Phase 1A – Feature Catalogue Builder Tests

1.0 Access system

Test reference	1.0-001		Requirement	1.1
Test Description				
System Log on - Create a new user account				
Set up				
Open the application and log in as administrator				
Action				
Create a new user account				
Result				
A new user account has been successfully created				

Test reference	1.1-002		Requirement	1.1
Test Description				
System Log on - Log in using a new user account with valid user credentials				
Set up				
Open the application				
Action				
Enter valid new user credentials and attempt to log in				
Result				
Log in is successful; the application can be fully accessed				

Test reference	1.1-003		Requirement	1.1
Test Description				
System Log on - Log in using a new user account with invalid user credentials				
Set up				
Open the application				
Action				
Enter invalid user credentials and attempt to log in				
Result				
Log in is not successful; the application remains inaccessible				

Test reference	1.2		Requirement	1.2
Test Description				
Assign user roles				
Set up				
Open the application				
Action				
Create different user roles				
Result				
The application can be accessed; accounts can be created according to user role				

Test reference	1.3		Requirement	1.2.1
Test Description				
Read only role				
Set up				
Open the application and log in as administrator				
Action				
Assign a user a read only role				
Result				
The application can only be accessed by the user in read only mode				

Test reference	1.4		Requirement	1.2.2
Test Description				
Read/write role				
Set up				
Open the application and log in as administrator				
Action				
Assign the user a read/write role				
Result				
The application can be accessed by the user in read/write mode				

Test reference	1.5		Requirement	1.2.3
Test Description				
Administrator role				
Set up				
Open the application and log in as administrator				
Action				
Assign a user an administrator role				
Result				
The application can be accessed by the user in administrator mode; they can now manage other users roles				

Test reference	1.6		Requirement	1.2.4
Test Description				
Approving official role				
Set up				
Open the application and log in with official role				
Action				
User with approving official role can certify that the feature catalogue is final and apply a digital signature				
Result				
The catalogue can be approved and assigned a digital signature				

Test reference	1.7		Requirement	1.3
Test Description				
Read access to the IHO GI Register				
Set up				
Open application and establish connection to IHO GI Register				
Action				
Log in as specified user and read the IHO GI Register				
Result				
The IHO GI Register can be accessed in read only mode				

2.0 Catalogue Management

Test reference	2.1-001		Requirement	2.1
Test description				
Create Catalogue - Catalogue data input				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Access the feature catalogue and input details for features, attributes, information type, simple attributes, complex attributes, associations, bindings and save as a new version				

Result	
The required details are now entered into the catalogue	

Test reference	2.1-002		Requirement	2.1
Test description				
Create Catalogue - Validate catalogue input				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Validate inputs as per the ISO 19110:2005 and ISO TC 211				
Result				
Catalogue input has been validated				

Test reference	2.2-001		Requirement	2.1.1
Test description				
Input catalogue metadata				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Input basic catalogue metadata, product specification version, catalogue version, etc.				
Result				
Metadata added and saved to the catalogue				

Test reference	2.2-002		Requirement	2.1.1
Test description				
Input catalogue metadata - Validate metadata				
Set up				
Open catalogue				
Action				
Validate the input entered according to standards ISO 19115:2005, ISO TS 19139:2007				
Result				
Metadata in catalogue is validated				

Test reference	2.3		Requirement	2.2
Test description				
Open existing catalogue				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Open existing catalogue				
Result				
The existing catalogue is opened for editing				

Test reference	2.4-001		Requirement	2.3
Test description				
Copy existing catalogue to a new catalogue				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				

Open existing catalogue and copy to a new catalogue
Result
A new catalogue is created within the application

Test reference	2.4-002		Requirement	2.3
Test description				
Copy existing catalogue to a new catalogue - Copy existing catalogue to a new catalogue using read only access				
Set up				
Access the application in read only role				
Action				
Open existing catalogue and copy to a new catalogue				
Result				
Catalogue could not copy to a new name or version number due to insufficient read only privileges; a new catalogue is not created				

Test reference	2.5-001		Requirement	2.4
Test description				
Delete Catalogue - Delete test catalogue				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Select a test catalogue and delete				
Result				
Test catalogue is deleted from the system				

Test reference	2.5-002		Requirement	2.4
Test description				
Delete Catalogue - Delete validated catalogue				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Select existing catalogue and delete				
Result				
Catalogue is not deleted as validated catalogues cannot be deleted				

Test reference	2.6		Requirement	2.5
Test description				
View Catalogue				
Set up				
Log in with specified user credentials and establish a connection to the system				
Action				
Select catalogue and view				
Result				
The selected catalogue can be viewed				

