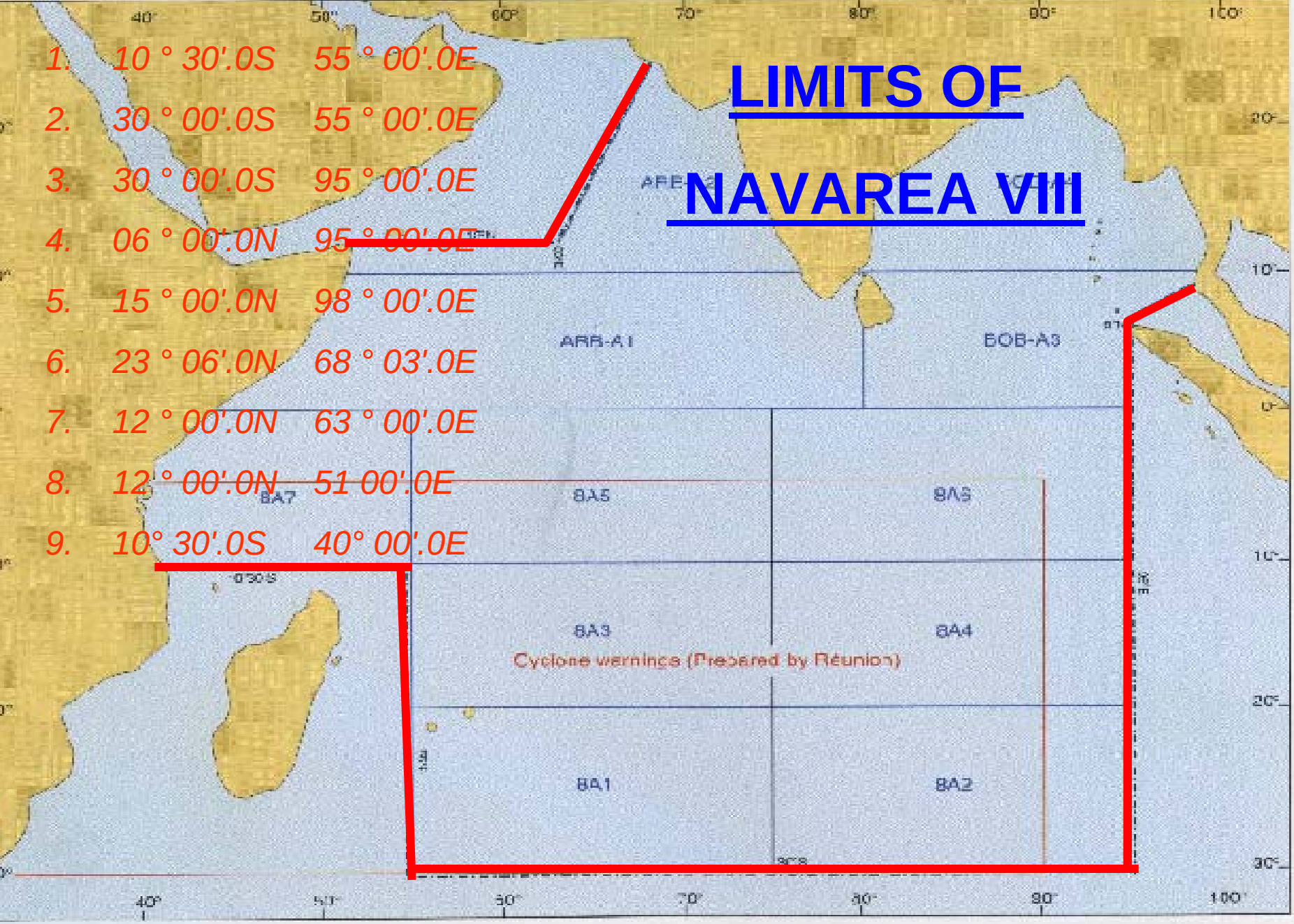
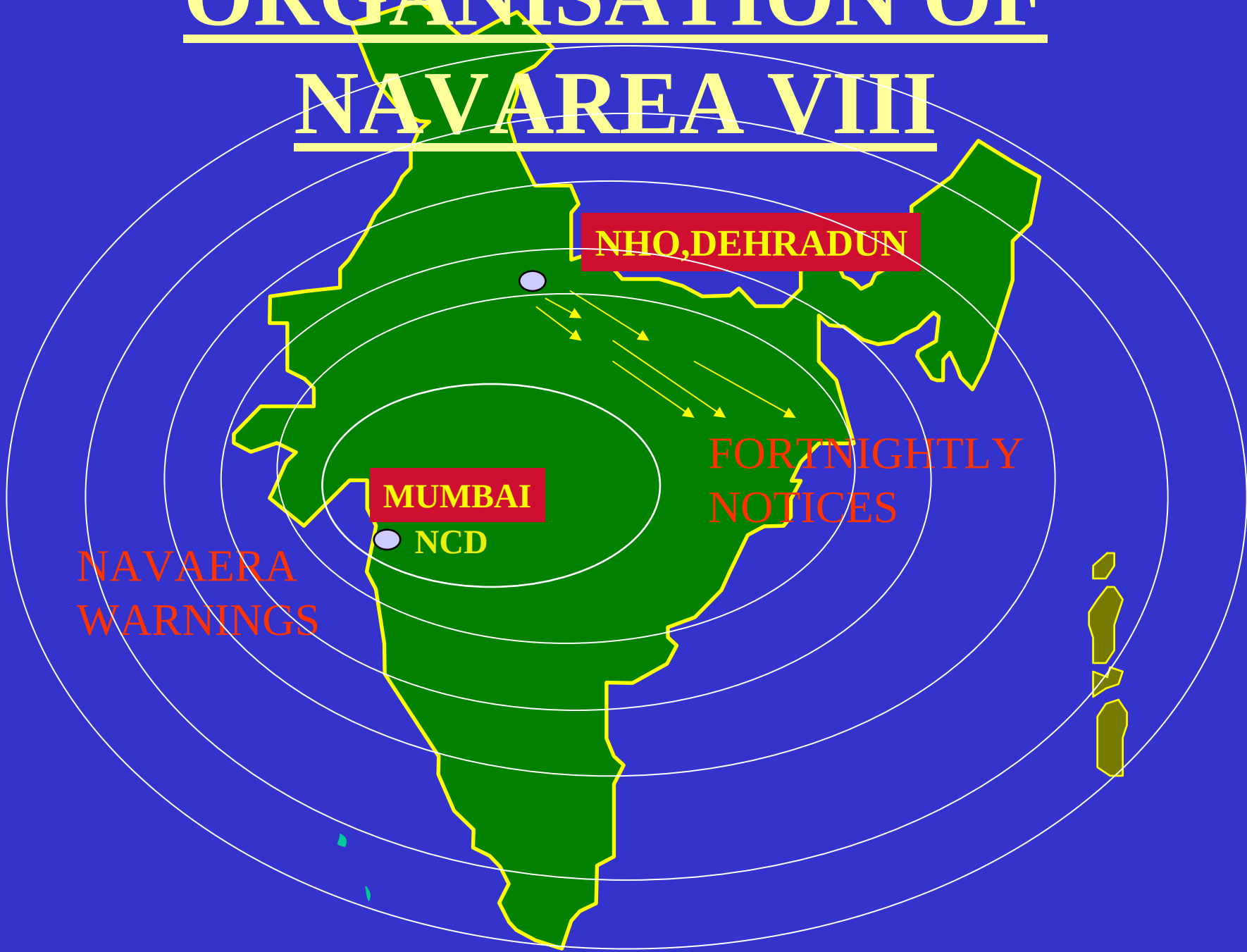
NAVIGATIONAL WARNINGS/MSI/GMDSS IN NAVAREA VIII

