Input paper: [[1]](#footnote-1) ENG19-3.1.2.7

Input paper for the following Committee(s): Purpose of paper:

**□** ARM X ENG **□** PAP X Input

**□** DTEC **□** VTS **□** Information

Agenda item [[2]](#footnote-2) n.n

Technical Domain / Task Number 2 Radionavigation services

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S-240 data service through S-200 test bed system

# Summary

IALA maintains a list of DGNSS station, and the IALA ENG committee has developed the S-240 DGNSS station almanac product specification and reviewing revisions to S-240 1.2. The list of DGNSS stations around the world is managed by IALA, and tabular form is currently provided through the IALA website. This input proposes an S-240 data service through a web-based S-200 test bed system to improve the usefulness of DGNSS lists as the S-240 is developed. The proposal aims to encourage the use of the S-240 data and help efficiently manage DGNSS station information between IALA members and the Secretariat.

## Purpose of the document

In order to recommend the use of the S-240 product specification and support information utilization by IALA members, this input proposes a plan to create and service an S-240 dataset through the S-200 test bed system.

## Related documents

* ENG18-3.2.2.3 Progress of S-240 update
* Drafted S-240 IALA DGNSS Station Almanac Product Specification (Edition 1.2.0, April 2024)

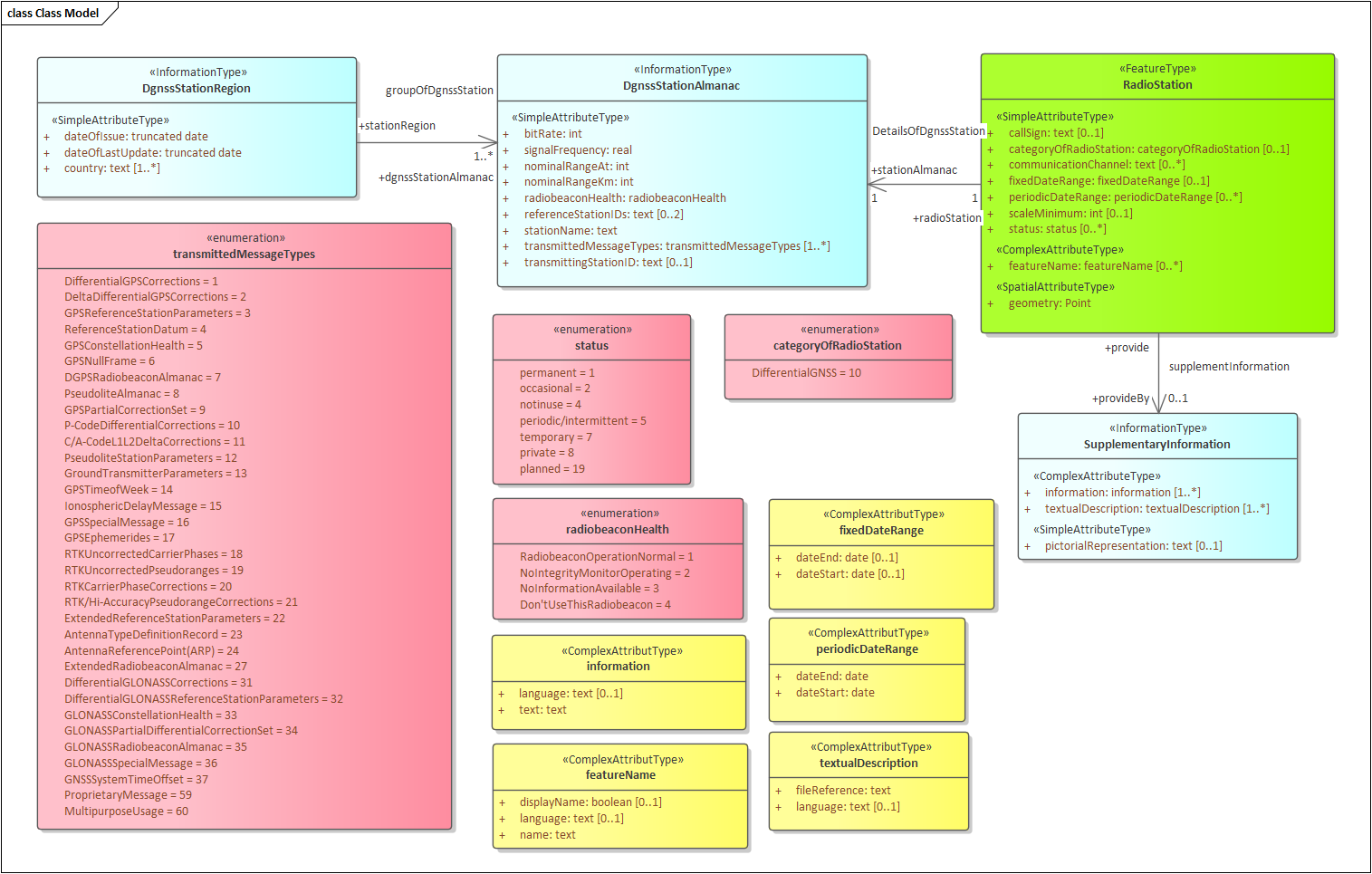
# Background

The IALA ENG committee developed the S-200 series product standard in the PNT domain, and among the S-200 series, the S-240 product specification for exchanging DGNSS station information was established and is currently in a revision process. As a major revision, in accordance with the International Hydrographic Organization's GI Registry operation and S-100 tool support, annexes such as FC, PC, and DCEG of the S-240 were developed. IALA secretariat and some of member states produced S-240 data. The S-240 are supposed to be updated considering opinions during the testing process.

# Discussion

The IALA ENG committee developed the S-240 as a common data model for exchanging DGNSS Station almanac, and proposed revision to the ed. 1.2 to reflect S-100 revision of IHO. Figure 1 is an application schema diagram that explains the content and structure of S-240 data. S-240 aims to exchange information of DGNSS Station, where region means country, and DGNSS Station which means detailed information of DGNSS Station included in a country or region. The feature type of DGNSS Station Almanac is related to the Radio Station feature type, which refers to the DGNSS Station of the S-101 ENC product specification.

The S-240 Development Task Group of ENG Committee has proposed revision the product specification by reflecting the review of ENG members, and production and use of S-240 data is required based on S-240 Ed. 1.2.



