EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 10 March 1999
on the harmonised examination syllabi
for the General Operator's Certificate (GOC)
and the Restricted Operator's Certificate (ROC)

(ERC/DEC/(99)01)

EUROPEAN CONFERENCE OF POSTAL AND TELECOMMUNICATIONS ADMINISTRATIONS

EXPLANATORY MEMORANDUM

1 INTRODUCTION

The start of the Global Maritime Distress and Safety System (GMDSS) in February 1992 made it necessary to harmonise the examination requirements for certificates of maritime radio operators. The CEPT Recommendation T/R 31-03 was developed and approved by the ERC in 1993 to harmonise the examination syllabi for maritime radio personnel operating in the GMDSS and the procedures for conversion of non-GMDSS certificates to GMDSS certificates.

The efficient operation of GMDSS depends on the proficiency of the maritime radio operators. The Recommendation T/R 31-03 concerning the harmonised examination syllabi for the general operator's certificate and the restricted operator's certificate has proved to be a valuable tool for improving the competence of operators. The importance of the harmonised procedures is emphasised by the fact that part of the content of T/R 31-03 has been adopted by the IMO into the Model Training Course.

Some parts of T/R 31-03 are not relevant any more, notably the temporary procedures for limited examination. Since the period of validity of the limited examinations has ended, these procedures have not been included in the ERC Decision.

In addition to the examination syllabi described in this Decision an ERC Recommendation on the content and format of GOC and ROC certificates is under preparation.

2 NEED FOR AN ERC DECISION

Unfortunately serious operational mistakes still take place on GMDSS frequencies, e.g. in the form of false distress alerts and incorrect distress relays. In order to alleviate these problems, the status of the GOC and ROC examination syllabi needs to be enhanced. The 17th meeting of ERC in June 1996 recognised that more efficient provisions than a Recommendation are required and approved in the Work Programme of WGRR the work item of converting T/R 31-03 to an ERC Decision.

After the implementation of the ERC Decision mechanism, the normal outcome of ERC should be in the format of a Decision. Decisions are presumed to be used in matters of significant harmonisation in the radiocommunications regulatory field. The importance of efficient and timely implementation of the GMDSS system requires the Recommendation T/R 31-03 to be converted to a Decision.

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"The European Conference of Postal and Telecommunications Administrations

considering:

a) that the Maritime Mobile Service and the Maritime Mobile-Satellite Service are services according to ITU Radio Regulations and governed by the ITU Radio Regulations and national regulations;

b) that provisions closely related to the Maritime Mobile Service and the Maritime Mobile-Satellite Service are also given in the International Convention for the Safety of Life at Sea (SOLAS) and other IMO conventions and resolutions;

c) that it is desirable to establish common standards of competence for the personnel of stations of the Maritime Mobile Service and the Maritime Mobile-Satellite Service operating in accordance with the Global Maritime Distress and Safety System (GMDSS);

d) that the GMDSS entered into force on 1 February 1992;

e) that administrations are responsible, in accordance with Article S48 of the ITU Radio Regulations, to ensure that the personnel of ship stations and ship earth stations, operating in accordance with the GMDSS, are adequately qualified to enable efficient operation of the station;

f) that Article S47 of the ITU Radio Regulations specifies the conditions governing the issue of GMDSS certificates for personnel of ship stations and ship earth stations and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) regulates the conditions for the issue of the GMDSS certificates;

g) that IMO resolution A.703(17) recommends the training for maritime radio personnel operating in the GMDSS;

h) that the development in IMO and changes in the GMDSS need to be monitored and consequent modifications introduced in the examination syllabi;

i) that the basic requirements for the content of certificates are set down in Radio Regulations S47.9 through S47.16;

j) that the Council Directive 94/58/EC on the minimum level of training of seafarers (amended by EU Council Directive 98/35/EC) gives the procedures and criteria for the recognition of certificates issued by third countries;

k) that the Directive referred to in considering j) relates to seafarers onboard ships that are subject to the SOLAS Convention;

DECIDES

1. that administrations issue General Operator's Certificates (GOC) for candidates passing the examination described in Annex 1;

2. that administrations issue Restricted Operator's Certificates (ROC) for candidates passing the examination described in Annex 2;

3. that GOC and ROC certificates issued in accordance with this Decision shall bear a reference to the Radio Regulations and this Decision;

4. that administrations mutually recognise each others certificates when these are issued in accordance with this Decision;

5. that this Decision shall enter into force 15 of March 1999;

6. that administrations shall communicate the national measures implementing this Decision to the ERC Chairman and the ERO when the Decision is nationally implemented."

