

**IMO Assembly Resolution A.664(16) –  
Performance Standards for Enhanced Group Call Equipment**

Submitted by Inmarsat

**SUMMARY**

Executive Summary: This document provides proposed changes to the existing text of resolution A.664(16) for consideration by CPRNW10.

Action to be taken: Paragraph 4

Related documents: None

1. During the preliminary consideration of the International SafetyNET Manual at the WWNWS Document review meeting held at the IMO temporary headquarters on 15 – 17 April 2008 it was noted that prior to the revision of this document it would be necessary to review resolution A.664(16) on Performance Standards for Enhanced Group Call Equipment.
2. It was further agreed that this matter should be considered during CPRNW10 where Inmarsat would provide guidance on the changes that would be necessary.
3. The text of the existing resolution with proposed changes is attached at the Annex for your reference. It is hoped that a revised text can be submitted to and approved at COMSAR 13 in January 2009 for subsequent adoption by the MSC.
4. CPRNW is invited to note the information provided.

\*\*\*

## Annex

RESOLUTION A.664(16)  
Adopted on 19 October 1989  
Agenda item 10

### PERFORMANCE STANDARDS FOR ENHANCED GROUP CALL EQUIPMENT

THE ASSEMBLY,

RECALLING Article 15(j) of the Convention on the International Maritime Organization concerning the functions of the Assembly in relation to regulations and guidelines concerning maritime safety,

RECOGNIZING the need to prepare performance standards for enhanced group call equipment in order to ensure the operational reliability of such equipment and to avoid, as far as practicable, adverse interaction between such equipment and other communication and navigation equipment aboard the ship,

HAVING CONSIDERED the recommendation made by the Maritime Safety Committee at its ~~[xxx] fifty-fifth~~ session,

Formatted: Font: Italic

1. ADOPTS the Recommendation on Performance Standards for Enhanced Group Call Equipment, the text of which is set out in the Annex to the present resolution;

2. NOTES that, currently, provision of maritime safety information via satellite is provided only through Inmarsat SafetyNET on Inmarsat C/mini-C;

23. NOTES also that general requirements and ~~part A-Annex B [TBC]~~ of the ~~INMARSAT-Inmarsat Maritime~~ design and installation guidelines for enhanced group call equipment is similar to the present performance standards for enhanced group call equipment and to the performance standards for shipborne radio equipment - general requirements (resolution ~~A.569(14)~~ A.694(17));

Formatted: Font: Italic

34. RECOMMENDS Member Governments to ensure that every enhanced group call equipment which will form part of the global maritime distress and safety system conforms to performance standards not inferior to those specified in the Annex to this resolution, which are in accordance with ~~part A of the INMARSAT~~ general requirements and Annex B ~~[TBC]~~ of the Inmarsat ~~Maritime~~ design and installation guidelines for enhanced group call equipment;

Formatted: Font: Italic

45. INVITES INMARSAT to ensure that any amendments to ~~part A-Annex B [TBC]~~ of the ~~INMARSAT-Inmarsat Maritime~~ design and installation guidelines for enhanced group call equipment be agreed with the Organization prior to their implementation;

Formatted: Font: Italic

56. REQUESTS the Maritime Safety Committee to ensure that any proposed amendments to this resolution be agreed through IMSO with ~~INMARSAT Inmarsat~~ prior to their consideration by the Assembly.

ANNEX

## RECOMMENDATION ON PERFORMANCE STANDARDS FOR ENHANCED GROUP CALL EQUIPMENT

### 1 INTRODUCTION

[Should there be some explanation here what EGC equipment is? (BM/AF)]

1.1 The enhanced group call equipment to be used in the ~~INMARSAT system~~ GMDSS should comply with the general requirements set out in Assembly resolution ~~A.569(14)–A.701(17)~~ [to be revised as well], [IEC 61097-4, IEC 60945] and the following minimum performance requirements.

Formatted: Font color: Red

Formatted: English (U.K.)

1.2 The equipment should be capable of producing a printed copy of received information. Received EGC messages may be stored for later printing, with indication to the operator that the message has been received, ~~for later printing~~, except for the vital messages referred to in paragraphs ~~3.2 and 3.5~~, which should be stored and printed out upon receipt.

1.3 The equipment should provide a visual indication that the ship's position has not been updated during the last 12 hours. It should only be possible to reset this indication by revalidating the ship's position.

