**ABSTRACT SUBMISSION**

**Topic No.:** 6. Resilient PNT (eLoran)

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**ABSTRACT**

Title: eLoran ASF data modelling and utilization for the S-245 Development

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Abstract: IALA decided to develop S-20X based product specifications on eLoran and S-245 is the product specification of eLoran ASF data. In this study, S-245 modelling is carried out based on requirements of RTCM SC-127 Minimum Performance Standards for eLoran Equipment and features of the gridded spatial models. First of all, analysis of reference document and text based ASF sample file has been done and the requirements of the model development are figured considering the ASF’s extendibility. S-245 model has been developed referring to IALA guideline No. 1106. In terms of scaling, an eLoran ASF data for the specific area can have various ASF maps according to multi temporal measures and multi transmitters. Different ASF maps are needed in order to improve the accuracy performance of eLoran equipment. ASF data for the specific area includes the many ASF maps and users can utilize this data to estimate the specific position and therefore S-245 product specification should be developed in order to enhance the application of ASF maps. An eLoran ASF data has some geospatial features and the application of ASF map is based on regular grid model. This study introduce the S-245 model diagram, the analysis results of performance requirement and geospatial functions of ASF data. This data model can support to manage the ASF data systematically and to improve the utilization of ASF data as geospatial information.