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Global maritime distress and safety system (GMDSS) – Part 15: Inmarsat FB500 ship earth station – Operational and performance requirements, methods of testing and required test results

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GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) –

Part 15: Inmarsat FB500 ship earth station – Operational and performance requirements, methods of testing and required test results

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International Standard IEC 61097-15 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
80/660/FDIS	80/667/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.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of IEC 61097 series, published under the general title *Global maritime distress and safety system (GMDSS)*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS) –

Part 15: Inmarsat FB500 ship earth station – 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 FB500 ship earth stations (SES), capable of transmitting and receiving distress and safety communications, initiating and receiving distress priority calls and transmitting and receiving general radiocommunications, using radiotelephony (voice), as required within 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.

This standard covers equipment construction and testing. Matters relating to installation are reproduced in Annex A.

NOTE The Inmarsat FB500 is intended to meet the voice requirements of IMO Resolution A.1001(25). In order to meet the GMDSS carriage requirements of SOLAS in respect of receipt of SafetyNET broadcasts and direct printing telegraphy, it is necessary to install a combined Inmarsat C/EGC transceiver in addition to the Inmarsat FB500 equipment. Annex B provides more information.

This standard incorporates the performance standards of IMO Resolution MSC.130(75) and also takes into account the priority access (voice pre-emption) requirements of IMO Resolution A.1001(25). This standard takes account of IMO Resolution A.694(17) associated with IEC 60945. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence.

All text of this standard, whose wording is identical to that in the IMO Resolutions is printed in italics and the Resolution and paragraph number indicated between brackets.

Responsibility for type approval of Inmarsat FB500 is vested in Inmarsat by IMO Resolution MSC.130(75) (see 4.2). Therefore, this standard does not reproduce Inmarsat test procedures in full, but refers to the relevant tests in Annex C. It is recommended that equipment manufacturers rationalize the test requirements of this standard and those of Inmarsat before embarking on the approval process.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

IEC 61162 (all parts), *Maritime navigation and radio communication equipment and systems – Digital interfaces*

IEC 61162-1:2010, *Maritime navigation and radio communication equipment and systems – Digital interfaces – Part 1: Single talker and multiple listeners*

ISO/IEC 17025*, General requirements for the competence of testing and calibration laboratories*

IMO, *International Convention for the safety of life at sea (SOLAS),1974 as amended*

IMO Resolution A.694(17), *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.1001(25), *Criteria for the provision of mobile-satellite communication systems in the Global Maritime Distress and Safety System (GMDSS)*

IMO Resolution MSC.130(75), *Performance standards for Inmarsat ship earth stations capable of two-way communications*

Inmarsat *BGAN System Definition Manual*