CIRCULAR LETTER 41/2003 24 June 2003

IHO SPECIAL PUBLICATION N° 55 (S-55) STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD-WIDE OUESTIONNAIRE

Reference: IHO CL 23/2003 dated 11 March 2003

Dear Hydrographer,

- 1. The attached questionnaire reflects comment from Member States on proposals in Circular Letter 23/2003 for review and reissue of Special Publication S-55, "Status of Hydrographic Surveying and Nautical Charting Worldwide" and for the establishment of a layered data-base which would enable continuous update in the future.
- 2. Most responses have welcomed the proposed content and format and acknowledged that S-55 <u>must be optimised as a top-level strategic document</u>. The emphasis on the key role of Regional Hydrographic Commissions (RHCs) and the importance of under-pinning regional data-bases has been strongly supported.
- 3. The following issues emerged, and have been reflected in the format of the questionnaire:
 - a. <u>Presentation</u>. The presentation adopted in previous editions has proved unpopular with some Member States. In the third edition of S-55 data will be grouped by alphabetical International Charting Region, as defined in IHO publication M-4.
 - b. <u>Depth bands to be assessed for adequacy of survey</u>. Data in the first edition was not broken down into depth bands. The second edition called for assessment of inshore, shelf and outer bands. This task was beyond the resources of many states, and contributed to the poor response rate and the inconsistency in presentation of results. Member states have indicated that S-55 should distinguish that sea area which is most significant for safe surface navigation, but opinions have varied on whether the 50m or 200m contour should define it. In the questionnaire the 200m contour, which is already in use in some RHC data-bases, has been adopted.
 - c. <u>Common standards for determination of survey status</u>. CL23/2003 set out the rationale for retention in S-55 of the categories 'Adequate', 'Re-survey Required', and 'Unsurveyed' for negotiations with non-specialist decision-makers. The need to promote a common standard for inputs is recognised, but Member States are divided in their views on the best footing for detailed national analysis of the percentages to be set against each category. S-44 criteria and S-57 CATZOC, M_QUAL and M_SREL attribution tools are available. Particularly where supporting source documentation for old surveys is not available, it may be more realistic to conduct an

assessment using the methodology in S-59 based on survey scale and sounding technique. Captain Barritt, the co-ordinator for this review, is available to discuss this issue with RHCs or individual states.

- d. <u>Reflection of unstable seabed and routine resurvey programmes</u>. The importance of identification of areas of unstable seabed and establishment of a routine resurvey programme has been reflected in the guidance notes for amplifying information.
- e. <u>Paper chart coverage</u>. Several states have urged that analysis of paper chart coverage should not be confined to the INT series, since this would exclude areas where there are adequate products but an INT scheme has not yet been implemented. The questionnaire therefore embraces paper chart series which meet the standards in M-4. Member States can use the amplifying notes to indicate the extent of INT coverage.
- f. <u>Illustration of chart coverage</u>. Several states urged the early development of digital methodologies rather than the production of graphical overlays to illustrate coverage and relationship with survey source data. Examples of formats can be seen on the IHO web-site. The aim is to enable states to update their own information in due course.
- g. <u>Information on Antarctica</u>. The Antarctic Hydrographic Committee will discuss at its next meeting the management of a regional data-base to support the summary in S-55.
- 4. At the suggestion of Member States, two sample completed questionnaires for "fictitious countries" covering a range of circumstances and responsibilities are also attached.
- 5. Member States are requested to return their completed questionnaires to the IHB **by 1 January 2004**. Captain Mike Barritt (<u>mike.barritt@ukho.gov.uk</u>; Tel: +44 (0)1823 337900 extension 3135) is available to advise and assist.

On behalf of the Directing Committee Yours sincerely,

(original signed)

Captain Hugo GORZIGLIA Director

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

QUESTIONNAIRE	

Country:

Date of validity of information:

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.