SCOPE OF PRESENTATION

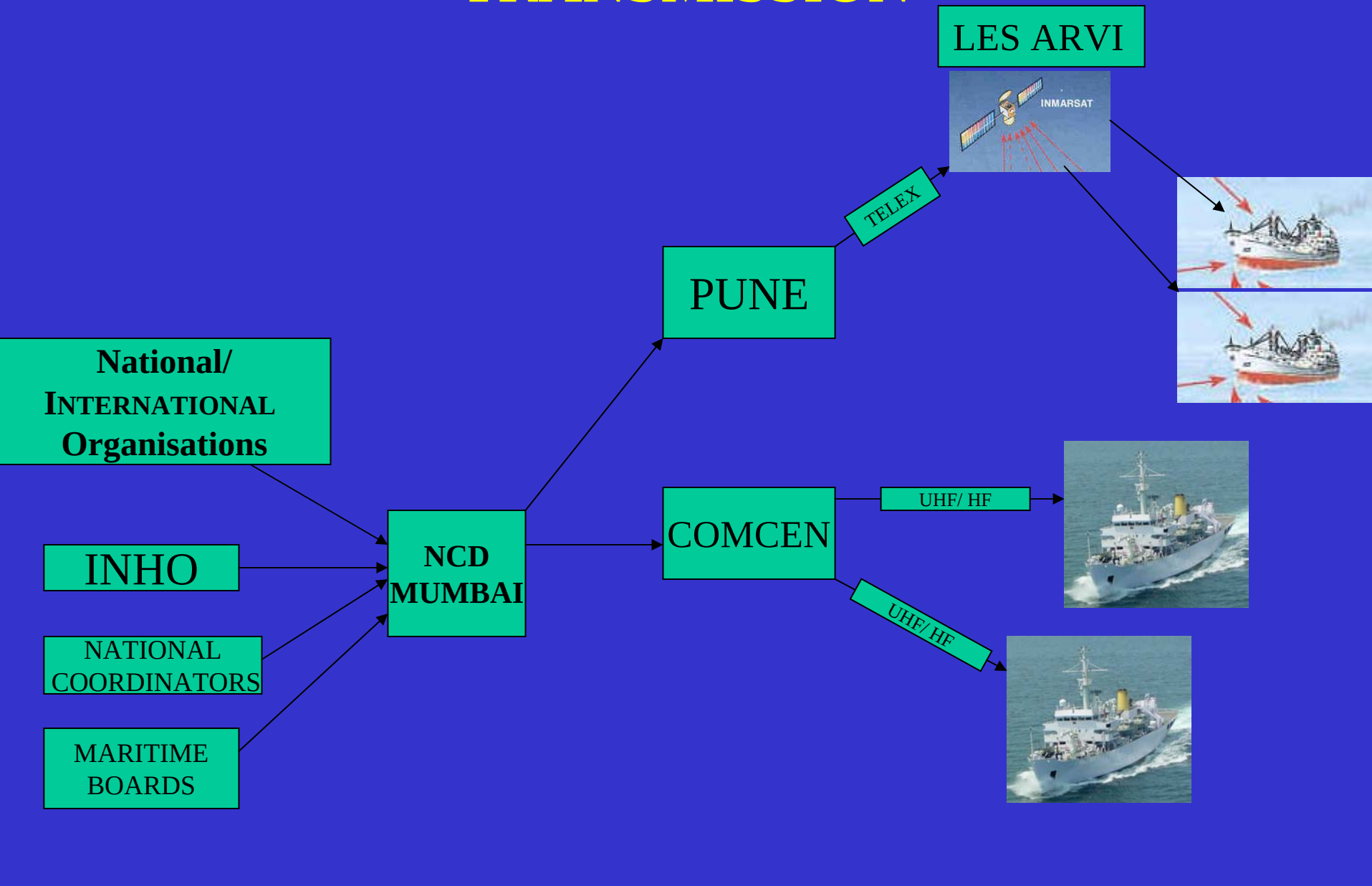
1. Introduction
2. NAVAREA VIII Radio Warnings
3. Indian Notices to Mariners
4. Implementation of GMDSS
5. Marine Safety Information
6. SAR Organisation in India
7. Action by Ships and National Coordinators


LIMITS OF
NAVAREA VIII
1. 10 ° 30'.0S 55 ° 00'.0E
2. 30 ° 00'.0S 55 ° 00'.0E
3. 30 ° 00'.0S 95 ° 00'.0E
4. 06 ° 00'.0N 95 ° 00'.0E
5. 15 ° 00'.0N 98 ° 00'.0E
6. 23 ° 06'.0N 68 ° 03'.0E
7. 12 ° 00'.0N 63 ° 00'.0E
8. 12 ° 00'.0N 51 00'.0E
9. 10° 30'.0S 40° 00'.0E
ARB-A1
BOB-A3
BA5
BA3
BA7
BA3
BA4
Cyclone warnings (Prepared by Réunion)
BA1
BA2

ORGANISATION OF NAVAREA VIII



NAVAREA VIII RADIO WARNING TRANSMISSION



TRANSMISSION OF NAVAREA WARNING

1. Issued by NCD(MB)
2. Routine transmission from satellite LES ARVI
3. Daily broadcast at 1000 UTC
4. Urgent message transmitted anytime
5. Navtex transmission through shore stations at Mumbai and Chennai
6. Monitored by National Hydrographic Office

AIM OF RADIO NAVIGATIONAL WARNINGS

Navigational Warnings only give information which cannot be included in Notices to mariners like failure of important navigational aids or new dangers. These warnings are aimed to assist the mariners in coastal navigation upto the entrance of a port. Matters within a harbour entrance may not be broadcast, therefore mariners must receive local warnings/ Notice to Mariners before entering major ports.