3.0 Edit Catalogue

Test reference	3.1		Requirement	3.1
Test description				
Add items				
Set up				
Login with specified user credentials and establish connection to the system				

Action	
Add items from S-100 GI Registry and save	
Result	
Added items will be displayed in the catalogue	

Test reference	3.2	Requirement	3.1.1
Test description			
Add attributes			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Add new attributes from the S-100 GI Registry			
Result			
Attributes added for features can now be viewed			

Test reference	3.3	Requirement	3.1.2
Test description			
Add features			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Add new features from the S-100 GI Registry			
Result			
Added features can now be viewed			

Test reference	3.4	Requirement	3.1.3
Test description			
Add information types			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select an attribute and add an information type from the S-100 GI Registry			
Result			
Information types added for attributes can now be viewed			

Test reference	3.5	Requirement	3.1.4
Test description			
Add enumerations			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select an attribute and add enumerations from the S-100 GI Registry			
Result			
Enumerations added for attributes can now be viewed			

Test reference	3.6	Requirement	3.1.5
Test description			
Add complex attributes			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select a feature and add a complex attribute from S-100 GI Registry			
Result			
Complex attributes added for features can now be viewed			

Test reference	3.7		Requirement	3.1.6
Test description				
Add associations				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Select features and add an association from the S-100 GI Registry				
Result				
Associations added for features can now be viewed				

Test reference	3.8		Requirement	3.1.7
Test description				
Add association roles				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Select feature and add association role from the S-100 GI Registry				
Result				
Association role added to features can now be viewed				

Test reference	3.9		Requirement	3.2
Test description				
Add items				
Set up				
Login with specified user credentials and establish connection to the system				
Action				
Open catalogue, add items manually and save				
Result				
Added items will be displayed in the catalogue				

Test reference	3.10		Requirement	3.2.1
Test description				
Add attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Select a feature and add attributes in the catalogue				
Result				
Attributes added for a feature can be viewed in the catalogue				

Test reference	3.11		Requirement	3.2.3
Test description				
Add information types				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Select an attribute and add the information type in catalogue				
Result				
Information type added for an attribute can be viewed				

Test reference	3.12		Requirement	3.2.4
Test description				
Add enumerations				
Set up				

Open the application with specified user credentials and access the catalogue	
Action	
Select attribute and add enumerations in catalogue	
Result	
Enumerations added for an attribute can be viewed	

Test reference	3.13	Requirement	3.2.5
Test description			
Add complex attributes			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select a feature and add complex attributes			
Result			
Complex attributes added for a feature can be viewed			

Test reference	3.14	Requirement	3.2.6
Test description			
Add associations			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select features and add associations in the catalogue			
Result			
Associations added to features can be viewed			

Test reference	3.15	Requirement	3.2.7
Test description			
Add association roles			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select features and add an association role in the catalogue			
Result			
Association role added to features can be viewed			

Test reference	3.16	Requirement	3.3
Test description			
Edit catalogue items			
Set up			
Login with specified user credentials and establish connection to the system			
Action			
Open catalogue and select items and edit as required in conformance with ISO 19110			
Result			
Edited catalogue can be viewed			

Test reference	3.17	Requirement	3.3.1
Test description			
Edit feature primitives			
Set up			
Open the application with specified user credentials and access the catalogue			
Action			
Select a feature and edit geometric primitive			
Result			

Edited feature can be viewed in the catalogue	

Test reference	3.18		Requirement	3.3.2
Test description				
Edit feature attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Select feature and edit attributes				
Result				
Edited feature can be viewed with revised attributes				

Test reference	3.19		Requirement	3.3.3
Test description				
Edit complex attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Access the feature and aggregate an attribute to another attribute to form a complex attribute. Assign a complex attribute to another attribute to form another complex attribute.				
Result				
Edited feature with complex attributes can be viewed				

Test reference	3.20		Requirement	3.3.4
Test description				
Edit information type attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Access a feature and edit an associated information type attribute				
Result				
Revised information type can be viewed				

Test reference	3.21		Requirement	3.3.5
Test description				
Edit enumerations				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Edit the enumeration list of values for an attribute				
Result				
Revised attribute enumeration values can be viewed				

Test reference	3.22		Requirement	3.3.6
Test description				
Edit catalogue details				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Edit features, attributes, geometric primitives, binds, enumerations, complex attributes and information type in conformance with ISO 19100				
Result				
Revised catalogue details can be viewed				

Test reference	3.23		Requirement	3.3.7
Test description				
Edit associations				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Edit associations between features (structure/equipment & supports)				
Result				
Edited association of features can be viewed				

Test reference	3.24		Requirement	3.3.8
Test description				
Edit supertypes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Edit a supertype feature				
Result				
Feature objects derived from generic feature objects are edited as per requirement				

