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| From: VTS Committee | VTS49-12.1.2.1 |
| To: ARM and ENAV Committees | 14 October 2020 |

LIAISON NOTE

S-212 Referencing to other S-100 Product Specifications

# INTRODUCTION

The VTS Committee has a task to develop a Product Specification under the S-100 framework for VTS (task 2.3.1). The task has been assigned to Working Group 2 (Technology) and the present work is focusing on the ship to ship and ship to shore data exchange for VTS operations within S-212, which is a Product Specification for the VTS Digital Information Service. The detailed task description can be found in document “VTS49-7.1.2 From VTS48 - VTS Task Register 2018-2022 (20191010).docx” under task 2.3.1.

This work will continue intersessionally and the input from ARM and ENAV Committees are highly appreciated and needed for making progress on VTS tasks 2.3.1.

The following assumptions have been made:

S-212 intents to notify ships of relevant S-100 products. In order to minimize exchange payloads and support future developments, the method of notification needs to be flexible.

The method of notification also needs to be elaborated and agreed with all stakeholders. In general, the VTS Committee assumes that this is done by some sort of referencing. Referencing can be done at different levels, e.g. dataset level or service level.

Dataset level referencing allows VTS to be very specific about datasets, while service level referencing only grants VTS the ability what services are important or available for that area.

# Method of referencing

**Dataset level referencing:**

There are several methods to make references to other datasets.

In general there are three methodologies of referencing:

1. Incapsulate the data within the dataset
2. Reference to other file in exchange set
3. Referencing to datasets not included in the transmission

In order to minimize payload size and make the product specification more futureproof, option 3 seems the most favourable.

This leaves some questions on clarifying on how the referencing is done and requires assumptions.

Two assumptions were made regarding the referencing:

1. A harmonised naming of the datasets
2. Availability and accessibility of the datasets

It is noted that the need for harmonised naming of datasets can have a large impact on ongoing developments by all stakeholders of S-100 products.

**Service level referencing:**

In general there are 2 options for referencing in a VTS context:

1. Referencing to specific services in a certain area using local implementation of international standards (e.g. OGC standards)
2. Referencing done with IALA guideline on the Specification of e-Navigation Technical Services (G1128)

It is assumed that the preferred methodology is to use G1128, since that would imply that services are described and registered internationally.

**What kind of referencing will be used in S-212 ?**

The taskgroup is of the opinion that there are three options:

1. Only use dataset level referencing
2. Only use service level referencing
3. Using both dataset and service level referencing



Figure 1 - Illustrative examples of the three options mentioned above (not technically accurate)

It is suggested that S-212 supports both dataset and service level referencing (option 3). Noting that this option increases the implementation burden on the ship side, while giving shore side more flexibility when considering local circumstances such as infrastructure and bandwidth availability.

# ACTION REQUESTED

The ARM and ENAV Committees are requested to:

1. *Discuss and comment on the assumptions made by the VTS Committee and provide relevant input to correspondence group taskleader (*[*wim.smets@mow.vlaanderen.be*](mailto:wim.smets@mow.vlaanderen.be)*) preferably before 16 November 2020..*
2. *ARM and ENAV Committee participants wishing to join the intersessional group on the developments of VTS task 2.3.1 (Develop a Product Specification under the S-100 framework for VTS) should contact group taskleader Wim Smets (*[*wim.smets@mow.vlaanderen.be*](mailto:wim.smets@mow.vlaanderen.be)*) by 16 November 2020.*