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## Status of ENC Production and Distribution in India E-mail: <nho@sancharnet.in>

# (A) Introduction

National Hydrographic Department is the sole authority for the production of paper charts and Electronic Navigational Charts (ENC's) covering our area of responsibility from cape of Good hope to Singapore to cater for the safety of navigation at sea. The advancement in digital technology and its influence on cartography has necessitated the need for switching over from age old analogue cartography to digital cartography. To cater for the above, the department has recently installed an Automated Cartographic System (ACS) and Image Setter, capable of producing the conventional paper chart and the recently introduced ENCs, meet the standards and specifications laid down by the International Hydrographic Organisation (IHO) and the International Maritime Organisation (IMO).

#### (B) ENC Production

The National Hydrographic office, Dehra Dun, India, is pursuing its program of the production of ENCs in S-57 Edn. 3.1 format incorporating the latest hydrographic data available. About 265 ENCs covering West Coast, East Coast, Lakshadweep and Andaman & Nicobar Islands are at different stage of production. The task of digitization & production of ENCs, as a one time measure, has been off loaded to a private firm M/S Intelligent Information Conversion Ltd., Hyderabad, India to accelerate the production of ENCs. NHO provides inputs in the form of updated navigational charts and the firm submits digital data sets for validation. NHO offers its comments during validation against standard QA & QC S/W. The corrected data sets are finally submitted to NHO.

Sea trials for 59 ENCs have successfully been completed and for remaining are in progress. ENC coverage by India is enclosed.

## (C) Marketing of ENC

Presently NHO is working on a strategy for marketing of ENCs which needs expertise to handle sale of ENCs with its updates. The ENCs would be marketed to the maritime community after successful sea trials. The process of dissemination of digital data sets besides other aspects involves the following :-

- (i) Copyright & privacy protection
- (ii) Data transmission
- (iii) Data Security & encryption
- (iv) Updation and its dissemination and
- (v) Pricing structure

Long term commercial partnership for marketing of various digital products and their updates by the Department is also being envisaged.

The office intends to offload the task to a firm which has sufficient expertise, experience and the requisite confidence to undertake the task.

India is looking forward for members cooperation in this regard.