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## Introduction of MRN in Product Specifications



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# S-100 ECDIS

How should the S-100 ECDIS ensure a proper interoperability of different information of the same object in several layers ?

# Overview

- Marine Resource Name (MRN) concept developed by IALA
- MRN concept was integrated in S-100 Edition 5
- S-100 Edition 5 advises that the specification of persistent global identifiers for feature and information objects is strongly recommended
- S-100 compliant product specifications are developing
- necessity to cross check whether the MRN concept is implemented in each product specification seeking operational status

# Overview

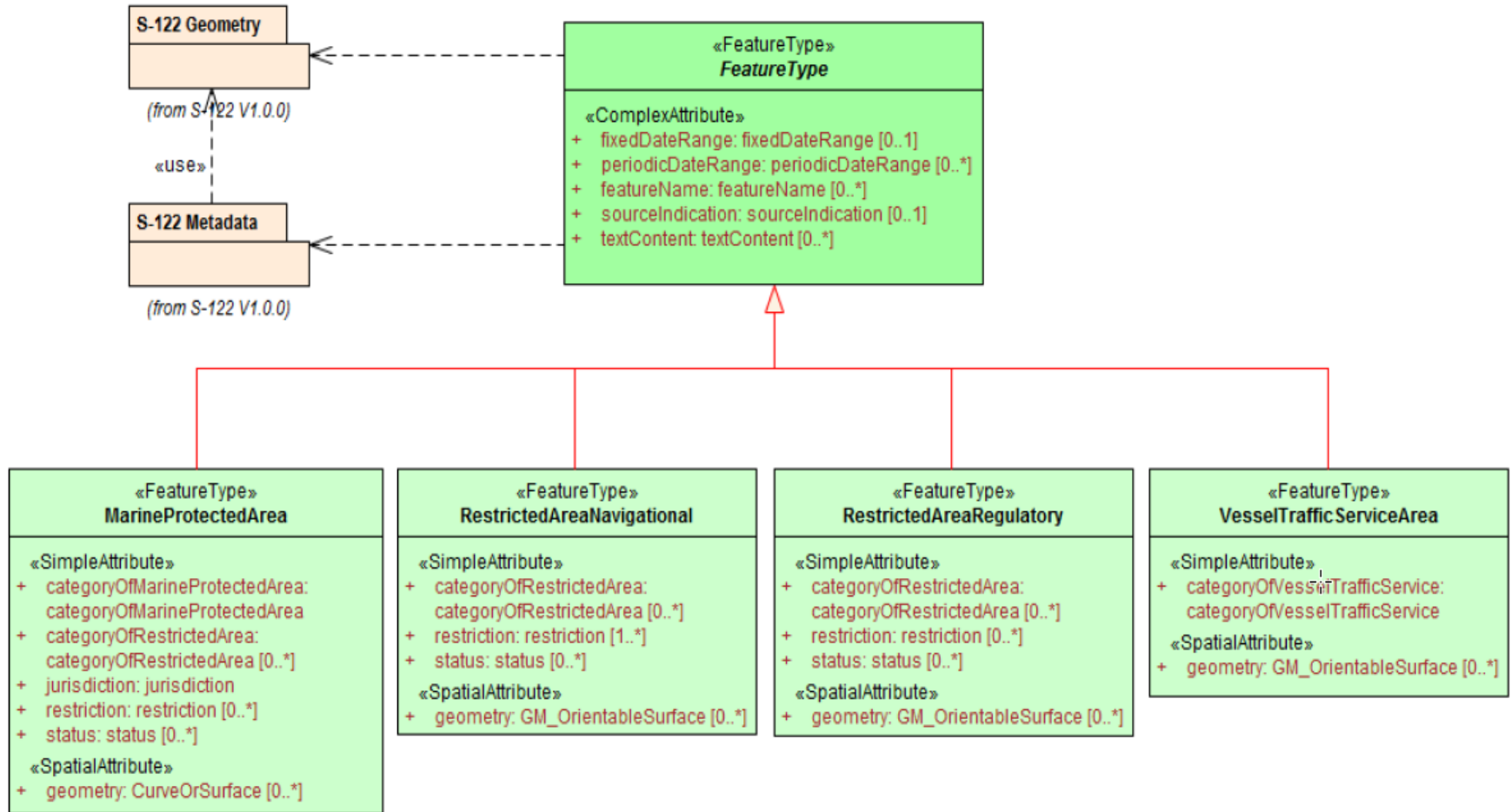


Fig 1: S-122 Feature types

# Analysis

- S-100 ECDIS concept intends interoperability between various products
- to enable interoperability, the ECDIS software requires a mechanism to identify identical features of each S-100 product
- employing MRN ensures further that information in ECDIS could be tailored according to the ship's condition
- BSH crosschecked various S-100 compliant product specifications and detected that this concept is currently not reflected

## Analysis / Discussion

- common feature MRN for both the features in S-122 and S-101 would ensure that S-100 compliant ECDIS can link these two instances
- S-100 is stating that an MRN should not be assigned to each individual feature, we strongly recommend to do so
- prepare the products for future interoperability possibilities
- better to have this in place as early as possible instead of trying to implement MRN at a later stage when products are in operational use

# Conclusion

- implementation of MRN in various S-100 compliant product specifications is essential to unveil the full interoperability function of future ECDIS
- supports the interoperable multilayer data management concept
- MRN concept is sufficiently described in S-100 Edition 5 and ready for implementation in S-100 compliant product specifications

# Recommendations / Actions required

- 1.) Note and discuss this presentation
- 2.) Consider in which NPUB product specifications the MRN implementation is useful
- 3.) Implement the MRN structure for each individual feature in the relevant NPUB product specifications to ensure the widest possible interoperability with other S-100 products

(Please refer to German Input Paper)