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REVISED QUESTIONNAIRE ON SHORE-BASED FACILITIES FOR THE GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

1 The Maritime Safety Committee, at its ninety-second session (12 to 21 June 2013), approved circulation of the attached revised questionnaire on shore-based facilities in the GMDSS prepared by the Sub-Committee on Radiocommunications and Search and Rescue, at its seventeenth session.

2 The revised questionnaire contains the revision of MSC.1/Circ.1382, annex 7, related to NAVTEX services.

3 Member Governments, including those which have submitted responses to MSC/Circ.684 and MSC.1/Circ.1382, as amended, are invited to provide or update, in accordance with the annexed questionnaire, the required information electronically, as far as possible, for inclusion in the GMDSS Master Plan (GMDSS.1 circular).

4 Administrations should submit information obtained, as appropriate, from national authorities responsible for shore-based facilities for the GMDSS, NAV/MET Area Coordinators and search and rescue authorities.

5 This questionnaire supersedes MSC.1/Circ.1382/Rev.1.



STATUS OF SHORE-BASED FACILITIES FOR THE GMDSS

1 Indicate in brief the status of shore-based facilities for the GMDSS, using the following indicators:

- O = Operational T = Under trial
- P = Planned or to be decided

		COAST STATIONS						MSI BROADCAST SERVICE					Cospas-Sarsat	
COUNTRY		DSC			Inmarsat	LES	SES		SafetyNET					
	A1	A2	A3 & A4	В	С	Inmarsat Fleet F 77	for RCC	NAVTEX	NAV	MET	SAR	HF NBDP	мсс	LUT

Sea area A1 (within range of shore-based VHF DSC coverage)

- 1 Does your Administration intend to establish sea area A1? If not operational now, indicate the date of operation in the following table.
- 2 Do they keep full-time DSC watch on channel 70? If not, indicate watch hours in the following table.
- 3 Indicate details of VHF stations.

YES	NO	Is it operational now?	YES	NO
YES	NO			

		VHF DSC Coast Station									
NAV/MET Country Area		Туре	Name	MMSI	Position	Range (NM)	Status of implementation	Purpose (SD/PS)	Watch hours on CH 70	RCC Associated	

- (1) Monitored stations include remote-controlled stations.
- (2) Refer to resolution A.801(19). See appendix.
- (3) SD = "Distress and Safety" only, PS = Both "Public Correspondence" and "Safety and Distress".

4 Provide a map indicating:

- Name and location of main VHF stations
- Coverage of main and monitored Transmitter & Receivers
- Name and location of associated RCC(s)

Appendix to annex 2

IMO resolution A.801(19), annex 3, paragraph 2

Criteria for establishing GMDSS sea areas

2.3 Determination of radius A

 $A = 2.5(\sqrt{H(in - metres)} + \sqrt{h(in - metres)})$

2.3.1 The following formula should be used to calculate range A in nautical miles:H is the height of the coast station VHF receiving antenna and h is the height of the ship's transmitting antenna which is assumed to be 4 m.

2.3.2 The following table gives the range in nautical miles (NM) for typical values of H:

H h	50 m	100 m
4 m	23 NM	30 NM

2.3.3 The formula given above applies to line-of-sight cases but is not considered adequate for cases where both antennae are at a low level. The VHF range in sea area A1 should be verified by field strength measurements.

Sea area A2 (within range of shore-based MF DSC coverage)

- 1 Does your Administration intend to establish sea area A2? If not operational now, indicate the date of operation in the following table.
- 2 Do they keep full-time DSC watch on 2187.5 kHz? If not, indicate watch hours in the following table.

3 Indicate details of MF stations.

YES	NO	Is it operational now?	YES	NO
YES	NO			

		MF DSC Coast Station									
NAV/MET Area	Country	Туре	Name	MMSI	Position	Range (NM)	Status of implementation	Purpose (SD/PS)	Watch hours on 2187.5 kHz	RCC Associated	

(1) Monitored stations include station remote-controlled stations.

(2) Refer to resolution A.801(19). See appendix.

(3) SD = "Distress and Safety" only, PS = Both "Public Correspondence" and "Safety and Distress".