1. HYDROGRAPHIC SURVEYING

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

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			
Depths > 200m			

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):
- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International (i.e. between hub ports):
 - (2) Regional (i.e. between hub ports and feeder ports):
 - (3) Internal (i.e. from feeder ports to other national ports; cruise liner routes):
 - b. Ports and Approaches:
 - c. Other (fisheries; offshore industry):

1.2 <u>Status of hydrographic</u> EEZ of dependent territori	c survey of all navigable wa	ters, including internal water	rs, out to the limits of the
<u>Territory</u> :			
Survey coverage, where:			
A = percentage which is a	dequately surveyed.		
B = percentage which requ	uires re-survey at larger scale	e or to modern standards.	
C = percentage EEZ which	h has never been systematica	ally surveyed.	
	A	В	С
Depths < 200m			
Depths > 200m			
Beptilis Zoom			
Amplifying information:			
	nstances which influence the atinental shelf or fringing resurvey programme):		
2. Significant shortfalls in	sea areas of high priority for	or maritime traffic:	
a. Maritime Ship	ping Routes:		
(1) International	(i.e. between hub ports):		
(2) Regional (i.e	. between hub ports and feed	der ports):	
(3) Internal (i.e.	from feeder ports to other na	ational ports; cruise liner rou	ites):
b. Ports and App	roaches:		

c. Other (fisheries; offshore industry):

	c survey of all navigable wa ies where surveys have beer		vaters, out to the limits of the t by your hydrographic
<u>Country</u> :			
Survey coverage, where:			
A = percentage which is a	dequately surveyed.		
B = percentage which requ	uires re-survey at larger scal	le or to modern standards	
C = percentage which has	never been systematically s	surveyed.	
	A	В	С
Depths < 200m			
Depths > 200m			
factors such as narrow con which require a routine res	astances which influence the atinental shelf or fringing reconsurvey programme):	efs, or constraints such as	
a. Maritime Ship		V	
u. Martinie Simp	ping Houses.		
(1) International	(i.e. between hub ports):		
(2) Regional (i.e.	between hub ports and feed	der ports):	
(3) Internal (i.e.	from feeder ports to other na	ational ports; cruise liner	routes):
b. Ports and App	roaches:		

c. Other (fisheries; offshore industry):

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:

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			
Landfall and Coastal passage/Medium			
Approaches and Ports/Large			

Amplifying notes:

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.

Territory:

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

Amplifying notes:

Significant gaps in coverage:

Territory:

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

Amplifying notes:

Significant gaps in coverage:

Territory:

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

Amplifying notes:

2.3	Status of nautical	charting pro	oduced by	mutual	agreement	within the	limits	of the EI	EZ of	other	coastal
state	es										

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:

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

Amplifying notes:

Significant gaps in coverage:

Country:

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

Amplifying notes:

Significant gaps in coverage:

Country:

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

Amplifying notes:

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.

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:
(3) MSI:

c. Requirements for assistance with procurement of equipment:

(1) Technical advice on procurement options:

Signature: Date:		

5. GENERAL COMMENTS OR ADDITIONAL INFORMATION

SAMPLE QUESTIONNAIRE 1

QUESTIONNAIRE ON THE STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD-WIDE

Country: LITTORALIA

Date of validity of information: October 2003

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.

- 1. New HO WEB site: http://www.litho.gov.lr
- 2. New surveying ship:

SEA EXPLORER Displacement: 2500 Date Launched: 2002 Crew: 36

- 3. Outsourcing strategy (as of Jan 03): 50% of coastal hydrographic surveying.
- 4. Survey, both government and private sector contract, and charting support can probably be provided within RHC projects outlined at Section 4.2.a.

1. HYDROGRAPHIC SURVEYING

1.1 Status of hydrographic survey of all navigable waters, including internal waters, out to the limits of the EEZ:

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 (See Note 1)	40 (See Note 2.a.(1))	25 (See Note 2)
Depths > 200m	15	20 (See Note 2.a.(2))	65

Amplifying information:

1. Special national circumstances which influence the statistical break-down above:

Large areas of seabed in the Metropolis Estuary and the Straits of Argosy are unstable, with extensive sand-wave fields. Maintenance of the routine re-survey programme is the top national priority.

- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International: The area of the MSR through the Amber Skerries, which is now the preferred route for large bulk carriers, is only partially covered by a small-scale E/S survey. Survey using dGPS and MBES, to ensure that no steep-to shoals remain undetected, is a high priority for RHC co-operation (see Section 4.).
 - (2) Regional: The next priority in the national hydrographic programme of modern surveys of coastal waters is coverage of the outer, more exposed approaches, especially beyond the Rugged Islands. This will be addressed by the new survey ship using dGPS and MBES.
 - (3) Internal (including cruise liners): Inter-continental short-sea and river traffic is now using the new Enterprise Canal and the Forgotten River. The latter requires urgent large-scale surveys, which will be put out to specialist contract.
 - b. Ports and Approaches: None. Firm arrangements are in place with Port Authorities.
 - c. Other (fisheries; offshore industry): None.

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>

Territory: AUBREY AND MATURIN ISLANDS

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	5	10 (See Note 2.b.)	85 (See Note 2.a.(3))
Depths > 200m	-	5 (See Note 2.a.(2))	95 (See Note 2.a.(1))

Amplifying information:

1. Special national circumstances which influence the statistical break-down above:

The Aubrey and Maturin group comprises steep-to oceanic islands and coral atolls

- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International: There are a number of vigias in the area where the main trans-ocean tanker route passes close SE of Surprise Reef. This area is the top priority for deep water survey.
 - (2) Regional: Leopard Channel was surveyed by echo sounder at 1: 100K in 1948. The area around Jollyboat Cay requires survey at larger scale.
 - (3) Internal (including cruise liners): It is reported that large cruise liners are passing close off the E coast of Aubrey Island and conducting boat landings through Diana and Sophie Passages. This area is charted from sketch lead-line surveys and miscellaneous soundings.
 - b. Ports and Approaches:

The approaches to Trepanning Harbour, the port of Maturin Island, were surveyed by echosounder in 1935. The main channel and flanks should be resurveyed with side-scan sonar to disprove the existence of isolated coral heads.

c. Other (fisheries; offshore industry):

A bathymetric and oceanographic survey is required of the area of the submarine volcanoes in the SE sector of the EEZ.

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>

Country: DICKENSIA

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	25	30 (See Notes 2.a.(2) &	45 (See Note 2.c.)
		2.b.)	
Depths > 200m	5	20 (See Note 2.a.(1))	75

Amplifying information:

- 1. Special national circumstances which influence the statistical break-down above: None
- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International: Dickensia and neighbouring states need to make a case to the IMO for a TSS in the Great Expectations Channel. This requires resurvey of Dickensian areas to seawards of the 1988 1: 25k survey by the Littoralian Navy.
 - (2) Regional: Little Dorrit Passage is now used by LNG feeder traffic. Charting is based on small-scale 1950s surveys. MBES and side-scan sonar coverage is needed.
 - (3) Internal (including cruise liners): **None.**
 - b. Ports and Approaches:

Scrooge Bank in the approaches to Christmas Harbour requires sidescan-sonar survey. Otherwise, the survey coverage from the 1950s-70s is adequate.

No details are available for the 1986-8 commercial surveys for the port development at Copperfield. A number of reported wrecks in the vicinity of the approach channel require location and survey.

c. Other (fisheries; offshore industry): Large foreign fishing vessels, operating under licence in the Micawber Archipelago, are using unsurveyed channels. A number of strandings have caused significant environmental damage. The required surveys are extensive in area and will require international project support.

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:

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	С
Offshore passage/Small	100	100	5
Landfall and Coastal passage/Medium	100	100	80
Approaches and Ports/Large	100	100	90

Amplifying notes:

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.

Territory: Aubrey and Maturin Group

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

Amplifying notes:

Significant gaps in coverage:

Although chart coverage is complete, attention is drawn to the shortcomings in source data indicated in Section 1 above.

Territory:

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

Amplifying notes:

Significant gaps in coverage:

Territory:

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

Amplifying notes:

2.3 <u>Status of nautical charting produced by mutual agreement within the limits of the EEZ of other coastal states</u>:

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: Dickensia

Purpose/Scale	A	В	C
Offshore passage/Small	100	100	_
Landfall and Coastal passage/Medium	100	100	-
Approaches and Ports/Large	100	100	30

Amplifying notes: An ENC has been produced for the main port of Christmas Harbour.

Significant gaps in coverage:

Although chart coverage is complete, attention is drawn to the shortcomings in source data indicated in Section 1 above.

Country:

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

Amplifying notes:

Significant gaps in coverage:

Country:

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

Amplifying notes:

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.

