link to the source of the definition	0..1	FC_DefinitionReference	

3. Impact on S-100 FCB

- S-100 FCB is a tool to create S-100 based feature catalogue connecting S-100 registry content, so its function should be improved in a way that users can decide whether to update comparing feature catalogue and registry contents.



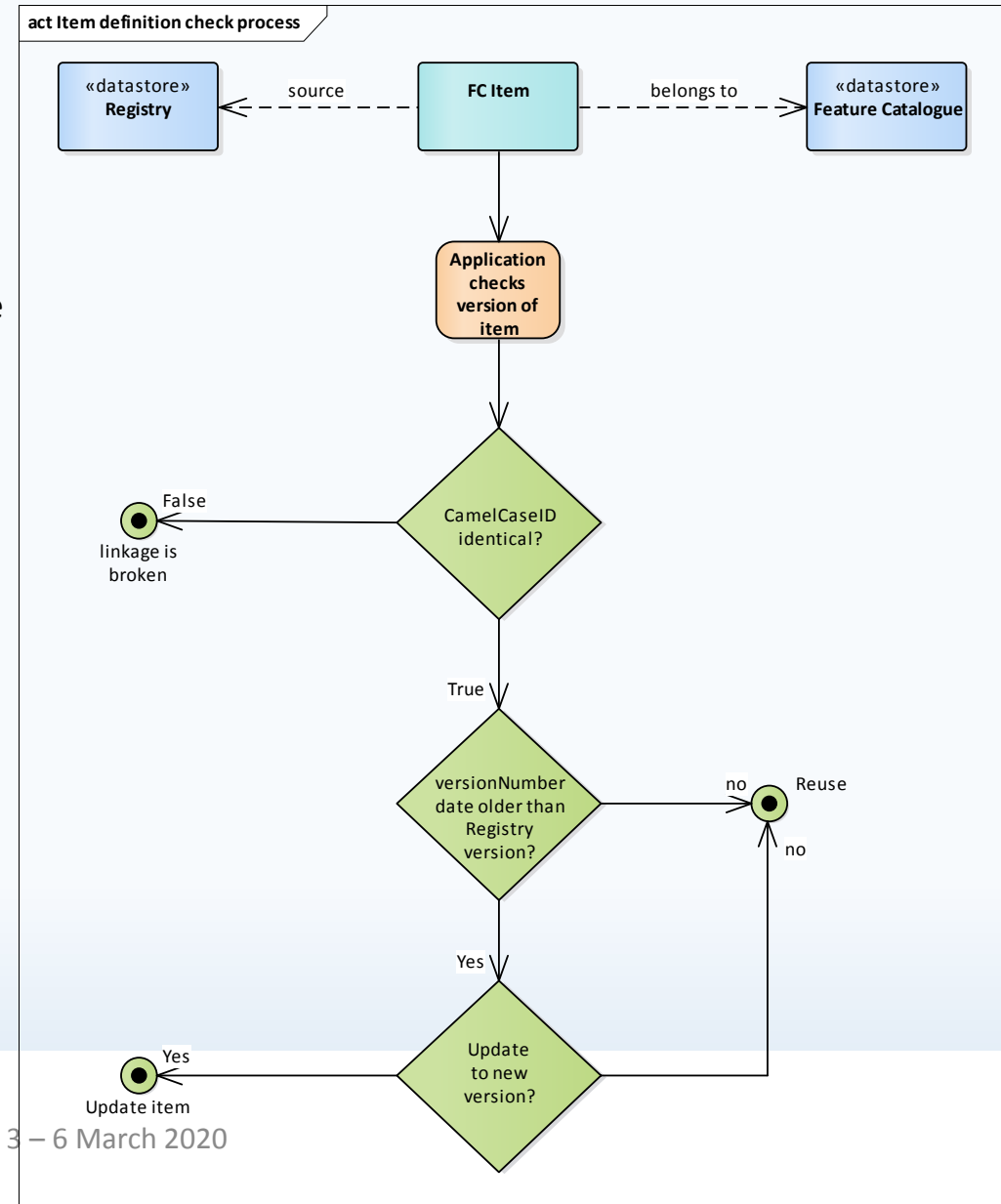
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3. Impact on S-100 FCB

- The decision process of updating definition in the S-100 FCB

The process is the same for S100_FC_Item and S100_FC_ListedValue



4. Conclusions and Recommendations

- In S-100 Edition 4.0.0, registry permits change management of the definitions by way of versioning.
- However there is no mechanism within S-100 Edition 4.0.0 to link to a certain version of a definition to an item in a feature catalogue.
- This paper proposes a change to S-100 FC model of adding the attribute `versionDate` to the classes `S100_FC_Item` and `S100_FC_ListedValue` to support linkage between a feature catalogue and specific versions of Registry content.
- There is an impact to S-100 FCB which is modifications of function to compare between feature catalogue and registry contents.
- It suggests a change of S-100 FC model and a function modification of S-100 FCB that occurs accordingly.



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Action required of S-100WG

- S-100WG5 is invited to:
 - a. **Note** this paper
 - b. **Discuss** the changes of S-100FC model proposed in this paper
 - c. **Approve** the changes into the next S-100 edition 5.0.0



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