TYPES OF NAVAREA WARNINGS ISSUED

- Casualties to lights, fog signals and buoys affecting main shipping lanes.
- The presence of dangerous wrecks in or near main shipping lanes and, if relevant, their marking.
- Establishment of major new aids to navigation or significant changes to existing ones when such establishment or change might be misleading to shipping.
- The presence of large unwieldy tows in congested waters.
- Drifting mines
- Areas where search and rescue (SAR) and anti-pollution operations are being carried out(for avoidance of such areas)
- The presence of newly discovered rocks, shoals, reefs and wrecks likely to constitute a danger to shipping and, if relevant, their marking.
- Unexpected alteration or suspension of established routes.

TYPES OF NAVAREA WARNINGS ISSUED

- Cable or pipe-laying activities, the towing of large submerged objects for research or exploration purposes, the employment of manned or unmanned submersibles, or other underwater operations constituting potential dangers in or near shipping lanes.
- Establishment of offshore structures in or near shipping lanes.
- Significant malfunctioning of radio navigational service and shore-based maritime safety information radio or satellite services.
- Information concerning special operations which might affect the safety of shipping, sometimes over wide areas, eg. naval exercises, missile firings, space missions, nuclear tests, etc. It is important that where the degree of hazard is known, this information is included in the relevant warning. Whenever possible, such warnings should be originated not less than five days in advance of the scheduled event. The warning should remain in force until the is completed.
- Acts of piracy and armed robbery against ships.

RADIO WARNING BROADCAST

The radio warnings are transmitted from LES Arvi and COMCEN Mumbai as per following schedule:-

- Every warning is repeated daily in all schedules for three days from the date of promulgation.
- The warning is repeated again on 5th and 8 th day from date of promulgation.
- There after the warning is repeated every fourth day for 42 days from date of promulgation or date of cancellation of the warning which ever is early.
- The NAVAREA messages pertaining to seismic surveys are repeated daily for 07 days, and thereafter once a week for 42 days, or till cancellation of NAVAREA message, whichever is earlier.

SUMMARY OF NAVAREA WARNING

Weekly summary of all NAVAREA warnings in force is promulgated every Monday by National Hydrographic Office, Dehradun, for transmission by COMCEN (MB). The Summary is also issued to all concerned NAVAREA Coordinators.

All national coordinators within NAVAREA VIII are required to forward their detailed address including email address to NAVAREA coordinator for issuance of the above summary.

ORIGINATION OF NAVAREA VIII RADIO WARNING

Officer-in-Charge NCD(MB) is responsible for originating NAVAREA Warnings on behalf of Chief Hydrographer to Govt of India.However any Naval/ Coast Guard Authority can originate a NAVAREA warning, depending upon the nature of event / occurrences that have a bearing on the navigational safety and route the same through their respective regional headquarters.

DRAFTING OF NAVAREA WARNINGS

- While drafting NAVAREA VIII navigational warnings, guidelines given in “Joint IMO/IHO/WMO Manual on Maritime Safety Information (MSI)” Special Edition S-53, are strictly followed. All mariners/National authorities forwarding information for issuance of these warnings need to be well aware of the essential contents of new NAVAREA warning format.