4 Provide a map indicating:

- Name and location of main MF stations
- Coverage of main and monitored Transmitter & Receivers
- Name and location of associated RCC(s)

Appendix to annex 3

IMO resolution A.801(19), annex 3, paragraph 3

Criteria for establishing GMDSS sea areas

3.3 Determination of radius B

Radius B may be determined for each coast station by reference to Recommendation ITU-R P.368-9 and P.372-10 for the performance of a single side band (J3E) system under the following conditions:

Frequency Bandwidth	-	2182 kHz 3 kHz
Propagation	-	ground wave
Time of day & Season	-	(Administration should determine time periods and seasons appropriate to their geographic area based on prevailing noise level)
Ship's transmitter power (PEP)	-	60 W (see footnote to regulation IV/16(c)(i) of the 1981 amendments to the 1974 SOLAS Convention)
Ship's antenna efficiency	-	25%
S/N(RF)	-	9 dB (voice)
Mean transmitter power	-	8 dB below peak power
Fading margin	-	3 dB

The range of sea area A2 should be verified by field strength measurements.

YES

Is it operational now?

NO

ANNEX 4

Sea areas A3 and A4 (outside sea area A2)

- YES NO 1 Does your Administration intend to equip one or more HF DSC station? If not operational now, indicate the date of operation in the following table.
- Do they keep full-time DSC watch on the bands? 2

	YES	NO
4 MHz (4207.5 kHz)?		
6 MHz (6312 kHz)?		
8 MHz (8414.5 kHz)?		
12 MHz (12577 kHz)?		
16 MHz (16804.5 kHz)?		

If not, indicate watch hours in the following table.

3 Indicate details of HF stations.

			HF DSC Coast Station						
NAV/MET Area	Country	Name	MMSI	Position	Status of implementation	Purpose (SD*/PS)	Frequency Band*	Watch hours	RCC Associated

* SD = "Distress and Safety" only, PS = Both "Public Correspondence" and "Safety and Distress".

Inmarsat facilities

*

- 1
 Does your Administration operate an Inmarsat Land Earth Station (LES)?
 Is it operational now?
 Is it operat
- 2 Indicate details of Inmarsat LES.

Country	Location	Ocean Area*	Service provided (S	Service provided (Status of Implementation / Data of operation)			
			Inmarsat-B	Inmarsat-C	Fleet F 77		
	Country	Country Location	Country Location Ocean Area*				

- AOR-E = Atlantic Ocean Region East
 - AOR-W = Atlantic Ocean Region West
 - IOR = Indian Ocean Region
 - POR = Pacific Ocean Region

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ANNEX 6

Rescue Coordination Centres (RCCs) using Ship Earth Stations (SESs)

1	Does your Administration intend to commission a ship earth station for RCC operation?	YES	NO
		YES	NO

Is it operational now? If not operational now, indicate the date of operation in the following table.

2 Indicate details of SES.

NAV/MET	Country	R	СС	SES DETAIL			Status of
Area		Name	Position	ID	Туре	Ocean Region Accessed	implementation

ANNEX 7

518 kHz NAVTEX service

- YES NO YES NO Does your Administration operate NAVTEX service on 518 kHz? Is it operational now? 1 If not operational now, indicate the date of operation in the following table.
- Indicate details of NAVTEX stations.* 2

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna ⁽¹⁾	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation ⁽²⁾

* Refer to resolution A.801(19). See appendix.

490 kHz NAVTEX service

1 Does your Administration operate NAVTEX service on 490 kHz? If not operational now, indicate the date of operation in the following table.

YES NO Is it operational now?

NO YES

2 Indicate details of NAVTEX stations.

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna ⁽¹⁾	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation ⁽²⁾

4209.5 kHz NAVTEX service

- Does your Administration operate a 4209.5 kHz NAVTEX service? 1 If not operational now, indicate the date of operation in the following table.
- 2 Indicate details of 4209.5 kHz NAVTEX stations.

NAV/MET Area	Country	NAVTEX Coast Station	Position of Antenna ⁽¹⁾	Range (NM)	B1 Character	Transmission times (UTC)	Language	Status of implementation ⁽²⁾

Position in Latitude and Longitude (degrees and minutes to two decimal places) using WGS 84 datum. Operational or planned and any short amplifying remark. (1)

(2)

YES NO

Is it operational now?

YES NO

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Appendix to annex 7

IMO resolution A.801(19), annex 4, paragraph 3

Criteria for use when providing a NAVTEX service

The ground-wave coverage may be determined for each coast station by reference to Recommendations ITU-R P.368-9 and P.372-10 for the performance of a system under the following conditions:

- Frequency 518 kHz Bandwidth – 500 Hz Propagation – ground wave Time of day & Season – (Administration sh (NAVTEX Manual)
 - (Administration should determine time periods in accordance with NAVTEX time transmission table (NAVTEX Manual, figure 3) and seasons appropriate to their geographic area based on prevailing noise level.)