LITTORALIA

NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS	V			
COASTAL WARNINGS	V			
NAVAREA WARNINGS	V			
INFORMATION ON PORTS	V			Agreements in place with all
AND HARBOURS ³				Port Authorities.

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS $Handbook^4$)

SERVICE	Yes	No	Partial	NOTES
Master Plan				
A1 Area				
A2 Area				
A3 Area				
NAVTEX				
SafetyNET		$\sqrt{}$		

³ Confirm that a system exists for passage of information on changes in ports and harbours to the responsible charting authority.

⁴ See also the guidance in Navigational Publications published by Hydrographic Offices e.g. ALRS 5.

AUBREY AND MATURIN GROUP

NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS	$\sqrt{}$			
COASTAL WARNINGS				
NAVAREA WARNINGS	V			Issued by Littoralia.
INFORMATION ON PORTS	V			Arrangements in place with
AND HARBOURS ⁵				Littoralian HO.

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook⁶)

SERVICE	Yes	No	Partial	NOTES
Master Plan				
A1 Area			$\sqrt{}$	
A2 Area				
A3 Area				
NAVTEX		V		
SafetyNET	√			Provided by Pelagia.

DICKENSIA

NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS		$\sqrt{}$		
COASTAL WARNINGS		$\sqrt{}$		
NAVAREA WARNINGS		$\sqrt{}$		
INFORMATION ON PORTS			V	Some arrangements in place
AND HARBOURS ⁷				with Littoralian HO.

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook⁸)

SERVICE	Yes	No	Partial	NOTES
Master Plan				Assisted by Littoralia.
A1 Area			$\sqrt{}$	
A2 Area		$\sqrt{}$		
A3 Area				
NAVTEX				Co-ordinated with Tolstoya.
SafetyNET				

⁵ Confirm that a system exists for passage of information on changes in ports and harbours to the responsible charting authority.

⁶ See also the guidance in Navigational Publications published by Hydrographic Offices e.g. ALRS 5.

⁷ Confirm that a system exists for passage of information on changes in ports and harbours to the responsible charting authority.

⁸ See also the guidance in Navigational Publications published by Hydrographic Offices e.g. ALRS 5.

4.	NATIONAL PRIORITIES FOR INTERNATIONAL AND OR REGIONAL C	'O-
o	PERATION OR ASSISTANCE.	

4.1 If international or regional projects are underway in your waters, please indicate here:
None.
4.2 Indicate below any priorities for co-operation or assistance:
a. Projects meriting IHO liaison with international funding agencies:
(1) Regional co-operative projects:
- indicate involvement of RHC, or other Member and non-Member states.
Modern survey coverage of the Amber Skerries MSR is a major undertaking which requires regional cooperation if a case is to be made to IMO for a TSS.
(2) National projects:
- indicate any bilateral co-operation with Member or non-Member states.
National routine re-survey programmes in the Straits of Argosy are coordinated within the RHC.
b. Requirements for training assistance:
- use M-5 and S-47 to identify level of qualification and course required.
(1) Hydrographic surveying:
None.
(2) Nautical cartography:
None.
(3) MSI:
None.

(1) Technical advice on procurement options:
None.
(2) Transfer of equipment:
None.

c. Requirements for assistance with procurement of equipment:

5. GENERAL COMMENTS OR ADDITIONAL INFORMATION

The LITTORALIA HO offers to maintain the "xxxxx" RHC S-55 data-base on its new web-site.

Signature: IMA Hydrographer

Date: 15 October 2003

EXAMPLE QUESTIONNAIRE 2

QUESTIONNAIRE ON THE STATUS OF HYDROGRAPHIC SURVEYING AND NAUTICAL CHARTING WORLD-WIDE

Country: **UNFATHOMEDLAND**

Date of validity of information: December 2003

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.