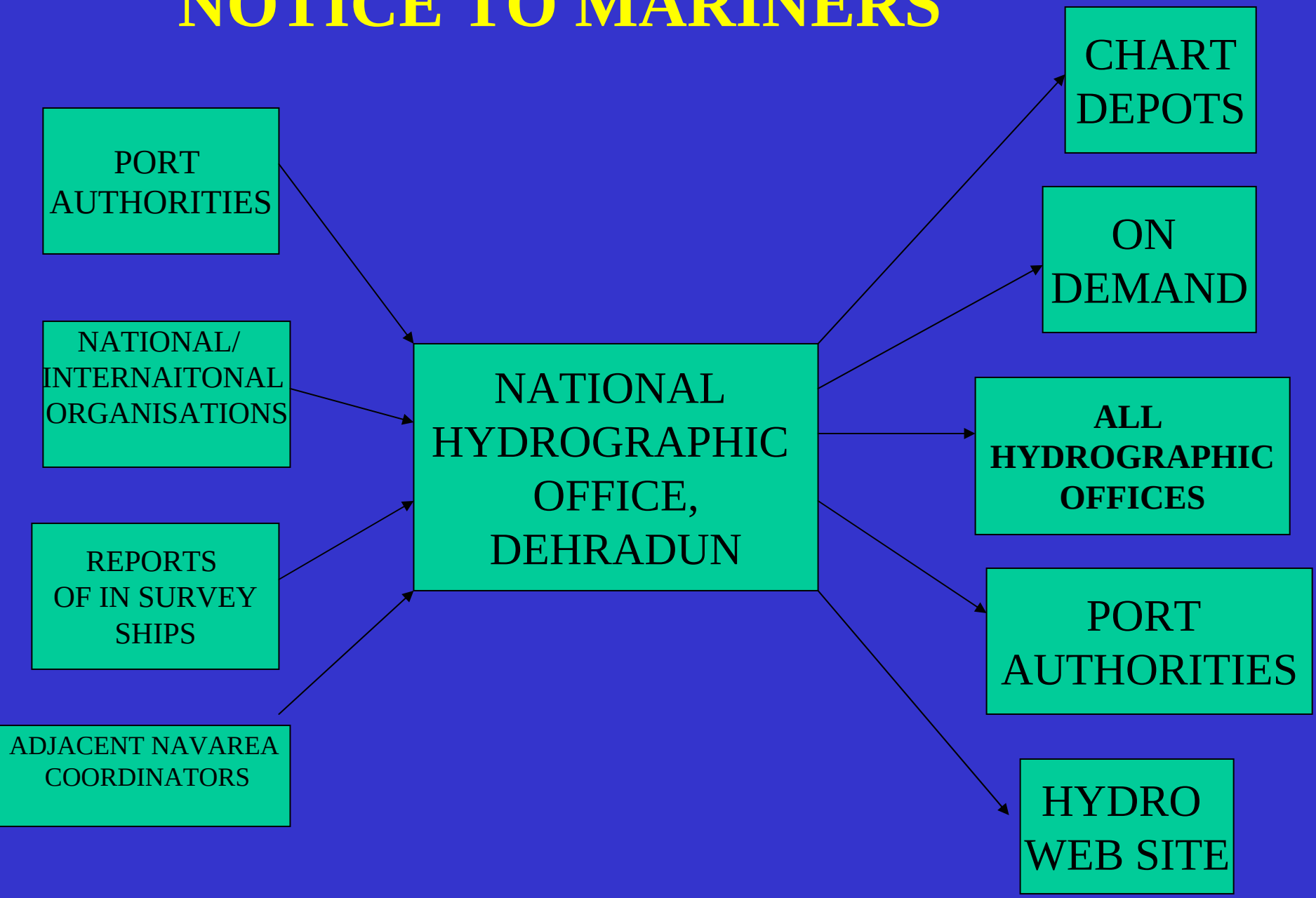
FORMAT ON NAVAREA VIII WARNING

The text of any NAVAREA warning message contains all the relevant STANDARD ELEMENTS, as indicated below:-

STANDARD ELEMENTS	**CONTENT OF ELEMENTS**
Message ID	**NAVAREA number and the Consecutive serial number of the warning message within the NAVAREA number**
Preamble	**1. General Area** **2. Locality** **3. Chart Number**
Warning	**1. Key Subject** **2. Geographical position** **3. Amplifying remarks**
Postscript	**Cancellation**

NOTICES TO MARINERS

NOTICE TO MARINERS



NOTICES TO MARINERS

- Fortnightly edition to Notices to mariners
- Annual edition to Notices to mariners
- Special edition to Notices to mariners

INFORMATIONS IN FORTNIGHTLY EDITION

1. Permanent Corrections to Indian charts and publications
2. Temporary and Preliminary Corrections to Indian charts and publications
3. General Marine Information for mariners at sea
4. Index of all Radio Navigational Warnings issued during the fortnight
5. Corrections to following publications
    a) List of Sailing Direction
    b) List of Lights
    c) List of Radio Signals
6. Format for reporting of new navigational dangers for issuance of NAVAREA warnings.

INFORMATION INANNUAL EDITION

1. List of Permanent corrections to Indian navigational charts.
2. Indian Equivalent to British Admiralty Charts.
3. Un-exploded Charges.
4. Text of Temporary and Preliminary Notices.
5. List of Chart Agents.
6. Indian Hydrographic Publications.

INFORMATION IN SPECIAL EDITION

The publication is renewed once in four years. All information included in the publication is of permanent nature and supplement information published in fortnightly and annual editions. Few examples of information published in the special edition are as follows:-

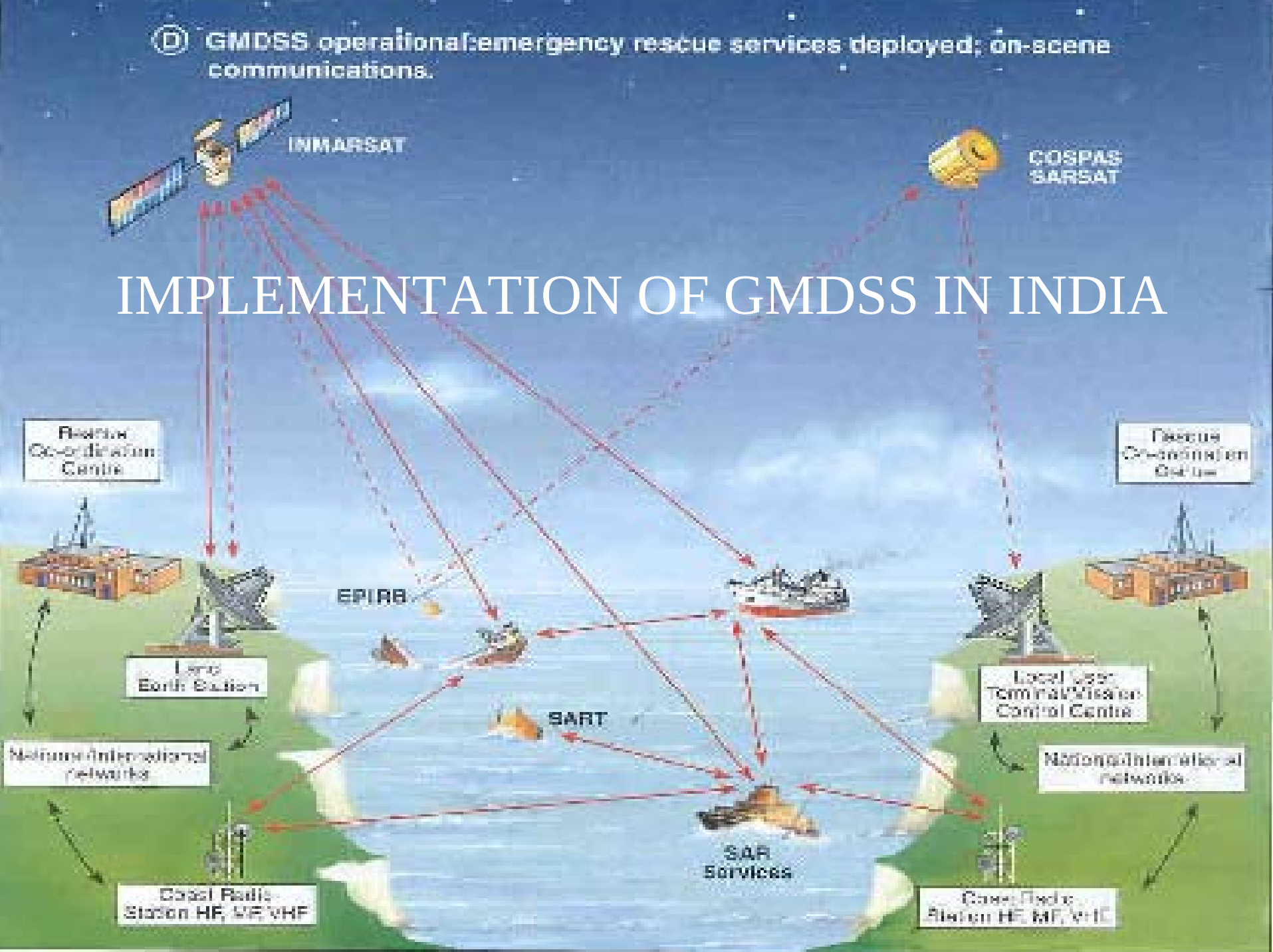
1. List of Storm Signal Stations.
2. Firing Practice and Firing Exercise Areas.
3. Information Concerning Submarines.
4. Submarine Cables.
5. Use of Radar in time of emergency or war.
6. National Data Buoy Programme.
7. Development of Offshore Oil and Gas Fields.
8. Traffic Separation Scheme-Ships Routing.