~~1.4~~ 1.4 The enhanced group call installation may be either separate or combined with other installations.\*

\* Elements of other installations, e.g. the antenna, low noise amplifier and down-converter of the ship earth station, may be shared for the reception of enhanced group call messages.

### 2 TECHNICAL REQUIREMENTS

The equipment should be type-approved by INMARSAT and should comply with the environmental conditions and electromagnetic compatibility requirements specified in the INMARSAT technical requirements for the enhanced group call receiver.

### 3 OPERATION

3.1 Means should be provided to enter the ship's position and current and planned area ~~NAVAREA/METAREA~~ codes manually so that area group calls can be received. Means should also be provided to enter current and planned coastal warning service coverage areas and different classes of messages. Optionally, the ship's position, as determined by the navigational equipment, may be entered automatically and the area code automatically derived therefrom.

3.2 Provision should be made for a specific aural alarm and visual indication at the position from which the ship is normally navigated to indicate receipt of a distress or urgency priority enhanced group call message ~~call or a call having distress category~~. It should not be possible to disable this alarm and it should only be possible to reset it manually and only from the position where the message is displayed or printed.

3.3 The equipment should indicate when it is not correctly tuned or synchronized to the enhanced group call carrier.

3.4 Any message should be printed regardless of the character error rate of its reception. The equipment should print a low line mark if a character is received mutilated,

3.5 Acceptance or rejection of service codes \*\* should be under the operator's control except that equipment should ~~be unable to reject relevant always receive~~ navigational warnings, meteorological warnings and forecasts, search and rescue information and ~~certain special warnings shore-to-ship distress alerts~~, which are directed to a fixed or absolute geographical area within which the ship is operating.

\* The meaning of the service codes is in accordance with the Recommendation ITU-R M.540-2 1990, Operational and technical characteristics for an automated direct-printing telegraph system for promulgation of navigational and meteorological warnings and urgent information to ships.

~~\*\* The meaning of the service codes is the same as for the NAVTEX system (see CCIR Recommendation 540 and the NAVTEX Manual).~~

3.6 Means should be provided not to ~~reprint~~ or store the same message after it has been received without error.

3.7 The printing device should be capable of printing at least the ~~Standard International Alphabet 5 (IA-Number 5)~~ character set. Other character sets are optionally used according to ISO 2022 standards or ITU-T Recommendation T.61\*\*.

\*\* ISO 2022, "Information technology - Character code structure and extension techniques" standards. ~~or CCITT Recommendation T.61.~~ [to check if it is valid]

3.8 The printing device should be able to print at least 40 characters per line.

3.9 The signal processor and printing device should ensure that if a word cannot be accommodated in full on one line, it should be transferred to the next line. The printing device should automatically feed five lines after completing the printed messages.

3.10 A local audible alarm should be sounded to give advanced warning of the printing device "paper low" condition. It should not be possible to confuse the sound of the "paper low" alarm with that of the distress or urgency alarm upon (caused by) reception of a distress or urgency priority message.

#### 4 POWER SUPPLY

4.1 The enhanced group call equipment should normally be powered from the ship's main source of electrical energy. In addition, it should be possible to operate the enhanced group call equipment, and all other equipment necessary for its normal functioning, from an alternative source of energy.

4.2 Changing from one source of supply to another, or any interruption of up to 60 s duration of the supply of electrical energy, should not require the equipment to be manually re-initialized and should not result in loss of received messages stored in the memory.

#### 5 ANTENNA SITING

Formatted: English (U.K.)

Formatted: Font: Not Italic

Formatted: English (U.K.)

5.1 Where an omnidirectional antenna is used, it is desirable that the antenna be sited in such a position that no obstacle likely to degrade significantly the performance of the equipment appears in the fore and aft directions down to  $-5^{\circ}$  and in the port and starboard directions down to  $-15^{\circ}$ .

5.2 Where a stabilized directive antenna is used, it is desirable that the antenna be sited in such a position that no obstacle likely to degrade significantly the performance of the equipment appears in any azimuth down to  $-5^{\circ}$ .

5.3 For omnidirectional antennas, objects, especially those within 1 m of the antenna which cause a shadow sector of greater than  $2^{\circ}$ , are likely to degrade significantly the performance of the equipment.

5.4 For directive antennas, objects, especially those within 10 m of the antenna which cause a shadow sector of greater than  $6^{\circ}$ , are likely to degrade significantly the performance of the equipment.