1. Application schema of S-240 DGNSS Station Almanac

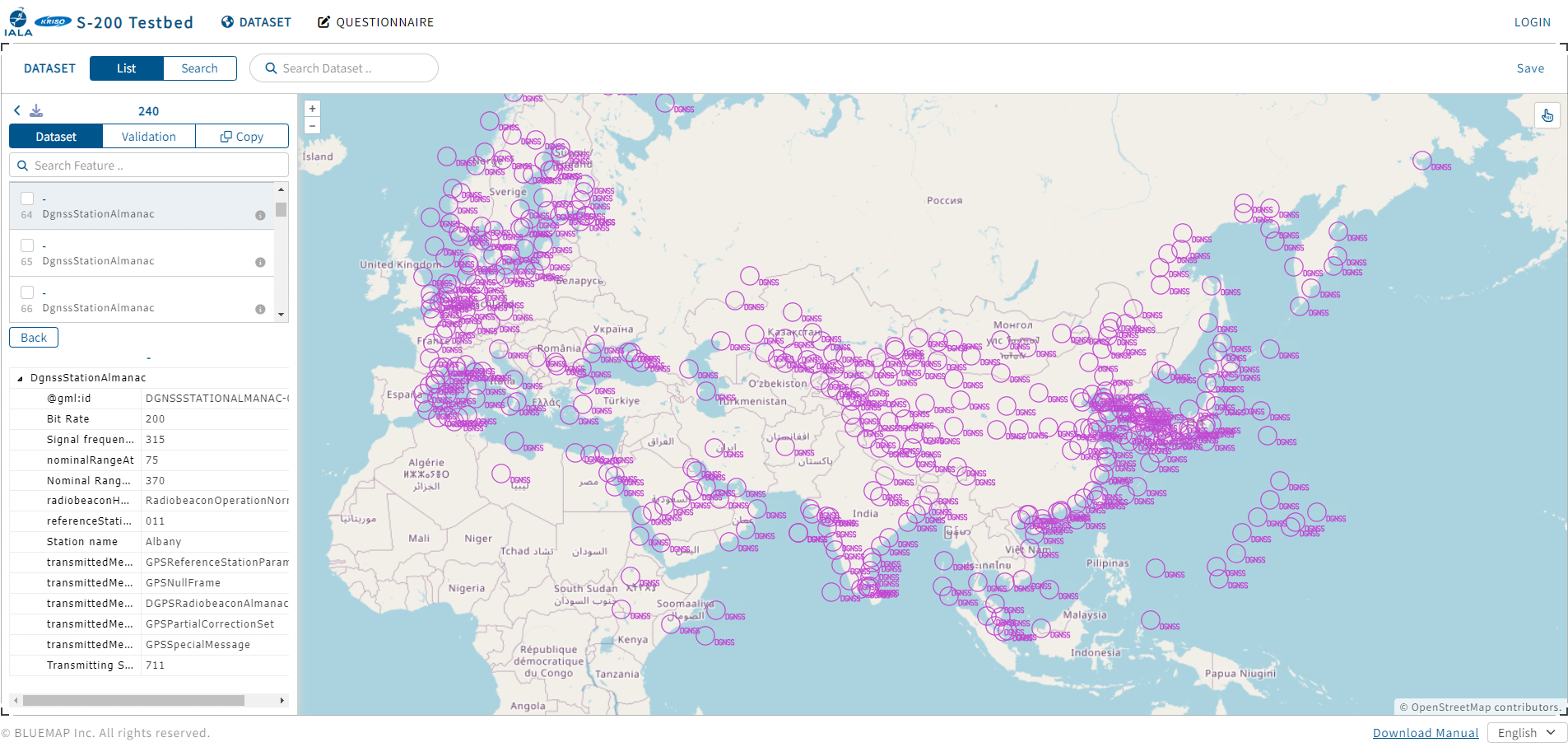
The IALA Secretariat is an international organization in charge of technical cooperation and standards in PNT domain. It manages the list of DGNSS stations around the world and is cooperating with IALA member states on the list of DGNSS stations.

The Netherlands has established an e-Navigation portal (https://www.e-navigation.nl/) and is providing a list of DGNSS Station using the source provided by IALA. The list information provided in the web interface can be downloaded in CSV, XML, and XLS.

The IALA ARM committee developed a web-based S-200 test bed system for the development of S-200 series product specification and to support the production and testing of S-200 data. The S-200 test bed is a system that can input and test all S-200 series data in GML, and can apply S-240 DGNSS Station data.

Prior to revising S-240 ed. 1.2, the ENG committee needs to identify the usability and improvements of the S-240 product specification through the production and application of S-240 test data. This input intends to propose a testing and service through the S-200 test bed as follows.

* Use the source of S-240 data provided by Netherlands e-Navigation web page
* Production of S-240 data based on S-240 ed. 1.2, loading and releasing S-240 data on S-200 test bed
* Validation and utilization of S-240 data
* Experimental operation of S-240 data service managed by S-240 task group



1. S-240 data service through S-200 testbed system - <http://new-tds.bluemap.kr/>

# Action requested of the Committee

The Committee is requested to consider the plan of S-240 data service via S-200 testbed system, and take actions as appropriate.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)