CONTACT AUTHORITIES

Mariners are to contact following authorities in case of any queries regarding transmission of Navarea VIII warnings.

The Chief Hydrographer to the Govt. of India
National Hydrographic Office
Dehradun, India. 248 001
Phone: 91-135-2747365,2747360,2742109
Fax: 91-135-2748373, Telex: 585220 AB: Code HYDR IN.
Website: www.hydrobharat.org

The Officer-in-Charge
Naval Chart Depot
SBS Road, Mumbai, India.
Phone: 91-22-22634604
Fax: 91-22-22687049
Telex: 118 3023 NCDM IN



IMPLEMENTATION OF GMDSS IN INDIA

Global Maritime Distress and Safety system

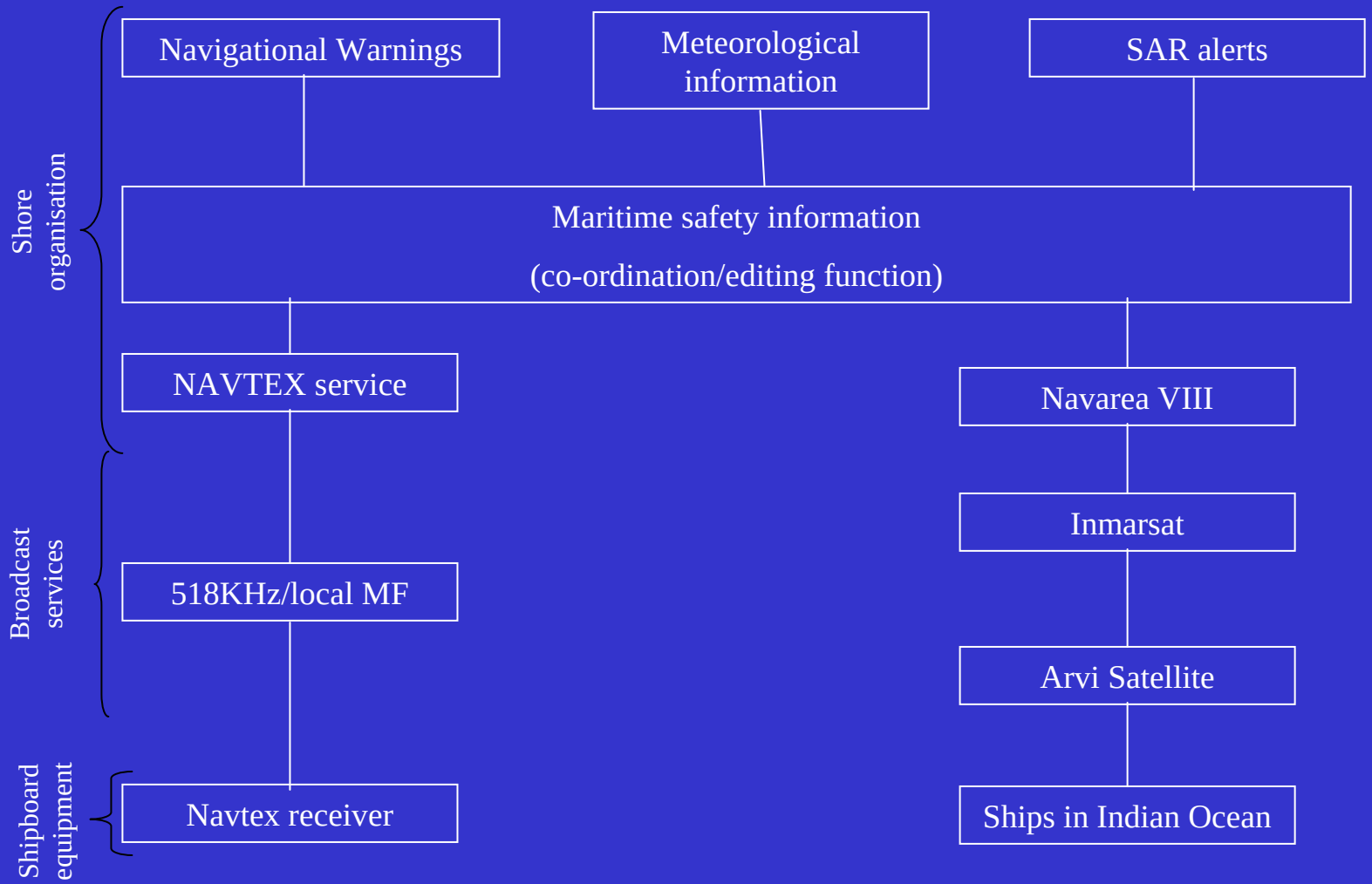
- The GMDSS is fully implemented and vessels built after 1st February 1995 must comply with all applicable GMDSS requirements. All warnings for Navarea VIII region are being transmitted on GMDSS. The complete Navarea VIII region is designated as area A3. Accordingly all the messages for the complete region is routed through INMARSAT LES at Arvi. These messages can be received on any standard INMARSAT receiver.