Note:
Please check the ERO web site (www.ero.dk) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.

ANNEX 1

EXAMINATION SYLLABUS FOR GENERAL OPERATOR'S CERTIFICATE (GOC) FOR THE MARITIME MOBILE SERVICE AND THE MARITIME MOBILE-SATELLITE SERVICE

The examination should consist of theoretical and practical tests and shall include at least:

A. KNOWLEDGE OF THE BASIC FEATURES OF THE MARITIME MOBILE SERVICE AND THE MARITIME MOBILE-SATELLITE SERVICE

AI. The general principles and basic features of the maritime mobile service
AI. The general principles and basic features of the maritime mobile-satellite service

B. DETAILED PRACTICAL KNOWLEDGE AND ABILITY TO USE THE BASIC EQUIPMENT OF A SHIP STATION

B1. Use in practice the basic equipment of a ship station
B2. Digital Selective Calling (DSC)
B3. General principles of Narrow Band Direct Printing (NBDP) and Radio Telex Systems. Ability to use maritime NBDP and Radio Telex equipment in practice.
B4. Usage of different INMARSAT systems.
B5. Fault locating

C. OPERATIONAL PROCEDURES AND DETAILED PRACTICAL OPERATION OF GMDSS SYSTEM AND SUBSYSTEMS

C1. Global Maritime Distress and Safety System (GMDSS)
C2. INMARSAT
C3. NAVTEX
C4. Emergency Position Indicating Radio Beacons (EPIRBs)
C5. Search and Rescue Radar Transponder (SART)
C6. Distress, urgency and safety communication procedures in the GMDSS
C7. Distress, urgency and safety communications with non-SOLAS ships which only use radiotelephony
C8. Search and rescue operation (SAR)

D. MISCELLANEOUS SKILLS AND OPERATIONAL PROCEDURES FOR GENERAL COMMUNICATIONS

D1. Ability to use English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea
D2. Obligatory procedures and practices
D3. Practical and theoretical knowledge of general communication procedures

EXAMINATION SYLLABUS GUIDELINES FOR GOC CERTIFICATE

A. KNOWLEDGE OF THE BASIC FEATURES OF THE MARITIME MOBILE SERVICE AND THE MARITIME MOBILE-SATELLITE SERVICE

A1. The general principles and basic features of the Maritime Mobile Service

1.1 Types of communication in the Maritime Mobile Service
- Distress, urgency and safety communications
- Public correspondence
- Port operations and ship movement service
- Intership communications
- On-board communications

1.2 Types of station in the Maritime Mobile Service
- Ship stations
- Coast stations
- Pilot stations, port stations etc.
- Aircraft stations
- Rescue coordination centre RCC

1.3 Elementary knowledge of frequencies and frequency bands
- The concept of frequency
- The equivalence between frequency and wavelength
- The unit of frequency: Hz, kHz, MHz, GHz
- The subdivision of the most significant part of the radio spectrum: MF, HF, VHF, UHF, SHF

1.4 Characteristics of frequencies
- Different propagation mechanisms: propagation in free space, ground wave, ionospheric propagation
- Propagation of MF frequencies
- Propagation of different HF frequency bands
- Propagation of VHF and UHF frequencies

1.5 Knowledge of the role of the various modes of communication
- DSC
- Radiotelephony
- NBDP
- Facsimile
- Data
- Morse telegraphy

1.6 Elementary knowledge of different types of modulation and classes of emission
- Classes of emission
- Carrier frequency and assigned frequency
- Bandwidth of different emissions
- Official designations of emissions (e.g. F1B,J3E,A3E,AIA etc.)
- Unofficial designations of emissions (e.g.TLX,SSB,AM,CW etc.)

