

| | | |
|------------|--|---|
| STN | Technické charakteristiky a metódy merania zariadení na generovanie, vysielanie a príjem digitálneho selektívneho volania (DSC) v námornej pohyblivej službe v pásmach MF, MF/HF a/alebo VHF Časť 5: Ručné VHF DSC triedy H | STN EN 300 338-5 V1.3.1 87 0338 |
|------------|--|---|

Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service; Part 5: Handheld VHF Class H DSC

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/20

Obsahuje: EN 300 338-5 V1.3.1:2020

131851

ETSI EN 300 338-5 V1.3.1 (2020-06)



**Technical characteristics and methods of measurement
for equipment for generation, transmission
and reception of Digital Selective Calling (DSC)
in the maritime MF, MF/HF and/or VHF mobile service;
Part 5: Handheld VHF Class H DSC**

Reference

REN/ERM-TGMAR-603

Keywords

DSC, GMDSS, maritime, radio

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

The present document can be downloaded from:

<http://www.etsi.org/standards-search>

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the prevailing version of an ETSI deliverable is the one made publicly available in PDF format at www.etsi.org/deliver.

Users of the present document should be aware that the document may be subject to revision or change of status.

Information on the current status of this and other ETSI documents is available at

<https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx>

If you find errors in the present document, please send your comment to one of the following services:

<https://portal.etsi.org/People/CommiteeSupportStaff.aspx>

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.

The content of the PDF version shall not be modified without the written authorization of ETSI.

The copyright and the foregoing restriction extend to reproduction in all media.

© ETSI 2020.

All rights reserved.

DECT™, **PLUGTESTS™**, **UMTS™** and the ETSI logo are trademarks of ETSI registered for the benefit of its Members.

3GPP™ and **LTE™** are trademarks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

oneM2M™ logo is a trademark of ETSI registered for the benefit of its Members and of the oneM2M Partners.

GSM® and the GSM logo are trademarks registered and owned by the GSM Association.

Contents

| | |
|---|----|
| Intellectual Property Rights | 6 |
| Foreword..... | 6 |
| Modal verbs terminology..... | 6 |
| 1 Scope | 7 |
| 2 References | 7 |
| 2.1 Normative references | 7 |
| 2.2 Informative references..... | 7 |
| 3 Definition of terms, symbols and abbreviations..... | 8 |
| 3.1 Terms..... | 8 |
| 3.2 Symbols..... | 9 |
| 3.3 Abbreviations | 10 |
| 4 Controls and Indicators in handheld Class H DSC Equipment..... | 10 |
| 4.1 Visual indication | 10 |
| 4.1.0 General..... | 10 |
| 4.1.1 Primary DSC alphanumeric display..... | 10 |
| 4.1.1.0 General Requirements..... | 10 |
| 4.1.1.1 Additional display information | 11 |
| 4.1.2 Handling visual information | 11 |
| 5 Technical requirements | 11 |
| 5.1 Facilities for DSC transmission and reception | 11 |
| 5.1.1 GNSS receiver | 11 |
| 5.1.2 CH:70 receiver..... | 11 |
| 5.2 Facilities for coding and decoding of DSC | 11 |
| 5.2.1 Call functions..... | 11 |
| 5.2.2 INDIVIDUAL calls | 12 |
| 5.2.3 ALL SHIPS calls | 12 |
| 5.2.4 DSC call functionality | 12 |
| 6 Automated and Non-Automated Procedure Requirements in handheld Class H DSC Equipment..... | 13 |
| 6.1 Introduction | 13 |
| 6.2 Non-automated features | 13 |
| 6.2.1 DSC Message Composition..... | 13 |
| 6.2.2 Transmission of DSC messages and prioritized wait..... | 14 |
| 6.2.3 Alarms | 14 |
| 6.3 Standby..... | 14 |
| 6.4 Sending distress automated procedure | 15 |
| 6.4.1 Procedure..... | 15 |
| 6.4.2 Tasks..... | 17 |
| 6.4.3 Display..... | 17 |
| 6.4.3.0 General Display Requirements..... | 17 |
| 6.4.3.1 Examples of sending distress procedure displays on handheld VHF equipment | 18 |
| 6.4.4 Dedicated distress button sub procedure..... | 18 |
| 6.4.5 Transmission of the alert attempt..... | 19 |
| 6.4.6 Updating position..... | 19 |
| 6.4.7 Handling received DSC Messages..... | 19 |
| 6.4.8 Alarms | 20 |
| 6.4.9 Determining Subsequent communications..... | 20 |
| 6.4.10 Automated tuning | 20 |
| 6.4.11 Cancelling the Distress Alert | 20 |
| 6.4.11.0 General Requirements..... | 20 |
| 6.4.11.1 Examples of cancel-distress displays on VHF equipment..... | 20 |
| 6.4.12 Acknowledgements..... | 21 |
| 6.4.13 Termination..... | 21 |
| 6.4.14 Warnings..... | 21 |