Test reference	3.25		Requirement	3.3.8
Test description				
Edit subtypes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Edit the subtype value of a feature				
Result				
Revised feature can be viewed				

Test reference	3.26		Requirement	3.4
Test description				
Delete catalogue items				
Set up				
Login with specified user credentials and establish connection to the system				
Action				
Open catalogue, select an item and delete				
Result				
The selected catalogue item has been deleted				

Test reference	3.27		Requirement	3.4.1
Test description				
Delete feature primitives				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete a feature primitive assigned to a feature				
Result				
Feature primitive has been deleted				

Test reference	3.28		Requirement	3.4.2
Test description				
Delete feature attributes				
Set up				

Open the application with specified user credentials and access the catalogue	
Action	
Delete feature attributes	
Result	
Feature attributes have been deleted	

Test reference	3.29		Requirement	3.4.3
Test description				
Delete complex attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete complex attribute with an aggregation of other attributes assigned to a feature				
Result				
Complex attribute has been deleted				

Test reference	3.30		Requirement	3.4.4
Test description				
Delete information type attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete information type attribute assigned to a feature				
Result				
Selected information type attribute has been deleted				

Test reference	3.31		Requirement	3.4.5
Test description				
Delete enumerations				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Access feature and delete enumeration value				
Result				
Enumeration value has been deleted				

Test reference	3.32		Requirement	3.4.6
Test description				
Delete catalogue details				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete required details from the catalogue file				
Result				
Catalogue file details have been deleted				

Test reference	3.33		Requirement	3.4.7
Test description				
Delete associations				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete association between two instances				
Result				

Selected association has been deleted

Test reference	3.34		Requirement	3.4.8
Test description				
Delete dataset attributes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete attributes; simple or complex as per requirement				
Result				
Selected dataset attributes have been deleted				

Test reference	3.35		Requirement	3.4.9
Test description				
Delete supertypes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete supertype from feature				
Result				
Supertype has been deleted from feature				

Test reference	3.36		Requirement	3.4.10
Test description				
Delete subtypes				
Set up				
Open the application with specified user credentials and access the catalogue				
Action				
Delete subtype from features				
Result				
Subtype has been deleted from feature				

4.0 Output Catalogue

Test reference	4.1		Requirement	4.1
Test description				
Export .XML catalogue file				
Set up				
Open the application; log in with specified user credentials and establish connection to the system				
Action				
Open and review the feature catalogue and export to .XML				
Result				
The feature catalogue can be exported into machine readable format; .XML				

Test reference	4.2		Requirement	4.2
Test description				
Export HTML style sheet and create a PDF version of the catalogue				
Set up				
Open the application; log in with specified user credentials and establish connection to the system				
Action				
Open XML in HTML format using style sheet and export to PDF version				
Result				

Catalogue exported to a PDF version

5.0 Validation

Test reference	5.1		Requirement	5.1
Test description				
Is the catalogue valid to the schema				
Set up				
Open the application; log in with specified user credentials and establish connection to the system				
Action				
Select the feature catalogue and validate against S100 FC schemas				
Result				
Validated the feature catalogue against the feature schema				

Test reference	5.2		Requirement	5.2
Test description				
Is the catalogue valid for content				
Set up				
Open the application; log in with specified user credentials and establish connection to the system				
Action				
Select the feature catalogue and review the content structure, comparing it to S100 FC content				
Result				
Validated feature catalogue for content				

6.0 Digital Signature

Test reference	6.1-001		Requirement	6.0
Test description				
Digital Signature - Create digital signature				
Set up				
Open the application; log in with approved official user credentials and establish connection to the system				
Action				
Create a digital signature				
Result				
Created a digital signature; it is in the system and ready for use				

Test reference	6.1-002		Requirement	6.0
Test description				
Digital Signature - Approve catalogue				
Set up				
Open the application; log in with specified user credentials and establish connection to the system; open the validated feature catalogue				
Action				
Approve the validated feature catalogue				
Result				
Feature catalogue is now approved				

Test reference	6.1-003		Requirement	6.0
Test description				
Digital Signature - Assign a digital signature				

Set up	
Open the application; log in with specified user credentials and establish connection to the system; access the approved feature catalogue	
Action	
Assign a digital signature	
Result	
The approved feature catalogue has been signed with a digital signature and is ready for distribution	

Test reference	6.1		Requirement	6.0
Test description				
Digital Signature - Open and edit a signed feature catalogue				
Set up				
Open the application; log in with specified user credentials and establish connection to the system; access a signed feature catalogue				
Action				
Open feature catalogue and attempt edits				
Result				
No edits should be possible to a catalogue that has a digital signature				