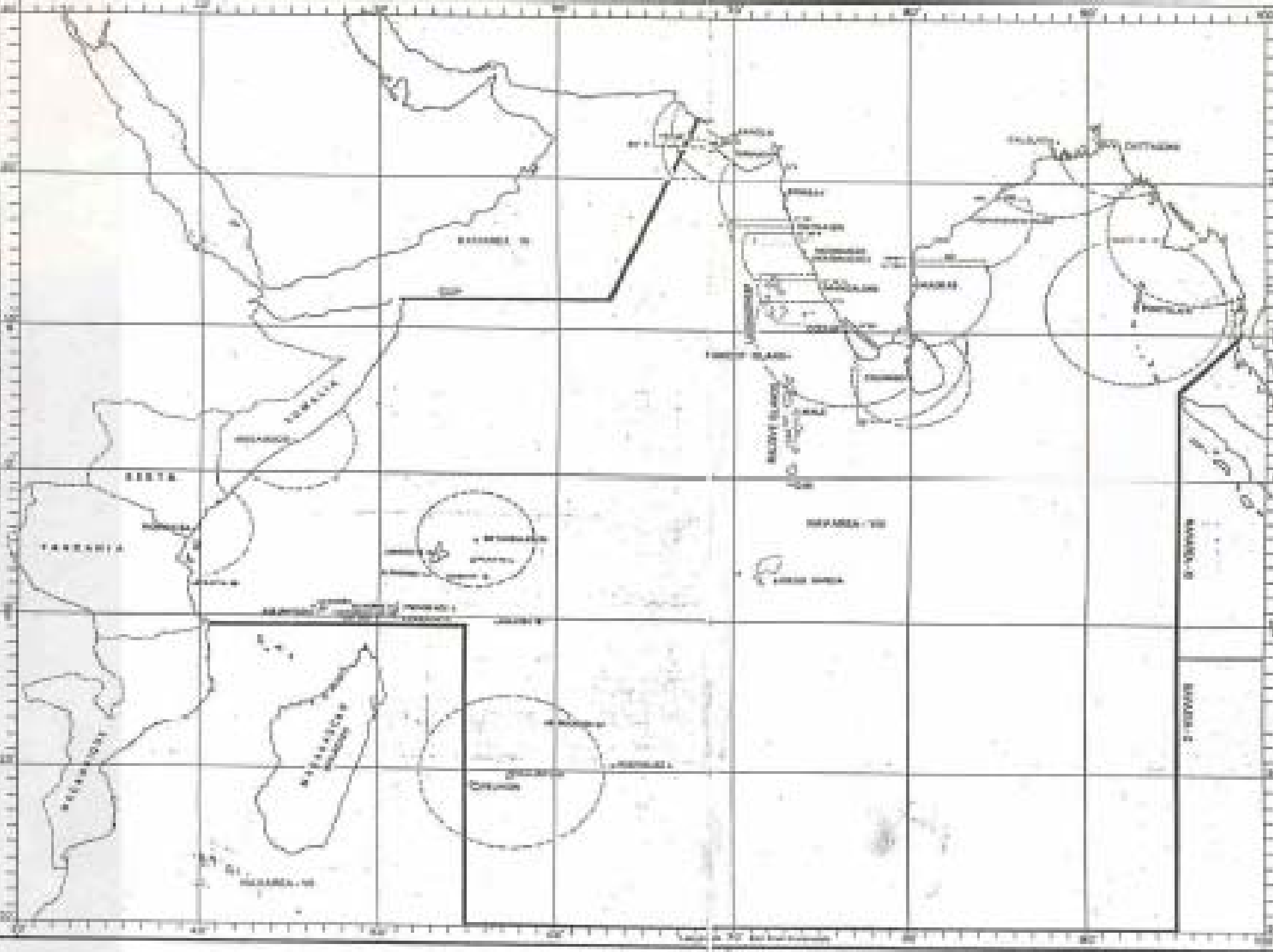
MARITIME SAFETY INFORMATION

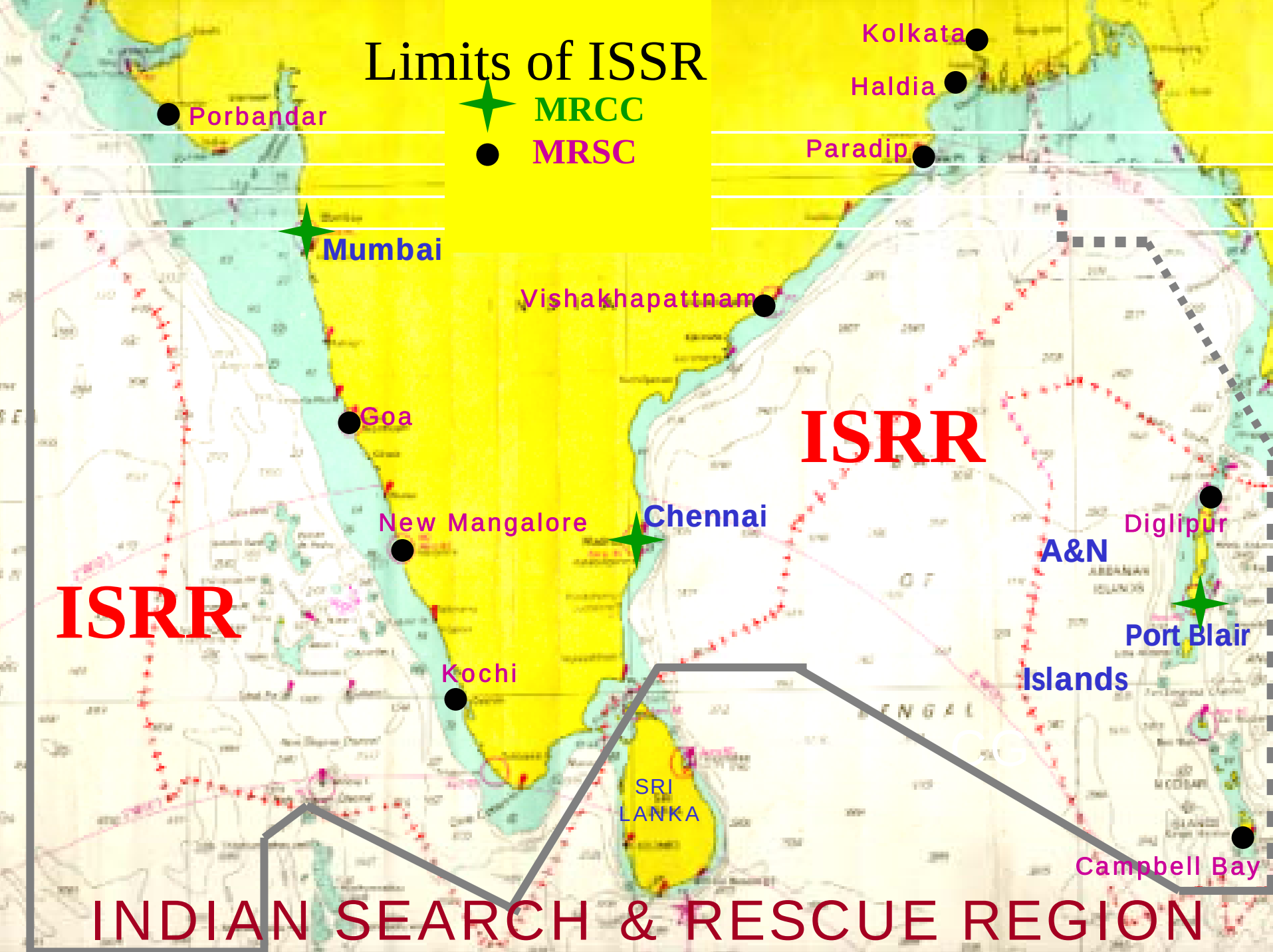
The Maritime Safety information

MSI includes navigational warnings, meteorological warnings, meteorological forecasts, and other urgent safety-related messages of vital importance to all vessels at sea .NAVAREA VIII MSI is broadcasted through MF telex (known as NAVTEX) by all major ports for local MSI, and through satellite (i.e., NAVAREA warnings) by Naval chart Depot Mumbai for long-range MSI as explained earlier.

The Indian Maritime Safety Information Service






Limits of ISSR
MRCC
MRSC
Kolkata
Haldia
Porbandar
Paradip
Mumbai
Vishakhapattnam
Goa
ISRR
New Mangalore
Chennai
Diglipur
A&N
ISRR
Port Blair
Islands
Kochi
SRI
LANKA
Campbell Bay
INDIAN SEARCH & RESCUE REGION

INDIAN SRR AND SAR ORGANISATION

1. On accession to the International Convention on Maritime Search and Rescue 1979, Indian Government has assumed the responsibility of providing SAR cover in Indian SRR with Director General Indian Coast Guard designated as National Maritime SAR Coordinating Authority (NMSARCA). There are three geographic areas/regions established in Indian SRR, for coordinating responses to both maritime and aviation related distress incidents.

2. The SRR (West) coves the SAR operations on the western seaboard. The SRR (East) covers Bay of Bengal including portions of Palk Bay and Gulf of Mannar. The SRR (A&N) covers the area adjacent to Andaman and Nicobar Islands.

3. There are three Maritime Rescue Coordination (MRCCs) defined in INSRR. The MRCC located at Mumbai covers western seaboard of Indian SRR. The eastern seaboard is covered by MRCCs located at chennai and Port Blair.

MARITIME RESCUE COORDINATION CENTRE IN ISRR

1. The Maritime Rescue Coordination Centre (MRCC) is an operational facility, responsible for promoting efficient organisation of SAR services, and for coordinating the conduct of SAR operations within the SRR. The MRCC only coordinates and does not necessarily provide the SAR facilities in the applicable SRR. Aeronautical SAR coordination is performed from aeronautical RCC.

2. There are three Maritime Rescue Coordination Centres (MRCCs) defined in SRR. The MRCC located at Mumbai covers the entire western seaboard of Indian SRR. The Eastern seaboard is covered by MRCCs located at Chennai and Port Blair. The coordinates of the Indian SRRs associated with the respective MRCCs are as follows:-

MRCC MUMBAI

The Indian SRR (West) area covered by the MRCC Mumbai, is defined by the line joining the following coordinates and IBL.