| | | |
|-------------------------------|--|-----------|
| 6.5 | Receiving distress automated procedure | 21 |
| 6.5.1 | Procedure | 21 |
| 6.5.2 | Tasks | 22 |
| 6.5.3 | Display | 23 |
| 6.5.3.0 | General Display Requirements..... | 23 |
| 6.5.3.1 | Examples of received distress procedure displays on VHF equipment..... | 23 |
| 6.5.4 | Handling received DSC Messages | 24 |
| 6.5.5 | Alarms | 24 |
| 6.5.6 | Determining Subsequent communications..... | 24 |
| 6.5.7 | Automated tuning | 24 |
| 6.5.8 | Acknowledgements..... | 25 |
| 6.5.9 | Termination..... | 25 |
| 6.5.10 | Warnings..... | 25 |
| 6.6 | Sending non-distress automated procedure | 25 |
| 6.6.1 | Procedure | 25 |
| 6.6.2 | Tasks | 26 |
| 6.6.3 | Display | 27 |
| 6.6.3.0 | General Display Requirements..... | 27 |
| 6.6.3.1 | Examples of sending non-distress procedures displays on VHF equipment | 28 |
| 6.6.4 | Handling received DSC Messages | 28 |
| 6.6.5 | Alarms | 28 |
| 6.6.6 | Automated tuning | 28 |
| 6.6.7 | Delayed Acknowledgements | 29 |
| 6.6.8 | Termination..... | 29 |
| 6.6.9 | Warnings..... | 29 |
| 6.7 | Receiving non-distress automated procedure | 29 |
| 6.7.1 | Procedure | 29 |
| 6.7.2 | Tasks | 30 |
| 6.7.3 | Display | 31 |
| 6.7.3.0 | General Display Requirements..... | 31 |
| 6.7.3.1 | Examples of receiving non-distress procedures displays on VHF equipment..... | 32 |
| 6.7.4 | Handling received DSC messages | 32 |
| 6.7.5 | Alarms | 32 |
| 6.7.6 | Automated tuning | 32 |
| 6.7.7 | Acknowledgements..... | 33 |
| 6.7.8 | Termination..... | 33 |
| 6.7.9 | Warnings..... | 33 |
| 6.8 | Communications automated procedure | 33 |
| 6.8.1 | Procedure | 33 |
| 6.8.2 | Tasks | 34 |
| 6.8.3 | Display | 34 |
| 6.8.4 | Handling received DSC Messages | 34 |
| 6.8.5 | Tuning of the receiver and transmitter..... | 34 |
| 6.8.6 | Termination..... | 34 |
| 6.9 | Handling incoming calls while the equipment is engaged | 34 |
| 6.9.1 | Procedure | 34 |
| 6.9.2 | Tasks | 35 |
| 6.9.2.0 | General | 35 |
| 6.9.2.1 | Higher priority calls | 35 |
| 6.9.2.1.0 | General | 35 |
| 6.9.2.1.1 | Higher priority calls - acceptance | 35 |
| 6.9.2.1.2 | Higher priority calls - non acceptance | 35 |
| 6.9.2.2 | Other calls | 36 |
| 6.9.2.3 | Termination of automated procedures..... | 36 |
| 6.9.2.4 | Action after termination of an automated procedure..... | 36 |
| 6.9.2.5 | Putting automated procedures on hold (optional) | 36 |
| 6.9.2.6 | Controlling non-terminated automated procedures (optional) | 36 |
| Annex A (informative): | DSC message composition..... | 38 |
| A.1 | Default values..... | 38 |

| | | |
|-----------------------------|---|-----------|
| Annex B (normative): | Automated non-distress channel selection algorithm | 39 |
| Annex C (normative): | Alarms..... | 40 |
| C.1 | Alarm specifications..... | 40 |
| C.2 | Alarming with critical errors | 41 |
| C.3 | Default alarm sounds..... | 41 |
| C.4 | Recommended alarm sounds..... | 41 |
| History | | 43 |

Intellectual Property Rights

Essential patents

IPRs essential or potentially essential to normative deliverables may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<https://ipr.etsi.org/>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Trademarks

The present document may include trademarks and/or tradenames which are asserted and/or registered by their owners. ETSI claims no ownership of these except for any which are indicated as being the property of ETSI, and conveys no right to use or reproduce any trademark and/or tradename. Mention of those trademarks in the present document does not constitute an endorsement by ETSI of products, services or organizations associated with those trademarks.

Foreword

This European Standard (EN) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document is part 5 of a multi-part deliverable. Full details of the entire series can be found in part 1 [i.2].

| National transposition dates | |
|--|------------------|
| Date of adoption of this EN: | 29 May 2020 |
| Date of latest announcement of this EN (doa): | 31 August 2020 |
| Date of latest publication of new National Standard or endorsement of this EN (dop/e): | 28 February 2021 |
| Date of withdrawal of any conflicting National Standard (dow): | 28 February 2022 |

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

1 Scope

The present document states the minimum requirements for general communication for handheld VHF radios using the handheld class H DSC for shipborne use.

Class H DSC may be used in the Very High Frequency (VHF) Maritime Mobile Service (MMS), for distress, urgency and safety communication and general communications using telephony for subsequent communications.

The present document is part 5 of a multi-part deliverable that covers the requirements to be fulfilled by equipment that is integrated with a handheld transceiver.

These requirements include the relevant provisions and the guidelines of the IMO as detailed in MSC/Circ.803 [i.1] for non-SOLAS vessels participating in the GMDSS.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ITU Radio Regulations (2016).
- [2] Recommendation ITU-R M.493-15 (01/2019): "Digital selective-calling system for use in the maritime mobile service".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] IMO Circular MSC/Circ.803: "Participation of non-SOLAS ships in the Global Maritime Distress and Safety System (GMDSS)".
- [i.2] ETSI EN 300 338-1: "Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service; Part 1: Common requirements".
- [i.3] Recommendation ITU-R M.493: "Digital selective-calling system for use in the maritime mobile service".

koniec náhľadu – text ďalej pokračuje v platenej verzii STN