

**21st IHO-TSMAD Meeting
Vancouver, Canada, 29th November - 3rd December 2010**

Paper for Consideration by TSMAD

Unique Identifier for S-100 Feature Catalogues

Submitted by:	TSMAD Chair
Executive Summary:	This paper prompts discussion on the use of unique identifiers in S-100 Feature Catalogues.
Related Documents:	1. S-100
Related Projects:	1. S-101

Introduction / Background

1. Development of the S-100 Feature Catalogue Builder has identified a requirement to decide what should be used as the unique identifier for each element; features, simple attributes etc in S-100 Feature Catalogues. A unique identifier is required in the Feature Catalogue so that software systems can distinguish different objects.

Analysis/Discussion

2. The S-100 GI Registry generates an integer value unique to each feature or attribute. This unique value could be used in the Feature Catalogue as the identifier of each feature/attribute. This approach would be consistent with a common identifier both in the registry and in software systems for the display and manipulation of data.

3. Alternatives would be the S-57 object/attribute identifiers which are 3 digit integers. The advantage of this approach would be backwards compatibility with S-57 and reduced data volume from the use of smaller numbers. However we need to allow for larger numbers as many more items may be added and used in future product specifications.

4. Another alternative would be to use the camel case identifier which is stored in the S-100v GI Registry in order to provide interoperability with GML and other OGC geospatial standards. The disadvantages of this approach are that using non-integer identifiers will be more problematic and less efficient for software systems and data volume will increase.

Conclusion

5. The choice of which identifier to use in S-100 Feature Catalogues requires discussion at TSMAD21.

Action Required of TSMAD

7. TSMAD is invited to: Discuss which unique identifier should be used in the S-100 Feature Catalogues.