1.7 Frequencies allocated to the Maritime Mobile Service
- The usage of MF, HF, VHF, UHF and SHF frequencies in the maritime mobile service
- The concept of radio channel. Simplex, semi-duplex and duplex. Paired and unpaired frequencies.
- Frequency plans and channelling systems:
    - HF telephony (Relevant appendix of the Radio Regulations)
    - VHF telephony (Relevant appendix of the Radio Regulations)
    - HF NBDP (Relevant appendices of the Radio Regulations)
    - MF telephony and NBDP for Region 1 (Geneva 85 plan)
    - GMDSS distress and safety frequencies
    - Distress and safety frequencies of the pre-GMDSS system

- Calling frequencies

A2. The general principles and basic features of the Maritime Mobile-Satellite Service

2.1 Basic knowledge of satellite communications
- INMARSAT Space segment
- Modes of communication
  - Telex services
  - Telephone services
  - Data and facsimile communications
  - Store and forward operation
- Distress and safety communications
- INMARSAT-A/B communications services
- INMARSAT-C communications services
- INMARSAT Enhanced Group Call (EGC) system
- INMARSAT-M communication services

2.2 Types of station in the maritime mobile-satellite service
- Coast Earth Stations (CES)
- Network Co-ordination Stations (NCS)
- Ship Earth Stations (SES)

B. DETAILED PRACTICAL KNOWLEDGE AND ABILITY TO USE THE BASIC EQUIPMENT OF A SHIP STATION

B1. Knowledge of and ability to use in practice the basic equipment of a ship station

1.1 Watchkeeping receivers
- The controls and usage of VHF DSC watch receiver
- The controls and usage of MF DSC watch receiver and MF/HF DSC watch receiver

1.2 VHF radio installation
- Channels
- Controls
- Usage
- DSC

1.3 MF/HF radio installation
- Frequencies
- Typical controls and usage, e.g.
  - connecting the power
  - selecting the RX frequency
  - selecting TX frequency
  - selecting ITU channel number
  - tuning the transmitter
  - selecting the class of emission
  - using volume control and squelch
  - using clarifier or RX fine tuning
  - controlling RF gain
  - using automatic gain control
  - using the 2182 kHz instant selector

1.4 Antennas
- Isolators
- VHF whip antennas
- MF/HF whip antennas
- MF/HF wire antennas
- Satellite antennas

1.5 Batteries
- Different kinds of batteries and their characteristics
- Charging of batteries
- Maintenance of batteries
- UPS systems

1.6 Survival craft radio equipment
- Portable two-way VHF radiotelephone apparatus
- SART
- EPIRB

B2. Digital Selective Calling (DSC)

2.1 Call format specifier
- distress call
- all ships call
- call to individual station
- geographic area call
- group call
- automatic/semi-automatic service

2.2 Call address selection with the MMSI number system
- the nationality identification
- group calling numbers
- coast station numbers
- ship station numbers

2.3 Call categorisation
- distress
- urgency
- safety
- other communications

2.4 Call telecommand and traffic information
- distress alerts
- other calls
- working frequency information

2.5 Test Calls

B3 Knowledge of the general principles of NBDP and Radio Telex systems. Ability to use maritime NBDP and Radio Telex equipment in practice.

3.1 NBDP systems
- Automatic systems
- Semi-automatic systems
- Manual systems
- ARQ mode
- FEC mode
- ISS/IRS arrangement
- Master and slave
- Radio telex numbering system
- Answerback

3.2 Radio Telex equipment
- Controls and indicators
- Keyboard operation

B4. Knowledge of the usage of INMARSAT systems. Ability to use INMARSAT equipment or simulator in practice.

4.1 INMARSAT-A/B Ship Earth Station
- Satellite acquisition
- Telex services
- Telephone services
- Data and facsimile communications

4.2 INMARSAT EGC Receiver
- Pre-programming an SES for EGC message reception
- Selecting operating mode for EGC reception

4.3 INMARSAT-C Ship Earth Station
- Components of an INMARSAT-C terminal
- Entering/updating position
- Usage of an INMARSAT-C Ship Earth Station
- Sending and receiving text messages

B5. Fault locating

5.1 - Proficiency in elementary fault localisation by means of built-in measuring instruments or software in accordance with the equipment manuals. Elementary fault repair such as replacement of fuses, indicator lamps and the like.

C. OPERATIONAL PROCEDURES AND DETAILED PRACTICAL OPERATION OF GMDSS SYSTEM AND SUBSYSTEMS

C1. Global Maritime and Distress and Safety System (GMDSS)

1.1 Sea Areas and the GMDSS master plan

1.2 Watchkeeping on distress frequencies as defined in the Radio Regulations, the SOLAS Convention, and the STCW Convention

1.3 Functional requirements of ship stations

1.4 Carriage requirements of ship stations

1.5 Sources of energy of ship stations including emergency sources of energy

1.6 Means of ensuring availability of ship station equipment

1.7 Licences, radio safety certificates, radio operator certificates, inspections and surveys

C2. INMARSAT usage in the GMDSS

2.1 INMARSAT-A/B Ship Earth Station
- Distress communications
    - Use of the distress facility
    - Satellite acquisition
    - Telex and telephony distress calls
    - Procedures for distress calls
    - Rescue Co-ordination Centres associated with the Coast Earth Stations.

