

## Paper for Consideration by Nautical Cartography Working Group

### Future of INT Chart Scheme?

Submitted by :	National Hydrographic Office
Executive Summary:	Future of INT Chart Scheme?
Related Documents:	S-4, S11 Part A & B
Related Projects:	ICCWG, NCWG, S-100WG, ENCWG

### Introduction / Background

The overall objective of INT charts is to facilitate International Mariner for safe entry and exit from ports by providing series of charts/ENCs covering open seas to the ports and harbours. The content of INT charts must be sufficiently complete and comprehensive in English language to enable international mariners to navigate to their destination; there should be no need for them to use larger scale national charts. To meet the objective of INT Charting, entire world has been divided into 15 International Charting Regions from A – N, under the coordinating responsible Regional Hydrographic Commissions (RHCs).

In general, overlaps between INT charts should be sufficient to enable the mariner to safely transfer their position from one chart to the next. They should be designed so that changing charts in an area of complicated navigation is avoided. Larger overlaps may sometimes be necessary where, for example, an important strait is covered on two charts to allow an adequate depiction of both approaches.(S-11, Part 'A' Edn. 3.1.0 of 2018, para 3.7.1). If there is no paper chart then overlap no more relevant as the navigator is going to get seamless ENC data. However the cell name and cell boundaries may get affected by the new S-100 compliant products.

### Analysis / Discussion

Blocks of approved INT chart numbers, sub-divided on a regional basis, have been allocated to major areas. These numbers are listed in S-4, A-204, together with the principles by which the numbers are allocated within a region. There should preferably be a logical order to the allocated INT numbers (for example, a series of charts numbered sequentially around a coast). In view of gridded ENC scheming for creation of S-101 product creation, the INT Chart numbering as per S-4, A204.2 may need a revision including regional INT chart boundaries. The recent developments in digital charting toward migrating into S100 compliant product generation the existence of INT charts is also a question mark. Accordingly the S-11 Part 'B and INTtoGIS may need a revision.

## **Recommendations**

- (i) Keep the INT Chart Scheme only for Route/ Planning Charts
- (ii) Let the Regional demarcation of areas to be retained and the respective RHCs to declare the serial numbers of their grids covering INTcharts.
- (iii) Since the gridded scheme ENC data is seamless on an ECDIS, there is no question of overlap of ENC/ chart.
- (iv) Revision of S11, Part A & Part B, S-4 and INTtoGIS may be obvious in view of migration into S-100 Compliant product creation.
- (v) It is HO's call to continue their paper chart production for the non ECDIS mandated vessels (eg. Small commercial, fishing, leisure etc) operating in their national waters.
- (vi) Paper chart specifications will remain as standards for nautical products.

## **Conclusion**

Since the HOs are moving ahead toward paperless bridge, there is a need to revisit the INT Chart Scheming for the contemporary changes in digital chart production. HSSC Action Item 15/54 and IRCC 15 Recommendation 17 are relevant in this regard.

## **Action Required of NCWG**

NCWG is invited to

- (a) Note this paper
- (b) Escalate the issues to the HSSC, IRCC, RHCs, ICCWG, ENCWG, DQWG and S100WG.