

भारत सरकार / GOVERNMENT OF INDIA पत्तन, पोत परिवहन और जलमार्ग मंत्रालय MINISTRY OF PORTS, SHIPPING AND WATERWAYS नीवहन महानिदेशालय, मुंबई



Date: 01.04.2024

DIRECTORATE GENERAL OF SHIPPING, MUMBAI

File No. 25-107/2/2024-NT-DGS

DGS Training Circular No. 07 of 2024

Subject: Modernisation of GMDSS-GOC Course and Examination Syllabus-reg.

- 1. The Wireless Planning & Coordination Wing, Department of Telecommunications has issued Office Memorandum No. P-14036/02/2023-COP dated 01/12/2023 on the subject of **Modernisation of GMDSS New GMDSS GOC Course and Examination Syllabus**. The said OM was prepared by WPC in consultation with DG Shipping and all the Maritime Training Institutes (MTIs) conducting GMDSS courses. The copy of OM is enclosed herewith.
- 2. The said OM prescribes the revised GMDSS-GOC course syllabus, list of equipment requirements and revised GMDSS simulator requirements to be installed by the institutes.
- 3. In order to ensure timely implementation of the said OM, all the MTIs approved by DG Shipping for conducting the GMDSS-GOC course are required to ensure full compliance with the requirements specified in the OM with effect from 1st April 2024.
- 4. The institutes shall modify/update the GMDSS simulation system, install the equipment required, revise the course syllabus and course handout to incorporate the changes specified in the said OM.
- 5. Upon compliance with the requirements, the approved MTIs shall communicate their readiness with full supporting documents to the jurisdictional MMDs for the joint inspection by WPC and DGS/MMD as soon as possible prior to commencement of next GMDSS course.

6. This is issued with the approval of the Director General of Shipping.

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Government of India Ministry of Communications Department of Telecommunications Wireless Planning & Co-ordination Wing

6 Floor, Sanchar Bhawan, 20, Ashoka Road, New Delhi-110001

No. P-14036/02/2023- COP

Dated: 01/12/2023

Office Memorandum

Subject: Guidelines for GMDSS Modernisation –new GMDSS GOC Course and Examination Syllabus.

Ministry of Communications in consultation with O/o DG Shipping and GMDSS Training Institutes is introducing modifications in GMDSS-GOC course and examination syllabus notified through its OM No. P-14036/01/2009-COP dated 21.04.2010 as per latest regulations by International Maritime Organisation.

- 2. Hence, all the approved institutes for conduct of GMDSS-GOC Course and Examination are directed to comply with following arrangements as per **Annexure** to this OM:
 - 2.1 Update GMDSS GOC Course Material
 - 2.2 Update of GMDSS GOC equipments
 - 2.3 Update of Simulation softwares
 - 2.4 Provide at least 25 Sample Question papers with answer key w.r.t. new GMDSS GOC syllabus
- 3. All approved institutes for conduct GMDSS Course and Examination and new institutes which have been granted in-principle approval for the same will be subject to joint inspection by Ministry of Communications and DG Shipping for implementation of GMDSS modernisation. Institutes found compliant to GMDSS Modernisation will only be entitled to conduct GMDSS Course and Examination after 31.03.2023.
- 3.1 All approved GMDSS GOC Training institutes are instructed to carryout activities in time-bound manner and send monthly report for compliance of para 2 to AWA (COP) at awacop-dot@nic.in as indicated in **Annexure**.

Amble

3.2 It is desired that GMDSS GOC Course Training and Examination shall be conducted as per this OM positively from 01.04.2024.

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Enclosure: As Above

To,

- 1. All approved GMDSS Institutes.
- 2. Sr. DWA/JWA of RLOs
- 3. EICs/DDs of NRHQ, ERHQ, WRHQ, ERHQ of WMO

Copy to:

- 1. Director General of Shipping
- 2. Director, WMO
- 3. Sr. DWA (IT & SACFA)- for uploading at DOT website.

1. Revisions to be carried out in the GMDSS-GOC course syllabus

Topics for Addition

- 1. Iridium satellite system
- 2. MF & MF/HF installation for communication using DSC/RT
- 3. Reception of MSI & SAR operation by MF (NAVTEX) & HF NBDP
- 4. AIS-SART & RADAR SART
- 5. EPIRB-AIS
- 6. Maintenance & Annual Testing of EPIRB
- 7. Survival craft portable 2-way VHF
- 8. On-scene communication portable Aero VHF
- 9. False Distress Alerts

Topics for Deletion (Removed/discontinued Services)

- 1. INMARSAT-A service
- 2. INMARSAT-B service,
- з. Fleet-77 service
- 4. MF/HF (NBDP)
- 5. VHF EPIRB (CH-70)
- L-Band EPIRB

2. List of equipments to be installed by the institute

- 1. Dummy AIS SART
- 2. Dummy RADAR SART
- 3. Dummy EPIRB-AIS
- 4. Dummy Aero VHF
- 5. AIS
- 6. Portable survival craft Radio.
- 7. Sample piece of Lead Acid battery.