2.2 INMARSAT-C Ship Earth Station
- Distress and safety services
    - Sending a distress alert
    - Sending a distress priority message
    - The INMARSAT-C safety services
    - 2-digit code safety services

2.3 INMARSAT EGC
- Purpose of the EGC system
- All-ships messages and INMARSAT system messages
- Classes of INMARSAT-C SES and their EGC reception

C3. NAVTEX

3.1 The NAVTEX system
- Purpose of NAVTEX
- NAVTEX frequencies
- Reception range
- Message format (transmitter ID, message type, message number)

3.2 NAVTEX receiver
- Selection of transmitters
- Selection of message type
- Messages which cannot be rejected
- Use of subsidiary controls and changing paper

C4. Emergency Position Indicating Radio Beacons (EPIRBs)

4.1 Satellite EPIRBs
- Basic characteristics of operation on 406 MHz
- Basic characteristics of operation on 1.6 GHz
- Basic characteristics of operation on 121.5 MHz including homing functions
- Information contents of a distress alert
- Manual usage
- Float-free function
- Routine maintenance
    - Testing
    - Checking battery expiry date
    - Checking the hydrostatic release mechanism expiry date

4.2 VHF-DSC-EPIRB
- Basic characteristics of operation on CH70

C5. Search and Rescue Radar Transponder (SART)

5.1 Search and Rescue Radar Transponder (SART)
- The main technical characteristics
- Operation
- Range of a SART transmitter
- Routine maintenance of a SART
    - Checking battery expiry date

C6. Distress, urgency and safety communication procedures in the GMDSS

6.1 Distress communications
- DSC distress alert
    - The definition of a distress alert
    - Transmission of a distress alert

- Transmission of a shore-to-ship distress alert relay
- Transmission of a ship-to-shore distress alert relay
- Transmission of a distress alert by a station not itself in distress

- Receipt and acknowledgement of DSC distress alert
  - Acknowledgement procedure by radiotelephony
  - Acknowledgement procedure by NBDP
  - Receipt and acknowledgement by a coast station
  - Receipt and acknowledgement by a ship station
- Handling of distress alerts
  - Preparations for handling of distress traffic
  - Distress traffic terminology
- Testing DSC distress and safety calls
- Cancelling false distress alerts
- On-scene communications
- SAR operation

6.2 Urgency and safety communications
- The meaning of urgency and safety communications
- Procedures for DSC urgency and safety calls
- Urgency communications
- Radio medical services
- Medical transports
- Safety communications

6.3 Reception of maritime safety information (MSI)
- Reception by NAVTEX
- Reception by INMARSAT EGC
- Reception by HF NBDP
- The navigational warning signal of the old distress and safety system
- The navigational warnings transmitted by radio telephony

6.4 Protection of distress frequencies
- Guard bands
- Tests on distress frequencies
- Transmissions during distress traffic
- Avoiding harmful interference
- Prevention of unauthorised transmissions

C7. Distress, urgency and safety communications with non-SOLAS ships which only use radiotelephony
- Distress signal
- Distress call
- Distress message
- Acknowledgement of a distress message
- Distress traffic terminology
- Transmission of a distress message by a station not itself in distress
- Urgency signal
- Medical advice
- Safety signal

C8. Search and rescue operation (SAR)

7.1 The role of RCCs

7.2 Merchant Ship Search and Rescue Manual MERSAR

7.3 Maritime rescue organisations

7.4 Ship reporting systems

D. MISCELLANEOUS SKILLS AND OPERATIONAL PROCEDURES FOR GENERAL COMMUNICATIONS

D1. Ability to use English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea

1.1 Use of the International Code of Signals and the IMO Standard Marine Communication Phrases

1.2 Recognised standard abbreviations and commonly used service codes

1.3 Use of international phonetic alphabet

D2. Obligatory procedures and practices

2.1 Effective use of obligatory documents and publications

2.2 Radio record keeping

2.3 Knowledge of the regulations and agreements governing the maritime mobile service and the maritime mobile-satellite service

D3. Practical and theoretical knowledge of general communication procedures

3.1 Selection of appropriate communication methods in different situations

3.2 Traffic lists

3.3 Radio telephone call
- Method of calling a coast station by radiotelephony
- Ordering for a manually switched link call
- Ending the call
- Special facilities of calls
- Method of calling a coast station by DSC
- Selecting an automatic radiotelephone call