1. HYDROGRAPHIC SURVEYING

1.1 Status of hydrographic survey of all navigable waters, including internal waters out to the limits of the EEZ:

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	-	15 (See Notes 2.a.(2) &	85 (See Notes 1 & 2)
		b)	
Depths > 200m	-	-	100

Amplifying information:

- 1. Special national circumstances which influence the statistical break-down above: The sea areas in which there are dangers to surface navigation are confined to the delta of the Tallow River, passages within the coastal fringe of coral reefs, and the Plumb-bob Archipelago.
- 2. Significant shortfalls in sea areas of high priority for maritime traffic:
 - a. Maritime Shipping Routes:
 - (1) International: The atolls and reefs of the Plumb-bob Archipelago lie within 5nm of the MSR through the Dipsie Channel. There are no AtoN. The archipelago has never been systematically surveyed.
 - (2) Regional: 60% of the extent of the coastal passages linking ports in the Tallow River delta to the regional feeder ports was surveyed by echo sounder in the 1950s. The remainder is covered by nineteenth century lead-line surveys.
 - (3) Internal (including cruise liners): as at 2.a.(2).
 - b. Ports and Approaches: Modern surveys have been completed by commercial companies for the dredged approach and wharves used by offshore supply vessels at Port Ooze, and by the port surveyor at Sludgeville. Otherwise no recent surveys have been conducted of the unstable seabed of the Tallow River delta.
 - c. Other (fisheries; offshore industry): Numerous offshore installations have been constructed in the approaches to the Tallow River delta.

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:

MAPLAND is listed in the first edition of S-55 as having responsibility for charting in this area. They maintain coverage at all the scales indicated below.

If you do have a nautical charting capability, complete the details below:

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			
Landfall and Coastal passage/Medium			
Approaches and Ports/Large			

Amplifying notes:

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.

NAVIGATIONAL INFORMATION (S-53)

SERVICE	Yes	No	Partial	NOTES
LOCAL WARNINGS	1			For Port Ooze and Sludgeville only.
COASTAL WARNINGS				
NAVAREA WARNINGS	V			Port authorities pass to Area Coordinator.
INFORMATION ON PORTS AND HARBOURS ⁹	V			Passed to Mapland HO.

GMDSS IMPLEMENTATION (IMO Publication 970 - GMDSS Handbook 10)

SERVICE	Yes	No	Partial	NOTES
Master Plan			$\sqrt{}$	In hand.
A1 Area				
A2 Area				
A3 Area				
NAVTEX				
SafetyNET				

⁹ Confirm that a system exists for passage of information on changes in ports and harbours to the responsible charting authority.

 $^{^{10}}$ 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:

None.

- 4.2 Indicate below any priorities for co-operation or assistance:
- A. Projects meriting IHO liaison with international funding agencies:
 - (1) Regional co-operative projects:
 - indicate involvement of RHC, or other Member and non-Member states.

The area of the Plumb-bob Archipelago should be included in any regional project to undertake modern surveys of the dangerous areas in the Dipsie Channel. This should be discussed at the next RHC meeting with IHO advice.

- (2) National projects:
- indicate any bilateral co-operation with Member or non-Member states.

IHO advice is needed on management of contract survey of coastal passages.

- b. Requirements for training assistance:
 - use M-5 and S-47 to identify level of qualification and course required.
 - (1) Hydrographic surveying:

The Chief Surveyor of Sludgeville requires Cat A training to give him the skills to oversee contract surveys. This requires sponsorship or bursary.

(2) Nautical cartography:

Unfathomedland would like to send 2 candidates to the IMA Course in Hydrographic Data Management. RHC support will be sought for this submission.

(3) MSI:

An attachment to an established HO would help port officers to improve Unfathomedland's organisation. RHC help is requested.

- c. Requirements for assistance with procurement of equipment:
 - (1) Technical advice on procurement options:

A dGPS system is needed to enable surveys to be extended out into the Tallow River delta.

Great difficulty is being experienced in keeping a tide-gauge in operation at Sludgeville.

(2) Transfer of equipment:

Spare parts can no longer be obtained for the echo sounder and sidescan sonar system donated by the Gracian HO in 1992, and replacements are urgently needed.

A bigger launch would facilitate operations in the delta. It is hoped that a case can be combined with the requirement for a new buoy tender. RHC backing would be valued.

5. GENERAL COMMENTS OR ADDITIONAL INFORMATION

Unfathomedland is grateful for the advice of the IHB and the assistance of Mapland in providing information on source data. Even with this, the completion of this questionnaire, although it is simpler than that for the Second Edition, was challenging.

Signed: *I M Responsible* **Dated:** 25 December 2003