(a) 21 00N 068 15E

(b) 12 00N 063 00E

(c) 12 00N 060 00E

(d) 06 00S 060 00E

(e) 06 00S 068 00E

(f) 00 00S 068 00E

(g) 08 00N 073 00E

(h) 06 10N 077 20E

(i) 08 08N 077 20E

MRCC CHENNAI

The Indian SRR (East) area covered by the MRCC Chennai, is defined by the line joining the following coordinates and IBL.

(a) 08 08N 077 20E

(b) 06 10N 077 20E

(c) 06 00N 078 00E

(d) 10 00N 080 00E

(e) 10 00N 082 00E

(f) 07 15N 088 30E

(g) 15 20N 088 30E

(h) Coastal border between India and Bangladesh

MRCC Port Blair

The Indian SRR (A&N) area covered by the MRCC Port Blair is defined by the line joining the following coordinates and IBL.

(a) Coastal border between India and Bangladesh

(b) 15 20N 088 30E

(c) 07 15N 088 30E

(d) 06 00N 092 00E

(e) 06 00N 097 32E

(f) Northwards of position of serial (e) given above and covering the areas outside limits of the designated areas of other littoral countries.

RESCUE AGENCIES

(i) Indian Navy

(ii) Indian Air Force

(iii) Port Authorities

(iv) Shipping Corporation of India

(v) Director General civil Aviation

(vi) State/Central Fisheries Authorities

(vii) Merchant Ships operating close to position distress

(viii) Civil Authorities

(ix) Indian Meteorological Department

(x) INMCC Bangalore

(xi) Department of Telecommunications

MANNING OF DISTRESS FREQUENCIES

- Following authorities along the Indian coast continuously man distress frequencies for providing assistance to ships/aircraft in distress in Indian waters.

a. Thirteen Coast Radio Stations operated by the Department of communications.

b. Five Port Radio Stations operated by the concerned Port authorities maintain listening watch on distress frequencies.

c. The Indian Navy for providing maritime reconnaissance aircraft and Indian Naval Ships.

d. The Indian Air Force for providing suitable aircraft for rescue operations.

e. Air Traffic Control Centers are often the first to receive information about aircraft in distress. All commercial and may private aircraft are able to communicate with these centers by radio, therefore all aircraft under the control of the Director General of Civil Aviation will also be available for SAR operations.

SHIP REPORTING SYSTEMS

Two ship reporting systems covering Indian SRR are already in force.

1. INDIAN SHIP POSITION AND INFORMATION REPORTING SYSTEM (INSPIRES)
2. SHIP REPORTING SYSTEM FOR SAR (INDSAR)

INDIAN SHIP POSITION AND INFORMATION REPORTING SYSTEM (INSPIRES)

OBJECTIVES OF INSPIRES

The INSPIRES has been established to achieve following objectives.