3.4 Traffic charges
- International charging system
- INMARSAT communications charging system
- AAIC code
- The meaning of land line charge (LL), coast station charge (CC)
- Currencies used in international charging

3.5 Practical traffic routines

3.6 World geography, especially the principal shipping routes and related communication routes

ANNEX 2

EXAMINATION SYLLABUS FOR RESTRICTED OPERATOR'S CERTIFICATE (ROC) FOR THE MARITIME MOBILE SERVICE AND THE MARITIME MOBILE-SATELLITE SERVICE

The examination shall consist of theoretical and practical tests and shall include at least:

A. KNOWLEDGE OF THE BASIC FEATURES OF THE MARITIME MOBILE SERVICE

B. DETAILED PRACTICAL KNOWLEDGE AND ABILITY TO USE THE BASIC EQUIPMENT OF A SHIP STATION

- B1. Use in practice the basic equipment of a ship station
- B2. Digital Selective Calling (DSC)

C. OPERATIONAL PROCEDURES AND DETAILED PRACTICAL OPERATION OF GMDSS SYSTEM AND SUBSYSTEMS

- C1. Global Maritime Distress and Safety System (GMDSS)
- C2. NAVTEX
- C3. Emergency Position Indicating Radio Beacons (EPIRBs)
- C4. Search and Rescue Radar Transponder (SART)
- C5. Distress, urgency and safety communication procedures in the GMDSS
- C6. Distress, urgency and safety communications with non-SOLAS ships which only use radiotelephony
- C7. Search and rescue operation (SAR)

D. MISCELLANEOUS SKILLS AND OPERATIONAL PROCEDURES FOR GENERAL COMMUNICATIONS

- D1. Ability to use English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea
- D2. Obligatory procedures and practices
- D3. Practical and theoretical knowledge of general communication procedures

EXAMINATION SYLLABUS GUIDELINES FOR ROC CERTIFICATE

A. KNOWLEDGE OF THE BASIC FEATURES OF THE MARITIME MOBILE SERVICE

A1. The general principles and basic features of the maritime mobile service

1.1 Types of communication in the maritime mobile service
- Distress, urgency and safety communications
- Public correspondence
- Port operations and ship movement service
- Intership communications
- On-board communications

1.2 Types of station in the maritime mobile service
- Ship stations
- Coast stations
- Pilot stations, port stations etc.
- Aircraft stations
- Rescue coordination centre RCC

1.3 Elementary knowledge of frequencies and frequency bands
- The concept of frequency

1.4 Characteristics of frequencies
- Propagation of VHF and UHF frequencies

1.5 Frequencies allocated to the maritime mobile
- The usage of VHF and UHF frequencies in the maritime mobile service
- The concept of radio channel. Simplex, semi-duplex and duplex.
- Frequency plan for VHF telephony (Relevant appendix of the Radio Regulations)
- GMDSS distress and safety frequencies
- Calling frequencies

B. DETAILED PRACTICAL KNOWLEDGE AND ABILITY TO USE THE BASIC EQUIPMENT OF A SHIP STATION

B1. Knowledge of and ability to use in practice the basic equipment of a ship station

1.1 VHF radio installation
- Channels
- Controls
- Usage
- DSC

1.2 Antennas
- VHF antennas
- Antenna for the NAVTEX system

1.3 Batteries
- Different kinds of batteries and their characteristics
- Charging
- Maintenance of batteries
- UPS systems

1.4 Survival craft radio equipment
- Portable two-way VHF radiotelephone apparatus
- SART
- EPIRB

B2. Digital Selective Calling (DSC)

2.1 Call format specifier
- distress call
- all ships call
- call to individual station
- geographic area call
- group call
- automatic/semi-automatic service

2.2 Call address selection with the MMSI number system
- the nationality identification
- group calling numbers
- coast station numbers
- ship station numbers

2.3 Call categorisation
- distress
- urgency
- safety
- other communications
- routine

2.4 Call telecommand and traffic information
- distress alerts
- other calls
- working frequency information

2.5 Usage of VHF-channel 70

C. OPERATIONAL PROCEDURES AND DETAILED PRACTICAL OPERATION OF GMDSS SYSTEM AND SUBSYSTEMS

C1. Global Maritime and Distress and Safety System (GMDSS)