Transmitter power & Antenna efficiency

- (The range of a NAVTEX transmitter depends on the transmitter power and local propagation conditions. The actual range achieved should be adjusted to the minimum required for adequate reception in the NAVTEX area served, taking into account the needs of ships approaching from other areas. Experience has indicated that the required range of 250 to 400 nautical miles can generally be attained by transmitter power in the range between 100 and 1,000 W during daylight with a 60% reduction at night.)
- RF S/N in 500 Hz bandwidth 8 dB (Bit error rate 1 x 10^{-2})
- Percentage of time 90

Full coverage of NAVTEX service area should be verified by field strength measurements.

International SafetyNET service

1 Does your Administration broadcast MSI through the International SafetyNET service?

YES NO

Is it operational now?

YES NO?

If not operational now, indicate the date of operation in the following table.

2 Provide details of international SafetyNET service

NAV/MET Area	Type of Information	Country	LES/LESO	Ocean Region/LES ID	MSI Coastal Warning Area ⁽¹⁾ (if applicable)	Broadcast schedule (UTC)	Status of implementation
	NAV ⁽²⁾	*					
	MET ⁽³⁾	**					
	SAR ⁽⁴⁾						

(1) Provide a diagram showing limits of Coastal Warning Areas, including B₁ Codes.

(2) NAV = navigational warnings.

(3) MET = meteorological information.

(4) SAR = search and rescue alerts.

* = NAVAREA coordinator responsible for the area.

** = The issuing service nominated by WMO for METAREA services, responsible for the area.

HF Narrow Band Direct Printing (NBDP) MSI broadcast service

- 1 Does your Administration intend to broadcast MSI through HF NBDP?
- 2 Indicate details of HF NBDP MSI broadcast service.

Country	NBDP Coast Station	Position	Frequency Band	Schedule (UTC)	Status of implementation
			4 MHz (4210 kHz)		
			6 MHz (6425 kHz)		
			8 MHz (8416.5 kHz)		
			12 MHz (12579 kHz)		
			16 MHz (16806.5 kHz)		
			19 MHz (19680.5 kHz)		
			22 MHz (22376 kHz)		
			26 MHz (26100.5 kHz)		

Cospas-Sarsat MCC and LUT

- 1
 Does your Administration intend to operate Cospas-Sarsat ground facilities?
 Is it operational now?
 Is it operational now?
 Is it operational now?
 Is it operational now?

 1
 If not operational now, indicate the date of operation in the following table.
 Is it operational now?
 Is it operational now?
- 2 Indicate details of the Cospas-Sarsat facilities.

Ground Segment		MCC			LUT		
Ground Segment Operator	Location	Designator	Status of implementation	Location	Type (LEO GEO MEO)	Status of implementation	RCC Associated

EPIRB registration data

406 MHz EPIRB

- 1 MID-Numbers (country codes) assigned to 406 MHz EPIRBs?
- 2 406 MHz coding currently used by the country:

EPIRB CODING METHODS

Country- code	USER PROTOCOLS				LOCATION PROTOCOLS						
	Maritime user		Serial user			User location		Standard location		National location	
	MMSI	Radio call sign	EPIRB with serial number	Radio call sign	MMSI	EPIRB with serial number	Radio call sign	MMSI	Serial number	Serial number assigned by competent administration	

PLB CODING METHODS (if applicable)

Country	USER PROTOCOLS	LOCATION PROTOCOLS					
	Serial user	User Location	Standard location	National location			
Country code	PLB with serial number	PLB with serial	Serial number assigned by competent administration				

For reference on 406 MHz EPIRB coding methods, use document C/S G.005 "Cospas-Sarsat Guidelines on 406 MHz Beacon Coding, Registration and Type Approval" available on the Cospas-Sarsat website (www.cospas-sarsat.org).

- 3 <u>EPIRB Registration Information</u>:
- 3.1 Point of contact for 406 MHz EPIRB register:

YESNOOpen 24 hours a day, all days of the year?If not, specify the opening hours (UTC), days, etc.:

name, address, telephone, e-mail, AFTN, telex, fax.

- 3.2 Administrative points of contact for 406 MHz EPIRB matters (coding, registration and type approval): name, address, telephone, e-mail, telex, fax.
- 4 How often does your Administration update the database?

Maritime Mobile Service Identities (MMSI)

- 1 MID-Numbers (country codes) assigned to equipment other than 406 MHz EPIRBs?
- 2 National database for MMSI number:
 - Same database as for 406 MHz EPIRBs?
 - Address:

Open 24 hours a day, all days of the year?

- Telephone No. for database information:
- Telefax No. for database information:
- Telex No. for database information:
- AFTN No. for database information:
- E-mail address for database information:
- 3 How often does your Administration update the national database?
- 4 How often does your Administration update the ITU database?