**Input paper:** DTEC3-5.2.1.4

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

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ARM  ENG  PAP  Input

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**Agenda item** 5.2

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SECOM Service Design Template Recommendations

# Summary

According to IEC 63173-2 SECOM, some recommendations are made for the improvement of DTEC2-5.2.1.5.1 IALA Service Design - Template SECOM REST, with further explanation on the architecture of SECOM technical service，and with optimization of interface data models and descriptions.

## Purpose of the document

SECOM Service Design template provides a secure communication service design solution, and S-100 technical services can be designed according to the SECOM template to meet business requirements and data security protection requirements.

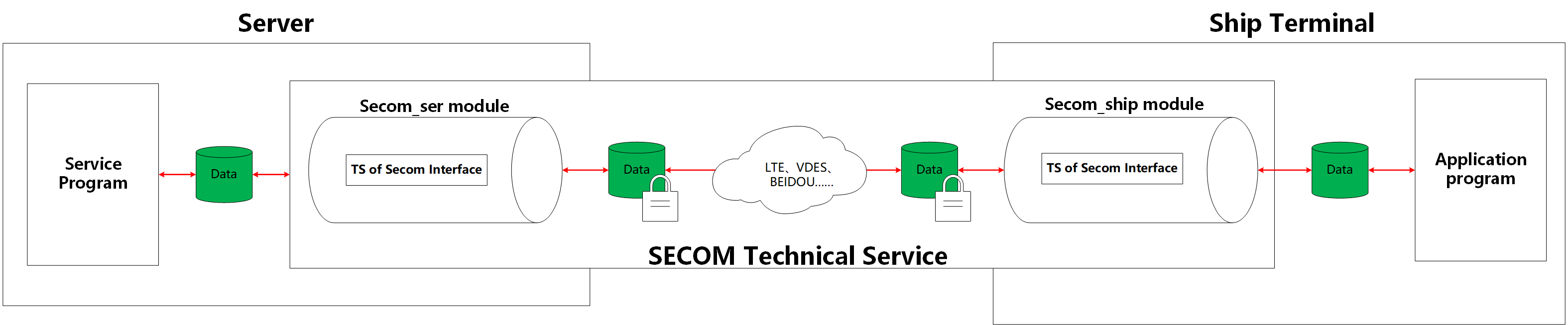
# Background

With the continuous development of digital maritime services, lots of technological services are carrying more and more important information. Some information needs to be kept confidential, some information needs to be protected from tampering, and some information needs to be safely delivered to recipients. Due to the need for wireless communication channels between ships and shore, the bandwidth of wireless communication is limited and valuable. In order to realize the purpose of ensuring information security, the SEOCM service design template is studied and perfected to provide protection for data interaction in technical services.

# Discussion

The following modification recommendations are proposed for DTEC2-5.2.1.5.1 IALA Service Design - Template SECOM REST before DTEC2.

1. In Section 4.1 of DTEC2-5.2.1.5.1, a description of the service design architecture is recommended to be added. Compared with non-SECOM technical services, SECOM technical services connect the server and ship-end applications, as shown in the figure below.



2. In Section 6.2 of DTEC2-5.2.1.5.1, the overview content should be modified. Both onshore service and ship-end application program should implement " upload " interface, thus onshore service can push data to the ship-end program via ship-end upload interface.

3.As Section 6.3 and 6.3.2 of DTEC2-5.2.1.5.1 is concerned, firstly, the overview should be modified. Both onshore service and ship-end application program need to implement " get " interface, thus onshore service can pull data from ship-end program via ship-end get interface. Secondly, the Operation Parameters Data Model of get interface in Section 6.3 should be improved, by adding a custom parameter "parameter" to the data model, to provide query condition parameters for get requests.

4. In section 6.7.2 of DTEC2-5.2.1.5.1, the Operation Parameters Data Model of the get summary interface should be improved, by adding a custom parameter "Parameter" to the data model to provide query condition parameters for the get summary request.

5. In section 6.10.2 of DTEC2-5.2.1.5.1, the Operation Parameters Data Model of the subscription interface, should be improved, by adjusting the original parameter "geometry" to the custom parameter "Parameter" to provide the subscription request with geometry, keyword, feature type, information type, and other query conditions.

# References

1. IEC 63173-2 SECOM
2. DTEC2-5.2.1.5.1 IALA Service Design - Template SECOM REST
3. IALA G1128

# Action requested of the Committee

The committee is requested to note the recommendations in this document and take actions as appropriate.