

12th CHRIS MEETING
Valparaiso, Chile, 23-25 October 2000

STATUS OF ENC PRODUCTION WORLDWIDE
(Estimates – October 2000)

Below is a table giving an estimate of the status of S-57 data production by the IHO Member States, as of September 2000. They have been compiled at the IHB from information provided by Hydrographic Offices. Attention is drawn to the following points:

- The figures given in the attached table are only estimates, which may not reflect the reality in some instances.
- Figures in the table indicate the number of "equivalent paper charts". This means that the unit used to express the geographical area covered by ENC data is the well-known paper chart. This is because the terms "ENC" and "ENC Cell" appear to be differently interpreted as regards their geographical coverage. ENC limits may significantly vary, depending on the producing agency. An ENC cell may follow a regular structure, like in S-52 Version 2, or it may follow paper chart limits. An ENC may also be formed from one or several cells, etc.
- Not all IHO Member States are listed in the table and ENC data may have been produced by some Member States, of which the IHB is not aware.

Besides the production of ENCs, it should be noted that NIMA (USA) has an ongoing project for a worldwide production of DNCs (Digital Nautical Charts), in VPF format. Further information on DNC is available from (www.nima.mil).

The European RENC, which operates under the name of PRIMAR, started an operational official ENC service, including the provision of updates, on 1 October 1999. ENC data from the Hydrographic Offices of, at least, the following countries are distributed through PRIMAR: Denmark, Finland, France, Germany, Norway, Portugal, Sweden and UK. Further information on PRIMAR is available from (www.primar.org).

Additional information on the status of ENC data production and availability may be obtained from Hydrographic Offices' web sites. The following list, which provides some addresses, is not exhaustive: Australia (www.hydro.navy.gov.au), Brazil (www.mar.mil.br/~dhn/dhn.htm), Canada (www.chs-shc.dfo-mpo.gc.ca and www.ndi.nf.ca), Chile (www.shoa.cl), Japan (www.jhd.go.jp), Rep. of Korea (www.nori.go.kr), and Singapore (www.mpa.gov.sg).

**Status of ENC Data Production by IHO Member States
(Estimates – October 2000)**

IHO Member State	ENC Data		Updating service provided	Commercially available
	No Paper Charts ⁽¹⁾	No ENC Cells		
Argentina	Project to start 2000			
Australia	48 ⁽⁴⁾		N	N
Belgium	1		N	N
Brazil	3		N	N
Canada	300	450	Y	Y
Chile	38	38	Y	Y
China		81	N	N
Colombia	Project to start 2000			
Croatia	Project to start 2001			
Cuba	5		N	N
Denmark	50		Y	Y ⁽²⁾
Ecuador	Project to start 2000			
Estonia	20		N	N
Finland		9	Y	Y ⁽²⁾
France		58	Y	Y ⁽²⁾
Germany	16	16	Y	Y ⁽²⁾
Greece	Project to start 2000			
India	100		N	N
Indonesia ⁽³⁾	-	-	N	N
Italy		56	N	N
Japan ⁽³⁾	295	345	Y	Y
Korea (Rep.)	210		N	N
Malaysia ⁽³⁾	2		N	N
Netherlands	6		Y	Y ⁽²⁾
New Zealand		12	N	N
Norway (NHS)	40	100	Y	Y ⁽²⁾
Peru	85		Y	N
Philippines	Project to start 2000			
Portugal	6		Y	Y ⁽²⁾
Russia	2000		N	N

IHO Member State	ENC Data		Updating service provided	Commercially available
	No Paper Charts ⁽¹⁾	NO ENC Cells		
Singapore ⁽³⁾	14		Y	Y
South Africa	10		N	N
Spain	14		Y	Y ⁽²⁾
Sweden		36	Y	Y ⁽²⁾
Turkey	5		N	N
Ukraine	10		N	N
UK	43	56	Y	Y ⁽²⁾
USA (NOAA)		65 ⁽⁵⁾	N	N
Venezuela	Project to start 2000			

- (1) geographical coverage of ENC data, in terms of paper charts through PRIMAR (European RENC)
- (2) Indonesia, Japan, Malaysia and Singapore have jointly produced 6 ENC cells in Malacca and Singapore Straits plus 27 plans
- (3) 190 critical theme ENCs collected
- (4)
- (5)