1.1 Sea Areas and the GMDSS master plan

1.2 Watchkeeping on VHF distress frequencies

1.3 Functional requirements of ship stations sailing within the limits of sea area A1

1.4 Carriage requirements of ship stations sailing within the limits of sea area A1

1.5 Sources of energy of ship stations including emergency sources of energy

1.6 Means of ensuring availability of ship station equipment

1.7 Licences, radio safety certificates, radio operator certificates, inspections and surveys

C2. NAVTEX

2.1 The NAVTEX system
- Purpose of NAVTEX
- NAVTEX frequencies
- Reception range
- Message format (transmitter ID, message type, message number)

2.2 NAVTEX receiver
- Selection of transmitters
- Selection of message type
- Messages which cannot be rejected
- Use of subsidiary controls and changing paper

C3. Emergency Position Indicating Radio Beacons (EPIRBs)

3.1 Satellite EPIRBs
- Basic characteristics of operation on 406 MHz
- Basic characteristics of operation on 1.6 GHz
- Basic characteristics of operation on 121.5 MHz including homing functions
- Information contents of a distress alert
- Manual usage
- Float-free function
- Routine maintenance
    - Testing

- Checking battery expiry date
- Checking the hydrostatic release mechanism expiry date

3.2 VHF-DSC-EPIRB
- Basic characteristics of operation on CH70

C4. Search and Rescue Radar Transponder (SART)

4.1 Search and Rescue Radar Transponder (SART)
- The main technical characteristics
- Operation
- Range of a SART transmitter
- Routine maintenance of a SART
    - Checking battery expiry date

C5. Distress and safety communication procedures in the GMDSS

5.1 Distress communications
- DSC distress alert
    - The definition of a distress alert
    - Transmission of a distress alert
    - Transmission of a shore-to-ship distress alert relay
    - Transmission of a ship-to-shore distress alert relay
    - Transmission of a distress alert by a station not itself in distress
- Receipt and acknowledgement of DSC distress alert
    - Acknowledgement procedure
    - Receipt and acknowledgement by a coast station
    - Receipt and acknowledgement by a ship station
- Handling of distress alerts
    - Preparations for handling of distress traffic
    - Distress traffic terminology
- Testing DSC distress and safety calls
- Cancelling false distress alerts
- On-scene communications
- SAR operation

5.2 Urgency and safety communications
- The meaning of urgency and safety communications
- Procedures for DSC urgency and safety calls
- Urgency communications
- Radio medical services
- Medical transports
- Safety communications

5.3 Reception of maritime safety information (MSI)
- Reception by NAVTEX
- The navigational warnings transmitted by radio telephony

5.4 Protection of distress frequencies
- Guard bands
- Tests on distress frequencies
- Transmissions during distress traffic
- Avoiding harmful interference
- Prevention of unauthorised transmissions

C6. Distress, urgency and safety communications with non-SOLAS ships which only use radiotelephony
- Distress signal
- Distress call
- Distress message

- Acknowledgement of a distress message
- Distress traffic terminology
- Transmission of a distress message by a station not itself in distress
- Urgency signal
- Medical advice
- Safety signal

C7. Search and rescue operation (SAR)

7.1 The role of RCCs

7.2 Merchant Ship Search and Rescue Manual MERSAR

7.3 Maritime rescue organisations

7.4 Ship reporting systems

D. MISCELLANEOUS SKILLS AND OPERATIONAL PROCEDURES FOR GENERAL COMMUNICATIONS

D1. Ability to use English language, both written and spoken, for the satisfactory exchange of communications relevant to the safety of life at sea

1.1 Use of the International Code of Signals and the IMO Standard Marine Communication Phrases

1.2 Recognised standard abbreviations and commonly used service codes

1.3 Use of international phonetic alphabet

D2. Obligatory procedures and practices

2.1 Effective use of obligatory documents and publications

2.2 Radio record keeping

2.3 Knowledge of the regulations and agreements governing the maritime mobile service

D3. Practical and theoretical knowledge of general communication procedures

3.1 Traffic lists

3.2 Radiotelephone call
- Method of calling a coast station by radiotelephony
- Ordering for a manually switched link call
- Ending the call
- Special facilities of calls
- Method of calling a coast station by DSC
- Selecting an automatic radiotelephone call

3.3 Traffic charges
- International charging system
- AAIC code
- Currencies used in international charging
- The meaning of land line charge (LL), coast charge (CC)

3.4 Practical traffic routines

3.5 Principal shipping routes and related communication routes appropriate for ships sailing within the limits of sea area A1