(i) To provide up to date information on shipping for search and rescue.

(ii) For effective vessel traffic management service.

(iii) For weather forecasting.

(iv) For prevention and containment of marine pollution.

INSPIRES Area of Applicability

The INSPIRES covers all the sea area North of latitude 30 degree South in the Indian Ocean including Arabian sea and Bay of Bengal, on the West along the African coast between latitude 10 degree 30 minute South and 12 degree North and in the East upto longitude 095 degree East.

INSPIRES operating Authority

The Director General Shipping coordinates the functioning of the system with Maritime Operations Centre, Mumbai. The merchant ships are required to pass INSPIRES report to the MOC (Mumbai) and MOC (Vishakhapatnam). The details of information required for SAR operation can be obtained from MOC (Mumbai) and MOC (Vishakapatnam) as and when need arise.

SHIP REPORTING SYSTEM FOR SAR (INDSAR)

SHIP REPORTING SYSTEM FOR SAR (INDSAR)

With effect for 01 Feb 2003, the ship report for search and rescue services have been brought into operation for participation of merchant vessels operating/transiting in the Indian Search and Rescue Region (ISRR). The new reporting system, INDSAR, is an advanced computerized system designed to contribute to safety of life at sea and is operated and maintained by the Indian Coast Guard through Maritime Rescue Co-ordination Centre in Mumbai.

PURPOSE OF THE INDSAR SYSTEM

INDSAR is an integral part of the Maritime Search and Rescue (MSAR) system in India. The objective of the INDSAR system is to contribute to safety of life at sea by:

(a) Limiting the time between the loss of a ship and the initiation of search and rescue action;

(b) Limiting the search area for a rescue action; and

(c) Providing up-to-date information on shipping resources available in the area, in the event of a search and rescue incident.

Why MRCC Mumbai needs to know where you are

If your ship is in distress and you have not been able to send a Mayday message, the INDSAR positive checking system operated by MRCC Mumbai, will conduct an air search to locate your ship. The search aircraft will start searching in the area related to your ship's predicted route and speed, the search aircraft may not be able to find any survivors. It is in the best interest of the ship to keep MRCC Mumbai advised of all your voyage details.

ACTION BY SHIPS IN NAVAREA VIII REGION

1. GMDSS ships shall, while at sea, maintain an automatic DSC watch on the appropriate distress and safety calling frequencies in the frequency bands appropriate for the sea area in which they are operating. Ships, where so equipped, should also maintain watch on the appropriate frequencies for the automatic reception of transmissions of meteorological and navigational warnings and other urgent information to ships.
2. Report any information warranting issue of warning in NAVAREA VIII region.
3. Maintain continuous distress watch on all frequency in accordance with IMO Special Publication S – 53.
4. Contact concerned authority/ Chief Hydrographer in case of any doubts.
5. Vessels subject to the SOLAS Convention must comply with applicable equipment carriage for monitoring requirements and Global Maritime Distress and Safety System (GMDSS) equipment.
6. Any vessel carrying GMDSS compatible equipment should use it as intended and must be prepared at all times to receive distress alerts with it.

ACTION BY SHIP RECEIVING A DISTRESS MESSAGE

- Acknowledge receipt of message.
- Gather the following information from the craft in distress, if possible
  - – Position, course and speed of distressed craft.
  - – Length, breadth and colour of the ship.
  - – Distressed craft’s identity, port of registration, call sign, MMSI number and name.
  - – Telephone, fax and telex number of the ship, owner and agent.
  - – Communication frequency manned by the vessel.
  - – Number of personnel on board and nationality.
  - – Nature of the distress or casualty.
  - – Type of assistance required.
  - – Number of casualties, if any.
  - – Facilities for helicopter operation and obstruction for helicopter landing or winch operation.

ACTION BY SHIP RECEIVING A DISTRESS MESSAGE

– Type and quantity of cargo including fuel, chemical, explosives and hazardous material.

– Any other pertinent information that might facilitate the rescue.

• Proceed to render assistance.

• Relay distress and pass above information to the appropriate MRCC/MRSC.

ACTION BY NATIONAL CO-ORDINATOR.

(i) National Co-ordinators should arrange to receive NAVAREA VIII warnings broadcast and include those warnings in force for their region in their National Notice to Mariners.

(ii) Warnings which warrant further promulgation in an adjacent Area will be passed to the appropriate Area Co-ordinators by Telex/Cable/Airmail.

(iii) Written copies of NAVAREA VIII warnings are being sent by the Area Co-ordinator to the National Co-ordinators and Authorities in NAVAREA VIII by airmail. National Co-ordinators should consider the possibility of making written versions of NAVAREA VIII warnings in force available to ships in the region.

(iv) All NAVAREA VIII warnings included in notices to mariners are also available on Indian National Hydrographic Office website www.hydrobharat.org.

(v) All NAVAREA VIII warnings in force and Serial Numbers only of Warnings pertaining to other NAVAREAS are reproduced in Section 5 of the bimonthly edition of Indian Notices to Mariners and copies sent to National Co-ordinators and Port Authorities by the Area Co-ordinator (Chief Hydrographer) National co-ordinator should make Such Notices available to ship calling at their ports.

(vi) Copies of those NAVAREA VIII warnings likely to remain in force for more than six weeks will be made available to other Area Co-ordinators or National Authorities on request or can be downloaded from INHO website.

ACTION BY NATIONAL CO-ORDINATORS

(vii) The National Co-ordinator in NAVAREA VIII are to make necessary arrangements to issue coastal warnings where necessary in accordance with paragraphs 6 and 7 above. If the information is considered appropriate for promulgation as a NAVAREA VIII warning, it should be passed to the Area Co-ordinator (Chief Hydrographer to the Government of India) prefixed by the desired degree of priority by the fastest means available (Telex, Cable or Airmail).

(viii) The area Co-ordinator, on receiving the information from the National Co-ordinator will issue a NAVAREA VIII warning, if considered necessary.

(ix) When the National Co-ordinator believes himself to be the first receipt of information relating to another region he should pass it to the appropriate National Co-ordinator or Area Co-ordinator by the quickest possible means.

(x) When the Area Co-ordinator believes himself to the first receipt of information relating to another Area, such information will be passed to the appropriate Area Co-ordinator by Telex, Cable or Airmail.

(xi) Implement NAVTEX and SafetyNET service in their respective regions.

CONCLUSION