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Global maritime distress and safety system (GMDSS) –

Part 10: Inmarsat-B ship earth station equipment – Operational and performance requirements, methods of testing and required test results

Système mondial de détresse et de sécurité en mer (SMDSM) –

Partie 10: Matériel destiné aux stations terrestres des navires de type Inmarsat-B – Exigences d'exploitation et de fonctionnement, méthodes d'essai et résultats d'essai exigés

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FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61097-10 has been prepared by IEC technical committee 80: Maritime navigation and radiocommunication equipment and systems.

The text of this standard is based on the following documents:

FDIS	Report on voting
80/216/FDIS	80/231/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

Annex A forms an integral part of this standard.

Annexes B and C are for information only.

A bilingual version of this standard may be issued at a later date.

GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) –

Part 10: Inmarsat-B ship earth station equipment – Operational and performance requirements, methods of testing and required test results

1 Scope

This part of IEC 61097 specifies the minimum operational and performance requirements, technical characteristics, methods of testing and required test results for Inmarsat-B maritime class 1 ship earth stations (SES), capable of transmitting and receiving distress and safety communications using telephony and direct-printing telegraphy, as required by regulation IV / 10.1 and 14.1 of the 1988 amendments to the 1974 International Convention for the Safety of Life at Sea (SOLAS), for use in the GMDSS.

In order to meet the carriage requirements of the GMDSS in respect of receipt of SafetyNET broadcasts, it is necessary to install an additional EGC receiver or a combined Inmarsat-C/EGC receiver.

This standard takes account of IMO Resolution A.694, to which IEC 60945 is associated. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence.

This standard incorporates the performance standards of IMO Resolution A.808. It also incorporates the relevant ITU Radio regulations.

This standard does not incorporate the Inmarsat system requirements needed for Inmarsat type approval. For these, the latest edition of the Inmarsat-B system definition manual (SDM) shall be consulted. When a requirement in this standard is different from one in the Inmarsat-B SDM, reference shall be made to the most recent IMO and ITU applicable documents to resolve the difficulty.

NOTE – All text of this standard, the wording of which is identical to that in the IMO SOLAS Convention 1974 as amended and IMO Resolution A.808, is printed in *italics* and it is followed by the resolution or recommendation and paragraph number indicated between brackets.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61097. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61097 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60945:1996, *Maritime navigation and radiocommunication equipment and systems – General requirements – Methods of testing and required test results*

IEC 61162-1:1995, *Maritime navigation and radiocommunication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

IMO International Convention for the Safety of Life at Sea (SOLAS) 1974, as amended

IMO Resolution A.694:1991, *General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids*

IMO Resolution A.808:1995, *Performance standards for ship earth stations capable of two-way communications*

IMO MSC Circular 862:1998, *Clarifications of certain requirements in IMO performance standards for GMDSS equipment*

ITU:1997, *Radio Regulations*

ITU-R SM.329-7:1997, *Spurious emissions*

Inmarsat:1997, *Inmarsat-B system definition manual (SDM) – Issue 3.0 including change note CN 13 – technical performance requirements (module 2, part I) and type approval procedures (module 2, part II)*

Inmarsat:1997, *Inmarsat-B design and installation guidelines (DIGS)*