3. GMDSS Simulator Requirements

GMDSS Simulation Software should be approved/certified by recognised international maritime bodies. This software shall meet all requirements stated by IMO and should have below mentioned features:

3.1 Class A (COM) A full mission simulator capable of simulating all radio communication systems in the GMDSS frame-work applicable for a GOC certificate

and SAR operations. The simulator shall be capable of simulating a realistic environment for all of the applicable STCW competence requirements referred for class A.

- 3.2 It shall be possible to transmit and receive information using GMDSS subsystems and equipment, provide radio services in emergencies, perform practical examination of all competencies identified for GMDSS GOC and GMDSS ROC by ITU, IMO, Department of Telecommunications, DG Shipping.
- 3.3 Broad guidelines for capabilities of GMDSS Simulation Software are given below:

Item	Requirement	
1	The radio communication station shall simulate a typical station found merchant ships in accordance with SOLAS 74 chapter IV radiocommunications as amended, including documentation and logbooks.	
2	Each piece of equipment shall be arranged in a ship-like manner	
3	It shall be possible for the learner to move own ship in the navigation area.	
	radio communication station shall at least consist of the following main conents where all necessary sub-systems shall be included:	
4	VHF radiotelephone with DSC (digital selective call).	
5	At least one portable VHF equipment. Replication of instruments either dumn devices or presented in 3D-view for verification and inspection.	

6	At least one EPIRB (emergency position-indicating radio beacon). Replication of beacons and instruments either dummy devices or presented in 3D-view for use, verification and inspection in simulator.			
7	NAVTEX receiver			
8	One radar SART or an AIS-SART (search and rescue transponder). Replication of beacons and instruments either dummy devices or presented in 3D-view for verification and inspection in simulator.			
9	Radar for receiving SART signals			
10	MF/HF radio installation capable of transmitting and receiving, for distress, urgency, safety and general communications using DSC and radiotelephony, including maintain DSC watch.			

11	Recognized mobile satellite service ship earth stations recognized by IMO and in use overseen by IMSO. Inmarsat-C, Inmarsat Fleet Safety	
	service and Iridium.	
12	Sources of energy and a reserve sources of rechargeable accumulator battery for the radio installation to be operated and checked.	
13	At least one VHF Air (frequencies 121.5 MHz and 123.1 MHz) may be portable. Replication of instruments either dummy devices or presented 3D-view for verification and inspection.	
14	AIS-SART. Replication of beacons and instruments either dummy devices or presented in 3D-view for use, verification and inspection in simulator.	
15	When simulating real equipment the behaviour of such simulated equipment should behave as identical as possible as the original. Critical functionality shall be documented	
16	The simulated equipment should resemble especially important radio-technical variables, such as but not limited to: — distance limitations — VHF line of sight communication — VHF/MF/HF power limitation — MF ground wave propagation — HF atmospheric propagation and reflection — Inmarsat link test and log on/off various satellites — AIS and AIS SART (approved) functions — EGC test — EPIRB/SART/Port VHF/Navtex functions.	
17	It shall be possible to use different communication systems at the same time.	
18	The communication station shall be able to receive and transmit messages to the real world as virtualised by the simulator (instructor or other learner).	
19	The instructor shall be able to position the learner in real position all around the world.	
20	The instructor shall be able to introduce variable background noise, relevant to the location and time of day, for each frequency used.	

3.4 The simulator offered for the new syllabus shall be inspected and approved by the designated officers from WPC and DG Shipping. It is advised that the institutes in a region (if not in whole country) should work in a collaborative manner to arrive at a single simulator software in order to help the candidates during their training as well as for examination purpose. Therefore, the approval will be given only for one make and model from each region represented by the institutes in Mumbai, Delhi, Chennai and Kolkata.

4. Implementation Schedule for GMDSS Training Institutes

S. No.	Activity	Timeline
1	GMDSS Institutes to update course material and submit sample question papers to concerned RHQs and inform COP, WPC Wing	
2	Concerned RHQs, WMO to scrutinize and submit new GMDSS question papers for approval	(Fifteen days from S.No. 1) 15.01.2023
3	All approved GMDSS Institutes to carryout installation/updation of equipments and simulation software and inform concerned RLO and DG Shipping for inspection with a copy to COP, WPC Wing.	
4	Concerned RLOs to carryout inspection of GMDSS Institutes and submit report to COP section	(Thirty days from S.No. 3) 15.03.2024
5	Updated list of GMDSS Institutes and announcement implementation of amended GMDSS GOC Course by COP section	(Fifteen days from S.No. 4) 31.03.2024
6.	Commencement of GMDSS Course and GMDSS Examination with new amended syllabus	1 st April, 2024