PERFORMANCE SPECIFICATION

FOR INMARSAT ENHANCED GROUP CALL

(EGC) EQUIPMENT AND

INMARSAT STANDARD-C SHIP EARTH

STATION CAPABLE OF TRANSMITTING AND

RECEIVING DIRECT-PRINTING

COMMUNICATIONS



TELECOMMUNICATIONS AUTHORITY HONG KONG

FOREWORD

- 1. This specification stipulates the minimum performance requirements for enhanced group call (EGC) equipment and for INMARSAT Standard-C ship earth stations (SES) capable of transmitting and receiving direct-printing communications, as required by the 1988 amendments to the 1974 International Convention for Safety of Life at Sea (SOLAS) on the introduction of the Global Maritime Distress and Safety System (GMDSS).
- 2. Under the Merchant Shipping (Safety) (GMDSS Radio Installations) Regulation (hereafter referred to as the Regulation) under section 37 and 107 of the Merchant Shipping (Safety) Ordinance (Cap. 369), every GMDSS equipment required to be provided under the Regulation -
 - a) shall conform to the relevant performance standards adopted by the International Maritime Organization (IMO); and
 - b) shall, in the case of equipment provided on Hong Kong ships, in addition, conform to appropriate performance specifications issued by the Telecommunications Authority (TA).
- 3. Under the provision of the Regulation, EGC equipment and relevant Inmarsat-C installations equipped in Hong Kong ships shall comply with this specification.
- 4. Type-approval of the equipment will be granted on the basis of satisfactory document evaluation of the certification issued by competent overseas authorities for the equipment. Where applicable, the application should list all type-numbers that apply to non-technical variants of the model submitted.
- 5. Manufacturers or their specified agents, who wish to submit their EGC and SES equipment for type-approval, shall apply to:

Radio Laboratory, Standards Section, Office of the Telecommunications Authority, 29/F., Wu Chung House, 213 Queen's Road, East, Wanchai Hong Kong.

Tel. No.: +852 2343 7565 Fax No.: +852 2343 5824

- 6. The TA may amend any part of this specification as and when he deems necessary.
- 7. The TA reserves the right to conduct tests or evaluations on models he considers to be technical variants and whose performance may differ as between models.
- 8. In case of doubt about the interpretation of this specification, the methods of carrying out the test and the validity of statements made by the manufacturers of the equipment, the decision of the TA shall be final.

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1. SCOPE OF SPECIFICATION

This specification stipulates the minimum performance requirements for enhanced group call (EGC) equipment and for INMARSAT Standard-C ship earth stations (SES) capable of transmitting and receiving direct-printing communications, as required by the 1988 amendments to the 1974 International Convention for Safety of Life at Sea (SOLAS) for the introduction of the Global Maritime Distress and Safety System (GMDSS).

Equipment which comply with this specification shall be required to meet all relevant performance standards adopted by the relevant IMO Resolutions and technical characteristics as defined in the relevant ITU's Radio Regulations and Recommendations for the concerned equipment.

This specification is applicable to the following classes of equipment:

- Class 0: An EGC receiver, either stand-alone or an element of a GMDSS installation when added to an INMARSAT-A ship earth station installed in accordance with the INMARSAT design and installation guidelines (DIGs) for GMDSS installations.
- Class 1: A basic ship earth station providing shore-to-ship and ship-to-shore message transfer only.
- Class 2: As Class 1 but with EGC as an alternative to shore-to-ship transfer using a shared receiver.
- Class 3: As Class 1 but with EGC using an independent receiver.

2. TECHNICAL REQUIREMENTS

2.1 Enhanced Group Call (EGC) equipment shall comply with the basic technical requirements as defined in :-

IMO Resolution A.664(16) on "Performance Standards for Enhanced Group Call Equipment".

- 2.2 INMARSAT Standard-C ship earth stations (SES) capable of transmitting and receiving direct-printing communications shall comply with the basic technical requirements as defined in:-
 - (a) IMO Resolution A.807(19) on "Performance Standards for INMARSAT-C Ship Earth Stations capable of Transmitting and Receiving Direct-printing Communications" for equipment installed on or after 23 November 1996; or
 - (b) IMO Resolution A.663(16) on the same subject for equipment installed before 23 November 1996.

3. EVALUATION REQUIREMENTS

EGC equipment and INMARSAT-C SES capable of transmitting and receiving direct-printing communications shall be evaluated in accordance with the following technical standards:

- (a) IEC 1097-4: Global Maritime Distress and Safety System (GMDSS) Part 4: INMARSAT-C ship earth station and INMARSAT enhanced group call (EGC) equipment Operational and performance requirements, methods of testing and required test results, published by the International Electrotechnical Commission (IEC); or
- (b) ETS 300 460: Satellite Earth Stations and Systems (SES); Maritime Mobile Earth Stations (MMESs) operating in the 1.5/1.6 GHz bands providing Low Bit Rate Data Communications (LBRDCs) for the Global Maritime Distress and Safety System (GMDSS): Technical characteristics and methods of measurement published by the European Telecommunications Standards Institute (ETSI).

4. HOW TO OBTAIN TECHNICAL INFORMATION

- 4.1 The HKTA series specifications are issued by the Telecommunications Authority. The documents can be obtained through one of the following methods:-
 - download direct through the OFTA's Internet Home Page. The Home Page address is http://www.ofta.gov.hk;
 - download direct through the OFTA's Bulletin Board Service. The access details are given below:

BBS telephone number: +852 2834 0119

Number of data bits: 8
Number of parity bit: none
Number of stop bit 1

Flow Control: Hardware Terminal Mode: ANSI

Default Protocol: Zmodem is recommended

• hard copies will be available upon request to:-

Senior Telecommunications Engineer (Standards) Standards Section, Office of the Telecommunications Authority, 29/F Wu Chung House, 213 Queen's Road East, Wanchai, Hong Kong.

Fax: +852 2803 5112

4.2 The publications of IMO can be obtained from :

International Maritime Organization 4 Albert Embankment, London SE1 7SR

Tel: 0171 735 7611 Fax: 0171 587 3210

4.3 The technical standards issued by the IEC can be obtained from :

International Electrotechnical Commission 3, rue de Varembé • PO Box 131 211 Geneva 20 • Switzerland

Tel: +41 22 919 02 11 Fax: +41 22 919 03 00

4.4 The technical specifications issued by the ETSI can be obtained from :

The Publications Office ETSI, 06921 Sophia Antipolis CEDEX, France

Tel: +33 92 94 42 41 Fax: +33 93 95 81 33

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