SWPHC8-20

IHO SPECIAL PUBLICATION S-55 "STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD-WIDE" QUESTIONNAIRE

Country: Australia

Date of validity of information: 15 September 2007

Are any amendments required to your entry in the IHO Year Book? If so, enter below. Update is particularly important on your outsourcing strategy and on your ability to provide contract survey or charting support to other states in your RHC area.

Updated information will be forwarded in October 2007

1. HYDROGRAPHIC SURVEYING

1.1 Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the <u>EEZ</u>: (Please refer to the guidance given in the introductory text "Analysis of the Status of Surveys".)

Survey coverage, where:

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

	A	В	С
Depths < 200m	35	20	45
Depths > 200m	10	5	85

Amplifying information:

1. Special national circumstances which influence the statistical break-down above (e.g. geographical factors such as narrow continental shelf or fringing reefs, or constraints such as areas of unstable seabed which require a routine resurvey programme):

Includes Lord Howe Island. AHS highest priority remains Torres Strait and northern Great Barrier Reef. Ongoing effort is being provided to improve accuracy of Prince of Wales Channel (Torres Strait) to IHO 'Special' Order. Several areas within Torres strait exhibit sand wave formations, which may require routine re-survey.

- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International (i.e. between hub ports):

Torres Strait and its approaches require additional survey work to increase area surveyed to increase accuracy and improve charting for safe navigation. Survey operations are planned to achieve IHO 'Special' Order for Prince of Wales Channel (Torres Strait) while other areas of torres Strait remain difficult to survey given the seasonal weather conditions, complex reef systems and complex tidal regimes.

Additionally, further survey work is required in the Arafura Sea and in coastal approaches in the NW WA area (eg. Dampier, Port Headland). This survey work is being conducted using MBES and LIDAR technology.

(2) Regional (i.e. between hub ports and feeder ports):

NONE

(3) Internal (i.e. from feeder ports to other national ports; cruise liner routes):

Areas within the Inner Great Barrier Reef (IGBR), Joseph Bonaparte Archipelago, Torres Strait and NW WA coast remain unsurveyed. Primarily, these areas contain significant, complex reef systems that warrant special consideration when conducting survey operations. More recently, increased cruise liner interest in coastal passage between Broome and Darwin will warrant further survey operations in this area to allow safe navigation.

b. Ports and Approaches:

NONE

c. Other (fisheries; offshore industry):

In support of fisheries protection and border security, increased survey operations are underway in Torres Strait. These survey operations have been out-sourced to external survey companies.

1.2 <u>Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ of dependent territories:</u>

<u>Territory</u>: Australian Antarctic Territory (AAT); Christmas Island; Cocos Islands; Norfolk Island; Macquarie Island; Heard Island

Survey coverage, where:

Depths < 200 mDepths > 200 m

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

10

C = percentage EEZ which has never been systematically surveyed.

Australian Antarctic Territory	A	В	С
Depths < 200m	1	0	99
Depths > 200m	1	1	98
Dome / Zoom			
); Christmas Island	A	В	C
Depths < 200m	3	97	0
Depths > 200m	1	0	99
Cocos Islands	A	В	C
Depths < 200m	1	0	99
Depths > 200m	4	0	96
Norfolk Island	A	В	C
Depths < 200m	10	0	90
Depths > 200m	1	0	99
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Macquarie Island	\mathbf{A}	В	C
Depths < 200m	1	0	99
Depths > 200m	30	0	70
Heard Island	A	В	С
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0

0

99

Amplifying information:

1. Special national circumstances which influence the statistical break-down above (e.g. geographical factors such as narrow continental shelf or fringing reefs, or constraints such as areas of unstable seabed which require a routine resurvey programme):

NONE

- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International (i.e. between hub ports):

N/A

(2) Regional (i.e. between hub ports and feeder ports):

N/A

(3) Internal (i.e. from feeder ports to other national ports; cruise liner routes):

There are currently no high priority hydrogroahic surveys of Australia's Antarctic waters. The AHS, in conjunction with AAD, coordinate surveys on an opportunity basis using the Deployable Geospatial Support Team (DGST). The next opportunity has been identified for the summer season 08-09.

b. Ports and Approaches:

As above

c. Other (fisheries; offshore industry):

NONE

1.3 <u>Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ of developing countries where surveys have been, or are being carried out by your hydrographic service:</u>

<u>Country</u>: PAPUA NEW GUINEA (PNG)

Survey coverage, where:

A = percentage which is adequately surveyed.

B = percentage which requires re-survey at larger scale or to modern standards.

C = percentage which has never been systematically surveyed.

	A	В	C
Depths < 200m	28	See Note 1	72
Depths > 200m	10	See Note 1	90

Amplifying information:

1. Special national circumstances which influence the statistical break-down above (e.g. geographical factors such as narrow continental shelf or fringing reefs, or constraints such as areas of unstable seabed which require a routine resurvey programme):

Survey work has continued in coastal regions of New Britain and New Ireland, along with mainland PNG, towards the collaborative PNG Charting Redevelopment Project. Within the Depths < 200m large areas of narrow continental shelf and fringing coastal reefs have limited progress.

- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International (i.e. between hub ports): Significant areas of unsurveyed waters surround PNG. Aim is to dedicate Australian Hydrographic Survey Force units conduct one survey in PNG waters annually.
 - (2) Regional (i.e. between hub ports and feeder ports):

As above

(3) Internal (i.e. from feeder ports to other national ports; cruise liner routes):

As above

b. Ports and Approaches:

As above

c. Other (fisheries; offshore industry):

As above

2. NAUTICAL CHARTING

If you do not have a nautical charting capability, but know which country/countries has/have assumed responsibility for the charting of your sea areas, please indicate details here:

If you do have a nautical charting capability, complete the details below (Please refer to the guidance given in the introductory text "Analysis of the Status of Charting".):

2.1 Status of nautical charting within the limits of the EEZ

Coverage of charts published by your organisation, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by Raster Navigational Charts (RNCs) meeting the standards in S-61.

C = percentage covered by ENCs meeting the standards in S-57.

Purpose/Scale	A	В	C
Offshore passage/Small	100	100	40
Landfall and Coastal passage/Medium	95	95	20
Approaches and Ports/Large	100	100	50

Amplifying notes:

The 5% shortfall in the Medium bracket is a low priority for completion due to lack of maritime traffic in these areas.

Significant gaps in coverage:

2.2 Status of nautical charting within the limits of the EEZ of dependent territories

Coverage of charts published by your organisation, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by RNCs meeting the standards in S-61.

C = percentage covered by ENCs meeting the standards in S-57.

<u>Territory</u>: Christmas Island

Purpose/Scale	A	В	С
Offshore passage/Small	100	100	50
Landfall and Coastal passage/Medium	100	100	0
Approaches and Ports/Large	100	100	0

Amplifying notes:

Significant gaps in coverage:

<u>Territory</u>: Cocos Islands

Purpose/Scale	A	В	С
Offshore passage/Small	100	100	50
Landfall and Coastal passage/Medium	100	100	0
Approaches and Ports/Large	100	100	0

Amplifying notes:

Significant gaps in coverage:

Territory: Macquarie Island

Purpose/Scale	A	В	C
Offshore passage/Small	100	100	50
Landfall and Coastal passage/Medium	100	100	100
Approaches and Ports/Large	100	100	100

Amplifying notes:

Significant gaps in coverage:

<u>Territory</u>: Norfolk Island

Purpose/Scale	A	В	C
Offshore passage/Small	100	100	50
Landfall and Coastal passage/Medium	100	100	0
Approaches and Ports/Large	100	100	0

Amplifying notes:

Significant gaps in coverage:

2.3 Status of nautical charting produced by mutual agreement within the limits of the EEZ of other coastal states

Coverage of charts produced by your organisation, where:

A = percentage covered by INT series, or a paper chart series meeting the standards in M-4.

B = percentage covered by RNCs meeting the standards in S-61.

C = percentage covered by ENCs meeting the standards in S-57.

Country: PAPUA NEW GUINEA (PNG)

Purpose/Scale	A	В	C
Offshore passage/Small	100	100	50
Landfall and Coastal passage/Medium	95	95	10
Approaches and Ports/Large	100	100	50

Amplifying notes:

The 5% shortfall in the Medium bracket is in areas previously of low priority for cover. This is under review.

Significant gaps in coverage:

3. MARITIME SAFETY INFORMATION (MSI)

Fill in the tables to indicate the status of implementation of the services: Yes, No, Partial.

Use the Notes Columns to indicate services which are provided by another state, and facilities co-ordinated and/or shared with other coastal states.

(Please refer to the guidance given in the introductory text "Analysis of the status of MSI".):

NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS				
COASTAL WARNINGS				
NAVAREA WARNINGS				
INFORMATION ON PORTS AND HARBOURS ¹				

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook²)

SERVICE	Yes	No	Partial	NOTES
Master Plan				
A1 Area				
A2 Area				
A3 Area				
NAVTEX				
SafetyNET				

¹ Confirm that a system exists for passage of information on changes in ports and harbours to the responsible charting authority.

² See also the guidance in Navigational Publications published by Hydrographic Offices e.g. ALRS 5.

4. NATIONAL PRIORITIES FOR INTERNATIONAL AND OR REGIONAL CO-OPERATION OR ASSISTANCE.

4.1 If international or regional projects are underway in your waters, please indicate here:
4.2 Indicate below any priorities for co-operation or assistance:
a. <u>Projects meriting IHO liaison with international funding agencies</u> :
(1) Regional co-operative projects:
- indicate involvement of RHC, or other Member and non-Member states.
(2) National projects:
- indicate any bilateral co-operation with Member or non-Member states.
b. Requirements for training assistance:
- use M-5 and S-47 to identify level of qualification and course required.
(1) Hydrographic surveying:
(2) Nautical cartography:
(2) MCI.
(3) MSI:

c. Requirements for assistance with procurement of equipment:
(1) Technical advice on procurement options:
(2) Transfer of equipment:
(2) Transcriptions
5. GENERAL COMMENTS OR ADDITIONAL INFORMATION
Signature: Date: