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| Thrane&Thrane | |
| SAILOR 6320 250W MF/HF DSC Class A | |
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| | The list of tests and their status | |
|-----|---|-----|
| 1 | General requirements | |
| 1.1 | Distress button and initiation of distress alert test | yes |
| 1.2 | Input Own MMSI test | yes |
| 1.3 | Input Group MMSI test | yes |
| 1.4 | Operation check test | yes |
| 1.5 | Facilites of routine testing test | yes |
| 1.6 | Interruptions in the power supply test | no |
| 2 | Controls and Indicators in Class A/B DSC Equipment | |
| 2.1 | Visual indication test (general requirements) | yes |
| 3 | Non-automated features | |
| 3.1 | Verification of correct of dot pattern test | yes |
| 3.2 | Distress call attempt consisting of repeated call sequences | yes |
| 3.3 | Transmission of DSC messages and prioritized wait | yes |
| 3.4 | Standby state test | yes |
| 3.5 | Distress messages storage test | yes |
| 3.6 | Non Distress message storage test | yes |
| 3.7 | Sent DSC messages storage test | yes |

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| 4 | Shipborne alarms test | |
|------|---|-----|
| 4.1 | Shipborne specific aural alarm to indicate receipt of distress or urgency call or a call having distress category test | yes |
| 4.2 | A duplicate reception of distress relay calls test | yes |
| 4.3 | Shipborne aural alarm to indicate receipt calls other than distress and urgency test | yes |
| 4.4 | Shipborne specific aural alarm to indicate receipt of distress or urgency call or a call having distress category with critical errors test | yes |
| 5 | Sending distress automated procedure | |
| 5.1 | Distress button sub procedure tests | no |
| 5.2 | Default distress alert attempt test | yes |
| 5.3 | Default distress alert attempt consistency tests | yes |
| 5.4 | Transmission of the alert attempt tests | yes |
| 5.5 | Display test | no |
| 5.6 | Operator options prior to receiving distress alert acknowledgement test | no |
| 5.7 | Automatic resending of the distress alert attempt test | yes |
| 5.8 | Cancelling the distress alert test | no |
| 5.9 | Cancelling during the sending of a distress alert attempt test | yes |
| 5.10 | Handling distress alert acknowledgements test | no |
| 5.11 | Handling additional distress DSC messages pertinent to the automated procedure test | yes |
| 5.12 | Handling distress alert acknowledgements for other distress event test (prior to acknowledgement) | yes |

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| 5.13 | Use of the distress button priority test | yes |
|------|---|-----|
| 5.14 | Handling received DSC messages prior and after to acknowledgement the sendining distress alert automated procedure test | yes |
| 5.15 | Termination of the acknowledged sendining distress alert automated procedure test | no |
| 5.16 | Automated tuning test | no |
| 5.17 | Distress alert composition test | yes |
| 5.18 | Watchkeeping receiver test | yes |
| 5.19 | Information contents of distress alert attempt tests. Distress call with position in the NW quadrant | yes |
| 5.20 | Information contents of distress alert attempt tests. Distress call with position in the NE quadrant | yes |
| 5.21 | Information contents of distress alert attempt tests. Distress call with position in the SW quadrant | yes |
| 5.22 | Information contents of distress alert attempt tests. Distress call with position in the SE quadrant | yes |
| 5.23 | Distress call with expansion sequence | yes |
| 5.24 | Distress call, "Distress coordinates" cannot be included | yes |
| 5.25 | Updating position test | yes |

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| 6 | Receiving distress automated procedure | |
|------|---|-----|
| 6.1 | Received distress automated procedure started by a distress alert test | no |
| 6.2 | Received distress automated procedure started by a distress relay to Geographic area test | no |
| 6.3 | Received distress automated procedure started by a distress alert acknowledgement test | yes |
| 6.4 | Received distress automated procedure started by a distress relay to All ships test | yes |
| 6.5 | Received distress automated procedure started by a distress relay to All ships acknowledgement test | yes |
| 6.6 | Received distress automated procedure started by an individually addressed distress relay test | yes |
| 6.7 | Received distress automated procedure started by the sending of a DROBOSE test | yes |
| 6.8 | Distress event self cancel recognition receiving test | yes |
| 6.9 | Handling received DSC messages pertinent to the automatic procedure | yes |
| 6.10 | Handling received DSC messages pertinent to the station, but not pertinent to the automatic procedure test | yes |
| 6.11 | Acknowledgement of receiving distress automated procedure test | n.a |
| 6.12 | Acknowledgement of receiving distress automated procedure activated by distress call (RT) test | yes |
| 6.13 | Acknowledgement of receiving distress automated procedure activated by Distress relay to All ships (RT) test | no |
| 6.14 | Acknowledgement of receiving distress automated procedure activated by Distress relay to Individual station (RT) test | no |
| 6.15 | Acknowledgement of receiving distress automated procedure activated by the sending of a DROBOSE test | yes |

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| 6.16 | Handling received DSC messages pertinent to the automatic procedure initiated by distress call after acknowledgement | yes |
|------|---|-----|
| 6.17 | Handling received DSC messages pertinent to the automatic procedure initiated by distress relay after acknowledgement | no |
| 6.18 | Sending a distress alert acknowledgement test | yes |
| 6.19 | Sending a distress relay test | yes |
| 6.20 | Termination of the automatic procedure before acknowledgement. Manually termination of automated procedure test | yes |
| 6.21 | Termination of the automatic procedure after acknowledgement Manually termination of automated procedure test | no |
| 6.22 | Termination of automated procedure by automated timout | no |
| 6.23 | Determining subsequent communications test | no |
| 6.24 | Automated tuning prior to acknowledgement test | no |
| 6.25 | Automated tuning after acknowledgement test | yes |
| 6.26 | Reception of Distress call with different position and nature of distress test | yes |
| 6.27 | Verification of correct decoding of distress call acknowledgment | yes |
| 6.28 | Verification of correct decoding of distress relay call | yes |
| 6.29 | Verification of decoding of distress relay acknowledgment | yes |
| 6.30 | Verification of correct generation, encoding and transmission of distress call acknowledgment | yes |
| 6.31 | Verification of correct generation, encoding and transmission of distress relay call | yes |
| 6.32 | Verification of generation, encoding and transmission of distress relay acknowledgment | yes |
| 6.33 | Verification of generation, encoding and transmission of distress relay on behalf of someone else (DROBOSE) | no |

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| 7 | Sending non distress automated procedure | |
|------|--|-----|
| 7.1 | Sending non distress procedure sequence with "able to comply" test | no |
| 7.2 | Sending non distress procedure sequence with "comply with frequency change" (able to comply) test | yes |
| 7.3 | Sending non distress procedure sequence with "comply with frequency change" (new channel is not available) test | yes |
| 7.4 | Sending non distress procedure sequence with "unable to comply" test | yes |
| 7.5 | Sending non distress procedure sequence with no acknowledgement required test | no |
| 7.6 | Delayed Acknowledgements able to comply after terminating sending non distress procedure test | yes |
| 7.7 | Delayed Acknowledgements able to comply with "comply with frequency change" after terminating sending non distress procedure test | yes |
| 7.8 | Delayed Acknowledgements Unable to comply after terminating sending non distress procedure test | yes |
| 7.9 | Acknowledge Alarms of Sending non distress automated procedure test | yes |
| 7.10 | Handling received DSC messages pertinent to the sending non distress automatic procedure test | yes |

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| 7 | 11 Handling received DSC messages pertinent to the station, but not pertinent to the automatic procedure test | yes |
|---|---|-----|
| 7 | 12 Options of termination of the automatic procedure test | yes |
| 7 | 13 Manually termination of automated procedure test | yes |
| 7 | 14 Termination of automated procedure by automated timout test | yes |
| 7 | 15 Facilities for composition of non distress DSC calls: Default values test | no |
| 7 | 16 Medical transport and neutral ships and aircraft DSC calls test | yes |
| 7 | 17 Verification of correct generation, encoding and transmission of DSC call sequences to all ships | yes |
| 7 | 18 Verification of correct generation, encoding and transmission of Geographic area calls | yes |
| 7 | 19 Verification of correct generation, encoding and transmission of Urgency and safety calls to individual station | yes |
| 7 | 20 Verification of decoding of acknowledgment sequences Urgency and Safety acknowledgements calls to individual station | yes |
| 7 | 21 Verification of correct generation, encoding and transmission Routine call to a group of stations | yes |
| 7 | 22 Verification of correct generation, encoding and transmission Routine call to individual station | yes |
| 7 | 23 Verification of decoding of Routine acknowledgement calls to individual station | yes |

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| 8 | Receiving non distress automated procedure | |
|------|---|-----|
| 8.1 | The received non distress automated procedure with 'able to comply' tests (Manual acknowledgement) | yes |
| 8.2 | Received non distress automated procedure with 'comply with channel change' and option 'able to comply' is unavailable tests (Manual acknowledgement) | yes |
| 8.3 | Received non distress automated procedure with 'unable to comply' ('Unable to use preposed channel') tests (Manual acknowledgement) | yes |
| 8.4 | Received non distress automated procedure with 'comply with channel change' and option 'able to comply' is available tests (Manual acknowledgement) | no |
| 8.5 | Received non distress automated procedure with 'unable to comply' when option 'able to comply' is available tests (Manual acknowledgement) | yes |
| 8.6 | The received non distress automated procedure manually acknowledge DSC test call tests | no |
| 8.7 | The received non distress automated procedure auto acknowledge DSC polling call tests | no |
| 8.8 | The received non distress automated procedure auto acknowledge position request tests | no |
| 8.9 | Received non distress automated procedure if acknowledgement not requested tests | no |
| 8.10 | Auto acknowledgement options tests | yes |
| 8.11 | The received non distress automated procedure auto acknowledge individually addressed non distress DSC messages tests | yes |
| 8.12 | The received non distress automated procedure auto acknowledge DSC test call tests | no |

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| 8.13 | The received non distress automated procedure auto acknowledge DSC polling call tests | no |
|-------|--|-----|
| 8.14 | The received non distress automated procedure auto acknowledge position request tests | no |
| 8.15 | Options of termination of the automatic procedure test | yes |
| 8.16 | Manually termination automated procedure test | no |
| 8.17 | Termination of automated procedure by automated timout | yes |
| 8.18 | Handling received DSC messages pertinent the received non distress automated procedure test | yes |
| 8.19 | Handling received DSC messages pertinent to the station, but not pertinent to the automatic procedure test | yes |
| 8.20 | Facilities for decoding of non distress DSC calls test | yes |
| 8.21 | Decoding frequency information in DSC messages | no |
| 8.22 | Verification of decoding of DSC call sequences "All ships call" | yes |
| 8.23 | Verification of decoding of Urgency and Safety Geographic area calls | yes |
| 8.24 | Verification of decoding of DSC Urgency and safety calls, to individual station | no |
| 8.25 | Verification of decoding of Routine call to a group of stations | yes |
| 8.26. | Verification of decoding of Routine call to individual station | no |
| 8.27 | Verification of correct generation, encoding and transmission of Urgency and Safety calls to individual station acknowledgement | yes |
| 8.28 | Verification of correct generation, encoding and transmission Routine acknowledgement calls to individual station | yes |

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| 9 | Communications automated procedure | |
|-----|---|-----|
| 9.1 | Communications automated procedure setup tests (radiotelephone) | yes |
| 9.2 | Communications automated procedure setup tests (NBDP) | yes |
| 9.3 | Communications automated procedure setup tests (Morse telegraphy) | n.a |
| 9.4 | Communications automated procedure setup tests (Facsimile) | n.a |
| 9.5 | Handling incoming DSC calls while the equipment is engaged in radiotelephone communications automated procedure | yes |
| 9.6 | Handling incoming DSC calls while the equipment is engaged in NBDP communications automated procedure | yes |
| 9.7 | Termination of the automated procedure options test | yes |
| 9.8 | Manually termination automated procedure test | no |
| 9.9 | Termination of automated procedure by automated timout | yes |

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| 10 | Multiple automated procedures and parallel event handling | |
|-------|--|-----|
| 10.1 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the sending distress alert automated procedure | no |
| | (initiate its new own automated procedure on hold) | |
| 10.2 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the receiving distress automated procedure | no |
| | (initiate its new own automated procedure on hold) | |
| 10.3 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the sending non distress automated procedure | no |
| | (initiate its new own automated procedure on hold) | |
| 10.4 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the receiving non distress automated procedure | yes |
| 10.7 | (initiate its new own automated procedure on hold) | |
| 10.5 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the communications automated procedure | yes |
| | (initiate its new own automated procedure on hold) | |
| 10.6 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the sending distress alert automated procedure | yes |
| | (updating an existing automated procedure on hold) | |
| 10.7 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the receiving distress automated procedure | yes |
| | (updating an existing automated procedure on hold) | |
| 10.8 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the sending non distress automated procedure | yes |
| | (updating an existing automated procedure on hold) | |
| 10.9 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the receiving non distress automated procedure | yes |
| | (updating an existing automated procedure on hold) | |
| 10.10 | Handling of received DSC messages that are pertinent to the station while the radio is engaged in the communications automated procedure | yes |
| | (updating an existing automated procedure on hold) | |
| 10.11 | Unacknowledged test receiving automated procedure on hold tests | no |
| 10.12 | Unacknowledged polling receiving automated procedure on hold tests | no |
| 10.13 | Unacknowledged position request receiving automated procedure on hold tests | no |
| 10.14 | Unacknowledged Individual DSC message receiving automated procedure on hold tests | yes |

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| | 10.15 | Multiple automated procedures and parallel event handling options tests | no |
|---|-------|--|-----|
| | 10.16 | Multiple automated procedures and parallel event handling overflows tests | no |
| | 10.17 | Multiple automated procedures and parallel event handling the priority and age rules automatic termination tests | yes |
| | 11 | Decoding and error correction | |
| | 11.1 | Specified phasing (character synchronization) | yes |
| | 11.2 | Decoding format specifier with mutilations | yes |
| | 11.3 | Decoding call with no allowed format specifier | yes |
| | 11.4 | Decoder's ability to detect mutilate-type errors in ten-bit code | yes |
| | 11.5 | Decoder's ability to correct mutilate-type errors in the ten-bit code | yes |
| | 11.6 | Decoder's ability to detect wrong characters in the legal ten-bit code set | yes |
| | 11.7 | Decoder's ability to detect errors using an error-check character | yes |
| | 11.8 | Decoder's ability to correct serial mutilate-type errors in ten-bit code | yes |
| | 11.9 | Mutilated distress call reception | yes |
| | 11.10 | Decoding distress call attempt with one mutilated sequence | yes |
| | 11.11 | Iterative decoding process with adequate provision | no |
| | 11.12 | Decoding end of sequence with mutilations | yes |
| | 11.13 | Errors in received distress DSC messages | yes |
| 1 | 1 | | 1 |

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| 11.14 | Handling incomming Distress DSC messages with errors test | no |
|-------|--|-----|
| 11.15 | Handling incomming Distress relay to Individual station with errors test | yes |
| 11.16 | Handling incomming Distress DSC messages wits symbol "subsequent communication" error test "subsequent communication" | yes |
| 11.17 | Handling incomming Distress DSC acknowledgment with errors (MMSI ship in distress is known) | yes |
| 11.18 | Handling incomming Distress DSC acknowledgment with errors (MMSI ship in distress is unknown) | yes |
| 11.19 | Comparison error correction Distress DSC messages test (the entire set of received information characters is identical to the previously received set) | yes |
| 11.20 | Comparison error correction Distress DSC messages test (the set of received distress information characters is identical to the distress information) | yes |
| 11.21 | Comparison error correction Distress DSC messages test (error in the enhanced position information characters) | yes |
| 11.22 | Comparison error correction Distress DSC messages test (only the received distress event information characters are identical) | yes |
| 11.23 | Errors in received non distress DSC messages (Self ID, Category or Telecommand errors) | no |
| 11.24 | Errors in received non distress DSC messages (Frequency information errors) | no |
| 11.25 | Errors in received non distress DSC acknowledgement test | no |

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| 12 | Own position and Interfaces | |
|------|---|-----|
| 12.1 | Facilites of input own ship position information test | yes |
| 12.2 | Position update alarm test | yes |
| 12.3 | Facilities for automatic entry of position information test | yes |
| 12.4 | Protocol test of the entry position information inteface of the EUT | yes |
| 12.5 | Test under maximum interface workload | yes |
| 13 | MF/HF watchkeeping receiver | |
| 13.1 | Scanning efficiency test | yes |

The deviations to normative documents

| Ν | Clause | Description of deviation | Status | RES ID |
|---|--------|---|----------------|---------|
| 1 | 1.6 | Received DSC messages from LOG when interrupted the power supply is removed in the following case. Set the UTC/Date via interface IEC 61162-1 sentence ZDA. Send from TE distress DSC messages. Power supply off and than on again. Set the new UTC/Date for the month forward via interface IEC 61162-1 sentence ZDA. Power supply off and than on again. LOG all received messages are cleared. [ETSI EN 300 338-1, n.4.15] | No critical | (E697) |
| 2 | 1.6 | Received DSC messages from LOG when interrupted the power supply is removed in the following case. Power supply off and than on again. Send from TE distress DSC messages. Power supply off and than on again. Set the new UTC/Date for the month forward via menu System Date manually. Received messages in LOG changed information UTC time and date of reception by manually installed. [ETSI EN 300 338-1, n.4.15] [ETSI EN 300 338-2, n.6.3] | No critical | (E704) |
| 3 | 5.1 | In conditions when the equipment is present two sessions: sending distress automated procedure and receiving distress automated procedure, is active session sending distress automated procedure, and the focus of the session receiving distress automated procedure, the rules for handling distress button do not comply requirements. If the distress button is pressed and released before the three seconds have elapsed when releasing the button the radio change focus and return to sending distress automated procedure, while shall return to the its previous state: receiving distress automated procedure; [ETSI EN 300 338-2, n.6.4.4,c] | No critical | (E1305) |

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| Ν | Clause | Description of deviation | Status | RES ID |
|---|------------|--|----------------|---------|
| 4 | 5.1 6.2 | If the operator from receiving distress automated procedure selects option DROBOSE, and than hold the distress button (DB) less than 3 seconds, then radio returns to the Stand-by menu, but shall return to the previous menu – DROBOSE composition menu. [ETSI EN 300 338-2, n.6.4.4,c] | No critical | (E1308) |
| 5 | 5.1 | Functioning Distress Button does not meet the requirements of the standard in the following case. EUT has receiving distress automated procedure. Select option VIEW to display latest distress information. Next, select option SETUP – Rx distress to open log received distress DSC messages menu. Press and hold the distress button less than 3 seconds. Radio returns to the VIEW menu, but shall return to the previous menu – log menu. Next, select option ALERET to compose a distress alert. In fact, a menu opens log, rather than compose a distress alert. Later, when the nominal exit from the LOG menu (via option EXIT), equipment is functioning properly. [ETSI EN 300 338-2, n.6.4.4,c] | No critical | (E436) |
| 6 | 5.1 | Functioning Distress Button does not meet the requirements of the standard in the following case. EUT has receiving distress automated procedure. Select option VIEW to display latest distress information. Next, select option SETUP – Rx distress to open log received distress DSC messages menu. Press and hold the distress button less than 3 seconds. Radio returns to the VIEW menu, but shall return to the previous menu – log menu. Next, select option QUIT to terminate receiving distress automated procedure. In fact, automated procedure terminated but returned a menu opens log, rather than stand-by. Later, when the nominal exit from the LOG menu (via option EXIT), equipment is functioning properly. [ETSI EN 300 338-2, n.6.4.4,c] | No critical | (E670) |

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| Ν | Clause | Description of deviation | Status | RES ID |
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| 7 | 5.1 | Functioning Distress Button does not meet the requirements of the standard in the following case. EUT has two automated procedures: receiving distress automated procedure and any automated procedure. Select option HISTORY to display the information about history of the received DSC distress messages. Press and hold the distress button less than 3 seconds. a) Radio returns to the stand-by menu, but shall return to the previous menu – HISTORY menu. b) The operator tries to select from the list the second automated procedure. However, instead of the second automated procedure window appears HISTORY first automated procedure. | No critical | (E658) |
| 8 | 5.5 | If operator selects options "POS" input of position information is not dispalayed "top level" information. [ETSI EN 300 338-2, n.6.4.3,(5)] [ETSI EN 300 338-2, n.6.4.3,(4)] [ETSI EN 300 338-2, n.6.4.3,(2)] [ETSI EN 300 338-2, n.6.4.3,(1)] | No critical | (E1326) |
| 9 | 5.6 | The operator has the ability to set for distress communication arbitrary frequencies, including and not allowed for phone mode (eg 2187.5 kHz DSC frequency). [ETSI EN 300 337-2, n. 6.4.2,b(8)iv] [ITU-R M.493-13, Ann.4, n.3.1.6] | No critical | (E1303) |
| 10 | 5.8 | In the condition when the channel was busy and the channel was not DSC and voice cancelled, equipment indicates that the cancellation was made. Operator able to exit from sending distress automated procedure. While on HF once any single channel is cancelled, the operator shall be unable to exit the cancel procedure until all utilized channels have been cancelled. [ITU-R M.493-13, Ann.4, n.3.2.4.4.8.1] [ETSI EN 300 338-2, n.6.4.11] | No critical | (E1011) |

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| 11 | 5.8 | In case data was selected for "voice cancel" the EUT does not automatically send the Telex cancel. [ETSI EN 300 338-2, n.6.4.11] | No critical | (E1012) |
| 12 | 5.10 5.15 6.21 8.16 9.8 | For the case when equipment is engaged in the NBDP communications option "Terminate" is blocked. When choosing an operator option "Terminate" a warning appears : "UNABLE TO COMPLY. PLEASE TERMINATE TELEX CONNECTION" That is, the operator shall terminate at the Message Terminal (separate unit SAILOR 6006) the telex session communication first. Only after that may terminate the DSC procedure from the control unit SAILOR 6301. [ETSI EN 300 338-2, n.6.4.13] | No critical | (E521) (E1039) (E1082) (E1094) |
| 13 | 5.16 | There is a warning before the automated tuning changes frequency, but does not display the new frequency information. DSC warning text: "New communication frequency was requested by latest received call". No display reception frequency in the window of visual indication of reception DSC distress message too. [Rec. ITU-R M.493-13, Ann.4, n.3.1.3.2] [ETSI EN 300 338-2, n.6.4.10] | No critical | (E1307) |
| 14 | 6.1 | For all receiving distress automated procedures: When the operator selects the option HISTORY, the radio opens the new window witch macks the top level information (the elapsed time, stage of the automated procedure, operator options). While during the automated procedure the at top level the elapsed time, stage of the automated procedure, operator options shall be displayed. [ETSI EN 300 338-2, n.6.7.3] | No critical | (E1328) (E661)) (E87) |

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| 15 | 6.13 | TE sent a distress relay to Geographic area. EUT initiated receiving distress automated procedure. Next, TE sent the distress alert acknowledgement for the same distress event. EUT displayed in the INFO window the latest distress information: The type of call: "DISTRESS ACK"; Intended destination: "TO: AREA". While the intended destination for the distress alert acknowledgement shall be "All ships". [ETSI EN 300 338-2, n.6.5.3,e,f] | No critical | (E1312) |
| 16 | 6.14 | The automated procedure initiated by sending distress relay to all ships acknowledgement has not the option to send distress relay. [ETSI EN 300 338-2,n.6.5.2,g(1)] [ETSI EN 300 338-2,n.6.5.9] | No critical | (E1033) |
| 17 | 6.17 | TE sent a distress relay to Geographic area. EUT initiated receiving distress automated procedure. Next, TE sent the distress relay to all ships acknowledgement for the same distress event. EUT displayed in the INFO window the latest distress information: Intended destination: "TO: AREA". While the intended destination for the distress alert acknowledgement shall be "All ships". [ETSI EN 300 338-2, n.6.5.3,e,f] | No critical | (E1037) |
| 18 | 6.22 | Automated timeout termination of the procedure does not meet requirements. If automatic termination occurs when the window is open "VIEW", then the procedure was terminated, but remains on the display screen "VIEW". While the "VIEW" is part of the procedure and also when terminating procedures should be removed from the display. [ETSI EN 300 338-2,n.6.5.10; n.6.5.3,e] | No critical | (E1040) |

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| 19 | 6.22 | Automated timeout termination of the procedure does not meet requirements. If automatic termination occurs when the window is open "HISTORY", then the procedure was terminated, but remains on the display screen "HISTORY". While the "HISTORY" is part of the procedure and also when terminating procedures should be removed from the display. [ETSI EN 300 338-2,n.6.5.10; n.6.5.3,k] | No critical | (E661) |
| 20 | 6.23 | Broken the rules for handling receiving distress automated procedure. For receiving distress automated procedures the automated tuning to the communication frequency occurs after shutdown alarm by operator. While the automated tuning to the communication frequency shall occur upon the reception a call. [ETSI EN 300 338-2, 6.5.7] | No critical | (E1315) |
| 21 | 6.23 | Broken the rules for handling receiving distress automated procedure. For receiving automated procedures the initiating of procedure occurs after shutdown alarm by operator. While the initiating of the procedure shall occur upon the reception a call. Therefore, if the equipment after receiving a distress call with telex subcommunication, but before to shutdown the alarm by operator, receives a NBDP incomming call, start a new NBDP communications procedure. While the reception NBDP call shall be the part of current receiving distress automated proicrdure. [ETSI EN 300 338-2, 6.5.1] | No critical | (E1316) |
| 22 | 6.23 | Broken the procedure of distress relay composition. TE sent multi-frequency distress alert attempt on the 2 and 6 MHz. EUT initiated receiving distress automated procedure. EUT set communication frequency 8 MHz. Operator try to send distress relay (no DROBOSE). EUT set default DSC and sub- communication frequencies from 2 MHz, while is required from 8 MHz. [ETSI EN 300 338-2, 6.5.9] | No critical | (E1042) |

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| 23 | 6.23 | In the menu of the latest distress information (VIEW) is always displayed the frequency of subsequent communication for the primary DSC message (2182 kHz), which initiated the receiving distress automated procedure. While required to display the frequency of subsequent communication to the latest received DSC message. [ETSI EN 300 338-2, 6.5.3,f] | No critical | (E1318) |
| 24 | 6.24 | The receiving distress automated procedure displays the frequency at which calls were received. In this case, there is no possibility to determine at what frequency was received the last call. [ETSI EN 300 338-2, n.6.5.3,i] | No critical | (E1319) (E569) (E571) |
| 25 | 6.33 | When a DROBOSE composition equipment allows to enter MMSI ship in distress - MMSI coast station, which contradicts the requirements of ITU and IMO. [ETSI EN 300 338-2, n.6.2.1] [Rec. ITU-R M.493-13, Ann.4, n.3.1.6] | No critical | (E1049) (E575) |
| 26 | 6.33 | The equipment allows to make Individual DROBOSE only address coast station. Equipment can not make Individual DROBOSE in the address to ship station, which is not prohibited by the requirements of the ITU and IMO. [COMSAR Circ.25, n.A.2.1] | No critical | (E1050) (E166) |
| 27 | 6.33 | Broken the procedure of radius-centre point conversion and rounding algorithm. If the final latitudinal dimension exceeds 99 deg, EUT truncates the dimension to 98 deg. While the standard requires to truncate to 99 deg. [ETSI EN 300 338-2, n.B.2] | No critical | (E1320) |

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| 28 | 7.1 | DSC safety and urgency messages addressed to a coast station destinations is tramsmitted with "no information characters" (126) in the frequency parameters of the DSC message. While standards require to send the ship position information. [ETSI EN 300 338-2, C.2,e] [ETSI EN 300 338-2, A.3, Note 5] | No critical | (E1324) |
| 29 | 7.1 | Incorrectly indicates the frequency of the DSC acknowledgement. EUT is set for DSC communication: (DSC Tx frequency 8415.0 kHz, DSC Rx frequency 8436.5 kHz). From the EUT is transmitted a DSC message of priority routine requesting radiotelephone addressed to the TE (coast station). On HF send the DSC message on 8415.0 kHz. Acknowledge the DSC message from the TE with "able to comply" is transmitted on the 8436.5 kHz. However, the EUT indicates that the DSC acknowledgement was received on the 8415.0 kHz. [ETSI EN 300 338-2, n.6.6.3,e] | No critical | (E1053) |
| 30 | 7.1 | DSC routine messages addressed to a coast station destinations is tramsmitted with position in the frequency parameters of the DSC message, as required standards. However, in the window VIEW of the information content of the initial DSC message erroneously decoded and displayed no position, and frequency. [ETSI EN 300 338-2, n.6.6.3,d] | No critical | (E1330) |
| 31 | 7.1 | Broken radio control procedure for the case when equipment is received acknowledgement, but the operator has not shutdown the alarm. The operator has access to change the current working frequency, but the information of the new frequency is not visible up to shutdown alarm. [ETSI EN 300 338-1, n.4.6.1] | No critical | (E1063) |

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| 32 | 7.5 | In the window VIEW of the information content of the initial Geographic area DSC message is no information on "whether or not the DSC message requires an acknowledgement". [ETSI EN 300 338-2, n.6.6.3,d(7)] | No critical | (E175) |
| 33 | 7.5 | In the window VIEW of the information content of the initial Group DSC call is no information on "whether or not the DSC message requires an acknowledgement". [ETSI EN 300 338-2, n.6.6.3,d(7)] | No critical | (E181) |
| 34 | 7.15 | It is required of <u>four</u> keystrokes, button pushes or menu actions plus the entry or selection of a working channel for the operator to send the default (routine individual) DSC message from standby. While standard requires a maximum of <u>two</u> keystrokes, button pushes or menu actions plus the entry or selection of a working channel. [ETSI EN 300 338-2(2010-02), n.6.2.1,b] | No critical | (E1065) (E594) |
| 35 | 7.15 | No means of verifying the correctness of information entered, the working frequency in the composition of the call. The operator composed and sent the Individual DSC call with working frequencies: 4444.4 kHz / 4351.0 kHz radiotelephony. TE transmitted "able to comply" acknowledgement. EUT displayed warning: "Remote station replied with invalid channel. Make new call". [ETSI EN 300 338-2(2010-02), n.6.2.1] | No critical | (E1331) |
| 36 | 7.15 | When composition a DSC Group Routine sub-communication FEC on the band 2 MHz, the working frequency of defaults from a range of 4 MHz: 4202.5 kHz / 4202.5 kHz. While on HF the band of the communication channel shall be in the band of the DSC message. [ETSI EN 300 338-2(2010-02), C.2,h] | No critical | (E1068) |

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| 37 | 7.15 | When composition a DSC Group Routine sub-communication FEC on the band 2 MHz, the working frequency of defaults from a range of 4 MHz: 4202.5 kHz / 4202.5 kHz. While on HF the band of the communication channel shall be in the band of the DSC message. [ETSI EN 300 338-2(2010-02), C.2,h] | No critical | (E1075) |
| 38 | 8.4 | The operator has option "the comply with frequency change". However, there is no means of verifying the correctness of entering a new frequency by operator. The operator has the ability to send a new proposal for the ship station with duplex working channel. At that time, for ship-to-ship communication should be used simplex channels. [ETSI EN 300 338-2, C.2,f] | No critical | (E1078) |
| 39 | 8.6 8.7 8.8 | Broken the rules resend test/polling DSC acknowledgement for the special case. The EUT has active receiving distress automated procedure. From TE is sent test/poilling call addressed to the EUT. From TE transmitted acknowledgement. The option resend acknowledgement for receiving non distress automated procedure is available. It meets requirements. It is sent from TE identical a test/polling call. EUT received the call, but now the option resend is not available. It does not meet requirements. When operator select option HOLD and next ACTIVATE the receiving non distress automated procedure, the option resend will be available again. [ETSI EN 300 338-2, n.6.7.2,g(2),i] | No critical | (E1089) |
| 40 | 8.8 | There is no option "unable to comply" acknowledgement of position request call. While in the case of a position request, the option shall only require a single action by the operator to send, and the procedure shall indicate non compliance by filling the position and time information with the no information character. [ETSI EN 300 338-2, n.6.7.7.] | No critical | (E1080) |

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| 41 | 8.9 | Broken the rules for handling receiving non distress automated procedure. For receiving non distress automated procedures the automated tuning to the communication frequency occurs after shutdown alarm by operator. While the automated tuning to the communication frequency shall occur upon the reception a call. [ETSI EN 300 338-2, 6.7.6] | No critical | (E1084) |
| 42 | 8.12 8.13 8.14 | When auto acknowledging test, polling, position request DSC call sounds alarm. While when auto acknowledging test, polling, position request DSC call no alarm shall sound. [ETSI EN 300 338-2, n.6.7.5] | No critical | (E1083) (E1110) |
| 43 | 8.21 8.24 8.26 | Equipment does not support the proper handling of received DSC calls with frequency elements – MF/HF channels: a) not available option of acknowledge "able to comply"; b) the MF/HF channel decoding and display an error - as frequency element; c) upon reception of the call is automatically sent acknowledgement "unable to comply" (if option auto acknowledgement set ON). While this mode should be used for decoding received calls, to ensure interoperability with older equipment. [ETSI EN 300 338-1 (2010-02), n.12.1] [Rec. ITU-R M.493-13, Ann.1, 8.3.2.2.1] | No critical | (E1087) (E644) |
| 44 | 10.1 | EUT has two automated procedures: sending distress acknowledged state (on hold) and receiving distress (active). From receiving distress automated procedure is transmitted the distress relay. Since the trasmitting distress relay equipment changes the focus from the currently active procedure, the procedure in hold. Consequently during and after transmitting operator does not see top level information: the elapsed time, the stage, the operator options. [ETSI EN 300 338-2, n.6.7.3] [ETSI EN 300 338-2, n.6.9.2] | No critical | (E1097) |

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| 45 | 10.1 10.15 | The equipment is engaged in the handling of multiple automated procedures simultaneously (up to 7). Termination event occurs automatically one of the procedures. Displays a warning, but the operator does not informed which of the procedures (from up to 7) will be terminated. [ETSI EN 300 338-2,n.6.9.2] | No critical | (E566) (E155) (E1098) |
| 46 | 10.2 | EUT has more than two automated procedures: any type(s) of automated procedure (not sending distress only) and receiving distress (active). From receiving distress automated procedure is transmitted the distress relay. Since the trasmitting distress relay equipment changes the focus from the currently active procedure, the procedure in hold. Consequently during and after transmitting operator does not see top level information: the elapsed time, the stage, the operator options. [ETSI EN 300 338-2, n.6.7.3] [ETSI EN 300 338-2, n.6.9.2] | No critical | (E1099) |
| 47 | 10.2 | The receiving distress automated procedure is active. Select the option "Relay". In the set of available options for the operator is present option of selection of automated procedure from list. However, in actually this option is blocked. [ETSI EN 300 338-2, n.6.9.2] | No critical | (E1336) |
| 48 | 10.3 | EUT has two automated procedures: sending non distress automated procedure (on hold) and receiving non distress automated procrdure (active). During the sending acknowledgement from the receiving non distress automated procedure does not display the transmission DSC frequency. [ETSI EN 300 338-2, n.6.7.3] | No critical | (E1104) |

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| 49 | 10.11 10.12 10.13 | When the remaining automated procedures present on the equipment are inactive or on hold, and there are automated procedures handling test, polling, or position requests and these procedures are setup to auto acknowledge, the equipment does NOT perform the auto acknowledgement and terminate these procedures. [ETSI EN 300 338-2, n.6.9.2] [ITU-R M.493-13, Ann.4, n.3.3.4] | No critical | (E663) |
| 50 | 10.15 | EUT has two automated procedure: receiving distress automated procedure (Active) and communications procedure (on hold). The operator to activate displayed communications automated procedure on hold selected from the list requires two actions: (1) select option MORE, (2) select option ACTIVATE. Thile the operator shall be able to activate any displayed automated procedure on hold selected from the list by a single action (a button press or selection) [ETSI EN 300 338-2, n.6.9.2] | No critical | (E1333) |
| 51 | 10.15 | The equipment has a means of simultaneous processing of only one communications procedure. Of the seven possible automated procedures can be only one communications procedure. While the standards do not have special restrictions on the number of simultaneously handled communications procedures. [ETSI EN 300 338-2, n.6.9.2] [ETSI EN 300 338-2, n.6.8.1] | No critical | (E264) |
| 52 | 10.16 | When the equipment maximum is exceeded by one and the reserve procedure is started, the equipment generate a warning stating that an automated procedure needs to be terminated or equivalent, though this new procedure and all the previous automated procedures still function normally. But the operator does NOT be prevented from starting any automated procedure except for the sending one's own distress. [ETSI EN 300 338-2, n.6.9.2] | No critical | (E1115) |

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| 53 | 11.11 | TE transmitted single frequency distress call attempt consisting of five consecutive sequences. During the transmission, the TE simultaneously mutilates «distress coordinates» message in DX and RX positions: in the first character, first sequence; in the second character, second sequence; in the third character, third sequence; in the fourth character, fourth sequence; in the fifth character, fifth sequence; EUT received all five distress calls band correct errors. However, the equipment incorrectly indicates that received in an distress attempt only three calls. [ITU-R M.493-13, Annex 1, nos 11.1, 1.6.2] [ETSI EN 300 338-1(2010-02), n.8.1,1] [ETSI EN 300 338-1(2010-02), n.8.2.2] | No critical | (E1339) |
| 54 | 11.14 | Automated procedure is initiated by a reception distress alert acknowledgement that contains critical errors, the aural distress ack manually silenced. While the alarm shall be distress ack self terminate. Upon reception first distress alert acknowledgement without critical errors sounds self-terminating alarm. While when an automated procedure initiated with critical errors first receives a subsequent message without critical errors or the procedure is first able to correct the critical errors by combining received messages, the normal initiating alarm shall sound. [ETSI EN 300 338-1, n. 8.2.1] [ETSI EN 300 338-2, D.2] | No critical | (E1340) |

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| 55 | 11.23 | Incorrectly implement handling non distress DSC messages with critical errors. TE transmittid to the address EUT the individual call with critical errors. EUT received call and initiated automated procedure. The option of acknowledgement is unable. Next, TE transmitted the identical individual call without errors. EUT received new call. Now the optioin of acknowledgement is able. The receiving non distress automated procedure did not indicate the presence of errors. Next, TE transmitted initial individual call with critical errors. EUT received the call and blocked option of acknowledgement. The receiving non distress automated procedure indicated the presence of errors. While in no case shall the reception of an identical DSC message introduce more errors into the information characters (and their display) that are used to identify the procedure. [ETSI EN 300 338-1, n.8.2.1] | No critical | (E1342) |
| 56 | 11.24 | On the TE compose an individual DSC message of priority 'urgency' addressed to the EUT requesting voice subsequent communication (RT channel 2182.0 kHz). Before transmitting the message place a 3-bit error in the DX and RX positions of the first word of the frequency message. Transmit the edited DSC. On the EUT the receiving non distress automated procedure with critical errors is initiated. Select the option "comply with frequency change". a) EUT indicates the default parameters: frequency "Ch: 2182.0 / 2182.0 kHz" and mode "MODE: UNKNOWN". While mode is known: radiotelephone. b) Operator does not change the default settings and is transmitted the acknowledgement. Actually the radiotelephone mode and frequency (2182.0/2182.0) are transmitted but EUT is tuned to the telex (FEC/ARQ) mode on the 2182.0/2182.0 kHz. [ETSI EN 300 338-2, n.6.7.7] | No critical | (E1119) |
| 57 | 11.25 | A receiving non distress automated procedure uses correct receive errors by performing comparison error correction in the case repeate reception individual calls addressed to EUT. While distress automated procedure shall correct receive errors by performing comparison error correction only. [ETSI EN 300 338-1, n.8.2.2] [ETSI EN 300 338-1, n.8.2.3] | No critical | (E1120) |

Cross-references to ETSI EN 300 338-1(2010-02) and ETSI EN 300 338-2(2010-02)

| ETSI EN 300 338-2 | Test report |
|-------------------|--|
| 4.1 | 2.1 |
| 5.1.1 | 5.18; |
| 5.1.2 | n.a |
| 5.2 | |
| 5.3 | |
| 5.4 | |
| 6.1 | |
| 6.2.1 | 3.1; 3.2; 5.17; 6.33; 7.15; 7.17; |
| 6.2.2 | 3.3 |
| 6.2.3 | 4.1; 4.2; 4.3; 4.4 |
| 6.3 | 3.4; 3.5; 3.6; 3.7; 6.20; 6.21; 7.12; 7.14; 8.10; 8.11; 8.15; 8.16; 9.7; |
| | 9.8; 9.9; |
| 6.4.1 | All clausses of the chapter 5; |
| 6.4.2 | 5.6; 5.7; |
| 6.4.3 | 5.5; |
| 6.4.4 | 5.1; 5.2; 5.3; 5.17; |
| 6.4.5 | 5.4; |
| 6.4.6 | 5.25; |
| 6.4.7 | 5.11; 5.12; 5.14; |
| 6.4.8 | 5.11; |
| 6.4.9 | All clausses of the chapter 5; |
| 6.4.10 | 5.16; |
| 6.4.11 | 5.8; 5.9; |
| 6.4.12 | 5.10; 5.12; |
| 6.4.13 | 5.15; |
| 6.4.14 | All clausses of the chapter 5; |

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| 6.5.1 | All clausses of the chapter 6; |
| 6.5.2 | 6.1; 6.2; 6.3; 6.4; 6.5; 6.6; 6.7; 6.8; |
| 6.5.3 | 6.1; 6.2; 6.3; 6.4; 6.5; 6.6; 6.7; 6.8; |
| 6.5.4 | 6.9; 6.10; 6.16; 6.17; |
| 6.5.5 | 6.9; 6.11; 6.12; 6.16; 6.17; |
| 6.5.6 | 6.23; |
| 6.5.7 | 6.23; 6.24; 6.25; |
| 6.5.8 | 6.8; 6.11; 6.12; 6.13; 6.14; 6.15; 11.17; 11.18; |
| 6.5.9 | 6.14; 6.18; 6.19; |
| 6.5.10 | 6.20; 6.21; 6.22; |
| 6.5.11 | All clausses of the chapter 6; |
| 6.6.1 | All clausses of the chapter 7 |
| 6.6.2 | 7.1; 7.2; 7.3; 7.4; 7.5; |
| 6.6.3 | 7.1; 7.2; 7.3; 7.4; |
| 6.6.4 | 7.10; 7.11; |
| 6.6.5 | 7.1; 7.2; 7.3; 7.4; 7.9; |
| 6.6.6 | 7.1; 7.2; 7.3; 7.4; 7.5; |
| 6.6.7 | 7.6; 7.7; 7.8; |
| 6.6.8 | 7.13; 7.14; |
| 6.6.9 | All clausses of the chapter 7; |
| 6.7.1 | All clausses of the chapter 8 |
| 6.7.2 | 8.1; 8.2; 8.3; 8.4; 8.5; 8.9; |
| 6.7.3 | 8.1; 8.2; 8.3; 8.4; 8.5; 8.9; |
| 6.7.4 | 8.18; 8.19; |
| 6.7.5 | 8.6; 8.7; 8.8; 8.12; 8.13; 8.14; 8.18; |
| 6.7.6 | 8.1; 8.2; 8.3; 8.4; 8.5; 8.9; |
| 6.7.7 | 8.1; 8.2; 8.3; 8.4; 8.5; 8.11; |
| 6.7.8 | 8.6; 8.7; 8.8; 8.10; 8.11; 8.12; 8.13; 8.14; 8.16; 8.17; |
| 6.7.9 | All clausses of the chapter 8; |

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|-------------------|--|
| 6.8.1 | 9.1; 9.2; 9.3; 9.4; 9.5; 9.6; |
| 6.8.2 | 9.1; 9.2; 9.3; 9.4; |
| 6.8.3 | 9.1; 9.2; 9.3; 9.4; 9.5; 9.6; 9.8; |
| 6.8.4 | 9.5; 9.6; |
| 6.8.5 | 9.1; 9.2; 9.3; 9.4; |
| 6.8.6 | 9.7; 9.9; |
| 6.9.1 | All clausses of the chapter 10 |
| 6.9.2 | 9.5; 9.6; 10.1; 10.2; 10.3; 10.4; 10.5; 10.6; 10.7; 10.8; 10.9; 10.10; |
| | 10.11; 10.12; 10.13; 10.14; 10.15; 10.16; 10.17; |
| 6.9.3 | n.a |
| Annex A.1 | 7.15; |
| Annex A.2 | 6.33; |
| Annex A.3 | 7.15; 7.16; 7.17; 7.18; 7.19; 7.20; 7.21; 7.22; 7.23; |
| Annex B.1 | |
| Annex B.2 | |
| Annex B.3 | |
| Annex C.1 | n.a |
| Annex C.2 | |
| Annex D.1 | 4.1; 4.2; 4.3; 4.4; 7.9; |
| Annex D.2 | 4.1; 4.2; 4.3; 4.4; 7.9; |
| Annex D.3 | 4.1; 4.2; 4.3; 4.4; 7.9; |
| Annex D.4 | 4.1; 4.2; 4.3; 4.4; 7.9; |

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| ETSI EN 300 338-1 | Test report |
|-------------------|---|
| 4.7 | 1.1; 5.13 |
| 4.8 | 1.2 |
| 4.9 | 1.3 |
| 4.10 | 5.23; 12.1; 12.2; |
| 4.12 | 1.4 |
| 4.13 | 1.5 |
| 4.15 | 1.6 |
| 8.1 | 5.18; |
| 8.1,a | 11.1; 11.4; |
| 8.1,b | 5.18; |
| 8.1.c | 11.1; |
| 8.1.d | 5.18 |
| 8.1.e | 11.4; 11.8; |
| 8.1.f | 11.2; |
| 8.1.g | 11.3; |
| 8.1.h | 11.2; |
| 8.1.i | 11.5; 11.6; 11.8; |
| 8.1.j | 11.2; |
| 8.1.k | 11.7; |
| 8.1.1 | 11.10; 11.11; |
| 8.1.m | 11.12; |
| 8.1.n | 11.9; 11.12; |
| 8.1.o | 11.9; 11.12; |
| 8.2.1 | 11.13; |
| 8.2.2 | 11.10; 11.11; 11.14; 11.15; 11.16; 11.17; 11.18; 11.19; 11.20; 11.21; |
| | 11.22; |
| 8.2.3 | 11.23; 11.24; 11.25; |
| 9.3 | 12.3; |
| 12.1 | 8.21; |

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| ETSI EN 301 033-1 (2010-09) | Test report |
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| 8.10 | 13.1 |

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Normative references

1) ETSI EN 300 338-1 V1.3.1 (2010-02): "Electromagnetic compatibility and Radio spectrum Matters (ERM); 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."

2) ETSI EN 300 338-2 V1.3.1 (2010-02): "Electromagnetic compatibility and Radio spectrum Matters (ERM); 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 2: Class A/B DSC."

3) ITU-R Recommendation M.493-13 (2009): "Digital selective-calling system for use in the maritime mobile service".

4) ITU-R Recommendation M.541-9 (2004): "Operational procedures for the use of digital selective-calling equipment in the maritime mobile service".

5) ITU-R Recommendation M.821-1 (1997): "Optional expansion of the digital selectivecalling system for use in the maritime mobile service".

6) IEC 61162-1 (2007): "Maritime navigation and radio communication equipment and systems - Digital interfaces - Part 1: Single talker and multiple listeners".

A.806(19) "Performance standards for shipborne MF/HF radio 7) IMO Resolution installations capable of voice communication, narrow-band direct-printing and digital selective calling".

8) IMO Circular MSC/Circ-862: " Clarifications of certain requirements in IMO performance standards for GMDSS equipment".

9) IMO Resolution MSC.68(68): "Adoption of amendments to performance standards for shipborne radiocommunication equipment".

10) ETSI EN 301 033 V1.3.1 (2010-09): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Technical characteristics and methods of measurement for equipment for shipborne watchkeeping receivers for reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and VHF bands."

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Abbreviations

AIS Universal Automatic Identification System **COG** Course over ground **DGPS** Differential GPS **DSC** Digital selective calling **DTE** Data terminal equipment **DX** First transtission **EPFD** electronic position-fixing device **ETSI EN** European standard EUT Equipment under test GMDSS Global maritime distress and safety system **GNSS** Global Navigation Satellite System **GPS** Global positioning system (US) **IEC** International Electrotechnical Commission **IMO** International Maritime Organization **ITU** International Telecommunication Union ITU-R ITU Radiocommunication sector (formerly CCIR) **ITU-T** ITU Standardization sector (formerly CCITT) MMSI Maritime mobile service identity **NE** Nord-East **NW** Nord-West **RR** Radio Regulations **RX** Second transmission SOG Speed over ground **SOLAS** Safety of Life at Sea (International convention) SE South-East SW South-West TE **Test Equipment** UTC Universal time coordinated

n.a (N/A) - no applicable **n.t** (N.T) – no tested
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1. General requirements [ETSI EN 300 338-1(2010-02), n.4]

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1.1. Distress button and initiation of distress alert test

[ETSI EN 300 338-1 (2010-02), n.4.7] [MSC/Circ.862]

Definition

This test checks distress button sub-procedures.

Method of measurement and required results

Set the EUT into standby condition.Verify that:

| Distress alert activation | | | | | |
|---|-------|----|--------|----|---------|
| | Value | | Result | | Comment |
| Subject | YES | NO | YES | NO | |
| A distress alert should be activated only by means of a dedicated distress button that has no other function other than activating distress alerts. | X | | X | | |
| This button should not be any key of a digital input panel or a keyboard provided on the equipment. | X | | X | | |
| This button shall only operate if an own MMSI is installed. | Х | | X | | |
| The distress button should be clearly identified and be protected against inadvertent operation with a spring loaded lid or cover. | X | | X | | |
| This button shall be red in colour and marked "DISTRESS". Where a non-transparent protective lid or cover is used, it shall also be red and marked "DISTRESS". | X | | X | | |
| It shall not be necessary for the user to remove seals or to break the lid or cover in order to operate the distress button. | X | | X | | |
| The distress alert initiation should require at least two independent actions. | Х | | X | | |
| At all times it shall take a maximum of 5 seconds for lifting the spring loaded lid and continually pressing the dedicated distress button before a distress alert is transmitted. | X | | x | | |

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| Distress alert activation | | | | | | |
|--|-------|---------------|--------|----|----------------------------|--|
| Outriest | Value | | Result | | Comment | |
| Subject | YES | YES NO YES NO | | NO | | |
| No other button or control on the equipment shall initiate a distress alert however it is composed. | X | | X | | | |
| The equipment shall indicate the status of the distress alert transmission. | X | | X | | | |
| The use of the dedicated distress button shall automatically have priority over any other operation of the equipment. | X | | X | | | |
| The button shall not be used for activating any other function or accessing any menu. | Х | | X | | | |
| It should be possible to interrupt repetitive transmissions of distress messages. Such operation should not interrupt the transmission of a distress alert or distress message in progress but should prevent repetitive transmissions of a distress message. | X | | X | | See Distrerss alert cancel | |

| ent meets the requirements (yes / no /n.a) yes |
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1.2. Input Own MMSI test

[ETSI EN 300 338-1 (2010-02), n.4.8] [Rec. ITU-R M.493-13, Annex 1, n.12.4]

Definition

This test checks facilities of entering and storing own MMSI.

Method of measurement and required results

Verify that:

| Own MMSI | | | | | |
|---|---|-------|-----|------|---------|
| Subject | | Value | | sult | Comment |
| | | NO | YES | NO | |
| The EUT shall have facilities for entering and storing its own 9-digit MMSI with the 10th digit set automatically to 0 in its use in any DSC message unless the equipment is designed to use the 10th digit in accordance with ITU-R recommendation M.1080. [ETSI EN 300 338-1 (2010-02), n.4.8] | X | | X | | |
| The factory default for the MMSI shall be some indicator to the equipment that it is invalid. | X | | x | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| Once an own-MMSI is programmed, this number shall not be able to be edited by means of any of the user controls. Intervention by the manufacturer or authorized representative shall be required. | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| No DSC message shall be able to be sent without the proper entry of a valid own-MMSI. | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| No DSC message shall be able to be received without the proper entry of a valid own-MMSI. | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |

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| Own MMSI | | | | | |
|---|-----|-------|-----|------|---------|
| | | Value | | sult | Comment |
| Subject | YES | NO | YES | NO | |
| If there is no correctly programmed own-MMSI entered, on <u>switch on</u> the EUT shall display information to the user that there is no MMSI entered, DSC is disabled, the distress button will not work, or equivalent. | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| If there is no correctly programmed own-MMSI entered, on <u>switch on</u> the EUT shall also sound a warning alarm and display the reason for the alarm and the means to silence it. This aural alarm may self terminate. | x | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| Once stored, it possible for user to change the MMSI number | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.8] | | | | | |
| Readily display MMSI when the DSC equipment is on | X | | X | | |
| [Kec. 11 U-K M.493-13, Annex 1, n.12.4 [ETSI EN 300 338-2 (2010-02), n.6.3] | | | | | |

| nt meets the requirements (yes / no /n.a) yes |
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1.3. Input Group MMSI test

[ETSI EN 300 338-1 (2010-02), n.4.9] [ETSI EN 300 338-1 (2010-02), n.4.6.1]

Definition

This test checks facilities of entering and storing Group MMSI.

Method of measurement and required results

Verify that:

ſ

| Group MMSI | | | | | | |
|---|--------------|-----|----|-------------------------------------|--|---------|
| | Value | Res | | Result | | Comment |
| Subject | | YES | NO | | | |
| The equipment shall provide at least 20 user programmable group MMSIs to enable the equipment to recognize DSC messages addressed to either the ship's MMSI or the Group MMSIs. [ETSI EN 300 338-1 (2010-02), n.4.9] | More than 20 | X | | Should be 20 group MMSI at least | | |

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1.4. Operation check test

[ETSI EN 300 338-1 (2010-02), n.4.12]

Definition

This test checks facilities of operation EUT.

Method of measurement and required results

Verify that:

| Operation | | | | | |
|--|-------|----|--------|----|---------|
| | Value | | Result | | Comment |
| Subject | YES | NO | YES | NO | |
| The equipment shall be so designed that misuse of the controls cannot cause damage to the equipment or injury to personnel. [ETSI EN 300 338-1 (2010-02), n.4.12] | X | | X | | |
| For integrated equipment means shall be provided to interrupt the transmissions and to reset the equipment manually. [ETSI EN 300 338-1 (2010-02), n.4.12] | Х | | X | | |

The equipment meets the requirements (yes / no /n.a)

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1.5. Facilites of routine testing test

[ETSI EN 300 338-1 (2010-02), n.4.13]

Definition

This test checks facilities of routine testing EUT.

Method of measurement and required results

Verify that:

| Routine testing | | | | | |
|--|-------|----|--------|----|---------|
| | Value | | Result | | Comment |
| Subject | YES | NO | YES | NO | |
| Means shall be provided to enable routine testing of the DSC unit <u>without activating</u> <u>the associated radio transmitter.</u> | X | | X | | NOTE 1 |
| [ETSI EN 300 338-1 (2010-02), n.4.13] | | | | | |
| Typically this could be a DSC encode/decode loop test of a DSC call. Manufacturers shall declare the process employed | X | | X | | |
| [ETSI EN 300 338-1 (2010-02), n.4.13] | | | | | |

NOTE 1

EUT uses the Low-power emission.

| The equipment meets the requirements (yes / no /n.a) | yes |
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1.6. Interruptions in the power supply test

[ETSI EN 300 338-1 (2010-02), n.4.15]

Definition

This test checks interruptions in the power supply EUT.

Method of measurement and required results

Verify that:

| Interruptions in the power supply | | | | | | | |
|---|--|-----|--------|-----|------|--------|--|
| Subia | Value | | Result | | Com- | | |
| Subject | | YES | NO | YES | NO | ment | |
| The information in programmable memory | Own MMSI | Х | | Х | | | |
| devices shall be protected from interruptions in the power supply of <u>at least 10</u> | Configuration data inherent to the DSC process | X | | X | | | |
| hours duration. | All DSC call logs | | X | | Х | (1)(2) | |
| Non volatile memory shall be used for the following: | The fact the equipment is turned on | Х | | X | | | |
| [ETSI EN 300 338-1, n.4.15] | | | | | | | |
| If the equipment was interr sending distress automated p be presented with the options procedure after power has been [ETSI EN 300 338-1, n.4.15] | upted during <u>an active</u> <u>procedure</u> , the user shall to resume or cancel this n restored | х | | X | | | |

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(1) (E697)

Received DSC messages from LOG when interrupted the power supply is removed in the following case.

Set the UTC/Date via interface IEC 61162-1 sentence ZDA. Send from TE distress DSC messages. Power supply off and than on again. Set the new UTC/Date for the month forward via interface IEC 61162-1 sentence ZDA.

Power supply off and than on again. LOG all received messages are cleared.

[ETSI EN 300 338-1, n.4.15]

(2)

(E704)

Received DSC messages from LOG when interrupted the power supply is removed in the following case.

Power supply off and than on again. Send from TE distress DSC messages. Power supply off and than on again. Set the new UTC/Date for the month forward via menu System Date manually. Received messages in LOG changed information UTC time and date of reception by manually installed.

[ETSI EN 300 338-1, n.4.15] [ETSI EN 300 338-2, n.6.3]

| The equipment meets the requirements (yes / no /n.a) | no |
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2. Controls and Indicators in Class A/B DSC

Equipment [ETSI EN 300 338-2(2010-02), n.4]

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2.1. Visual indication test (general requirements)

[ETSI EN 300 338-2 (2010-02), n.4.1] [Rec. ITU-R M.493-13, Annex 1, n.12.3]

Definition

This test checks primary DSCalphanumeric display.

Method of measurement and required results

Verify that:

| Ν | Visual indication | Value Results | | Com- | |
|---|---|------------------|-----|------|--------|
| | | | YES | NO | ment |
| 1 | Any visual display of the information content shall be clearly legible under all ambient light conditions [ETSI EN 300 338-2, n.4.1] [Rec. ITU-R M.493-13, Annex 1, n.12.3] | | X | | |
| 2 | Total number of characters are displayed: The amount of information to display simultaneously on the display shall correspond to the information that can be written in plain text with a minimum of 160 characters [ETSI EN 300 338-2, n.4.1] [Rec. ITU-R M.493-13, Annex 1, n.12.3] | More tnan 160 | X | | |
| 3 | Number of lines: The display should have a minimum of 160 characters in two or more lines [Rec. ITU-R M.493-13, Annex 1, n.12.3] | More than 2 | X | | |
| 4 | Where logic flows and procedural guidance, expressed by graphical symbols, have an advantage over text, this shall be allowed. [ETSI EN 300 338-2, n.4.1] | | X | | |
| 5 | Any graphical symbols shall be clearly defined in the operation manual. [ETSI EN 300 338-2, n.4.1] | | n.t | n.t | NOTE 1 |

NOTE 1

The operation manual is not tested.

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| Ν | Visual indication | Value | Results | | Com- |
|---|--|-------|---------|----|--------|
| | | | YES | NO | ment |
| 6 | The display shall be large enough to hold enough information from the active procedure to safely guide the operator through operator options in any engaged DSC procedure (distress or non-distress). [ETSI EN 300 338-2, n.4.1] | | X | | NOTE 1 |
| 7 | It shall at any time hold information on how to instantly recall any waiting procedure, or put any active procedure on hold. | | X | | |
| | [ETSI EN 300 338-2, n.4.1] | | | | |
| 8 | The display shall be capable of displaying incoming and logged calls in plain language The headings and content of messages should be shown in plain language, for example: – "Radiotelephone" instead of J3E, – "busy" instead of "telecommand 2: 102" [Rec. ITU-R M.493-13, Annex 3, n.4] | | X | | |
| | Interface shall use terms such as "OK" or "Cancel" instead of "terminate procedure", and "all ships" instead of "format 116", and "radio telephone" instead of "telecommand J3E", and use labels such as "Calling station 567555454" instead of "Sending non distress automated procedure" [ETSI EN 300 338-1, n.4.1] | | | | |

NOTE 1

Not the full list of available options (only four) to the operator place on the top level.

| The equipment meets the requirements (yes / no /n.a) | yes |
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3. Non-automated features

[ETSI EN 300 338-2 (2010-02), n.6.2]

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3.1. Verification of correct of dot pattern test

[ETSI EN 300 338-2(2010-02), n.6.2.1] [ITU-R M.493-13, Annex 1, n. 3.4.1]

Definition

This test checks the dot pattern length for the DSC messages.

Method of measurement and required results

The EUT and TE are connected. The EUT generates and transmits to the TE the standard legal call sequences for the class of equipment. The TE receives, displays the sequences in the ten-bit error-detecting code. The dot pattern preceding the phasing sequence is then identified and quantified.

Verify that:

| Ν | Technical format of a call sequence | Result | | Result Comment | |
|----|---|--------|----|----------------|--|
| | (dot pattern) | YES | NO | | |
| 1 | Dot pattern of Distress call shall have length to 200 bits. | X | | | |
| 2 | Dot pattern of Distress acknowledgement call shall have length to 200 bits. | Х | | | |
| 3 | Dot pattern of Distress relay to Geographic area shall have length to 200 bits. | X | | | |
| 4 | Dot pattern of Distress relay to Individual ship station shall have length to 200 bits. | X | | | |
| 5 | Dot pattern of Distress relay to Individual coast station shall have length to 20 bits. | Х | | | |
| 6 | Dot pattern of Distress relay acknowledgement to Individual station shall have length to 20 bits. | X | | | |
| 7 | Dot pattern of Geographic area call shall have length to 200 bits. | X | | | |
| 8 | Dot pattern of Individual call sequence to ship stations shall have length to 200 bits | Х | | | |
| 9 | Dot pattern of Individual call sequence to coast stations shall have length to 20 bits. | Х | | | |
| 10 | Dot pattern of acknowledgement call sequence shall have length to 20 bits. | X | | | |
| 11 | Dot pattern of Routine group call sequence shall have length to 200 bits | X | | | |
| 12 | Dot pattern of Distress relay to All ships shall have length to 200 bits. | X | | | |

| The equipment meets the requirements (yes / no /n.a) | l v | es |
|--|-----|----|
| The equipment meets the requirements (yes / no /ma) | י א | 00 |

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3.2. Distress call attempt consisting of repeated call sequences

[Rec. ITU-R M.493-13, Ann.1, n. 3.4; n.11] [Rec. ITU-R M.541-9, Ann.1, n.3.1.3.1] [ETSI EN 300 338-2 (2010-02), n.6.2.1]

| Scenario | Legend |
|-----------------|-----------------|
| Is not required | Is not required |

Definition

This test checks the dot pattern length for the DSC distress alert attempt.

Method of measurement and required results

The EUT and TE are connected. The EUT generates a distress call attempt consisting of repeated call sequences. The TE receives, displays and prints the sequences in the ten-bit code. The transmitted distress call attempt is then analyzed. Verify that:

| Ν | Technical format of a distress call attempt | Result | | Comment |
|---|--|--------|----|---------|
| | | YES | NO | |
| 1 | A distress alert attempt should be transmitted as 5 consecutive calls on one frequency. | X | | |
| | [Rec. ITU-R M.541-9, Ann.1, n.3.1.3.1] | | | |
| 2 | Length of Dot pattern between the end of one call and the start of the following call shall be 200. | Х | | |
| 3 | The consecutive alerts should be transmitted with no gap between the end of one call and the start of the dot pattern of the following call | Х | | |
| | [Rec. ITU-R M.493-13, Ann.1, n.11] | | | |
| 4 | Equipment should be capable of using both single and multifrequency call attempts. | Х | | |
| | [Rec. ITU-R M.493-13, Ann.1, n.11] | | | |
| 5 | Multi-frequency call attempts should always include at least the MF and HF 8 MHz band DSC distress and safety frequencies. | Х | | |
| | [Rec. ITU-R M.493-13, Ann.1, n.11] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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3.3. Transmission of DSC messages and prioritized wait

[ETSI EN 300 338-2 (2010-02), n.6.2.2] [Rec. ITU-R M.541-9, n.3.6]

| Scenario | Legend |
|-----------------|-----------------|
| Is not required | Is not required |

Method of measurement and required results

a) The EUT and TE are connected. Select from TE menu Tools-> Test signals ->Dot par tten. Next click "Start" button.

The EUT encodes and sequentially transmits the following DSC calls:

- distress;
- urgency;
- non-test safety;
- test safety;
- routine.

The EUT should correctly monitoring the DSC channel to determine the presence of signal.

The EUT should monitoring the DSC channel to determine the presence of a signal and, except for distress alert, provide facilities for automatically preventing the transmission of a DSC call until the channel free. Verify that:

| Type of call | | Auto preventing the transmis- sion | | Results | | Com- ment | |
|--|---|---|----|---------|----|--------------|--|
| | | YES | NO | YES | NO | | |
| The alert shall be transmitted as soon as the channel becomes free or after 10s, which ever occurs first. [ETSI EN 300 338-2, n.6.2.2] | Distress alert | X | | X | | NOTE 1 | |
| The automated procedure on | Distress Alert Cancel | Х | | Х | | | |
| the EUT never transmits and continues to indicate that it is waiting for a free channel | Distress call (Ind. Distress relay Ack) | Х | | Х | | | |
| [ETSI EN 300 338-2, n.6.2.2] | Urgency call | Х | | Х | | | |
| | Safety call | Х | | Х | | | |
| | Test safety call | Х | | Х | | | |
| | Routine call | Х | | Х | | | |

Note 1.

The result has estimated character.

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b) The EUT and TE are connected. Select from TE menu 'Send Manual' -> List -> LONG DOTS. While sending DSC message LONG DOTS (45 sec) try to send from EUT the following DSC calls:

- distress; -
- _ urgency;
- non-test safety; -
- test safety; _
- routine. -

The EUT should correctly monitoring the DSC channel to determine the presence of signal. From TE open View->Dump RX channel for analysis. Repeat the test more than 10 times.

The EUT should monitoring the DSC channel to determine the presence of a signal and, except for distress alert, provide facilities for automatically preventing the transmission of a DSC call until the channel free. Verify that:

| Ν | Type of call | Wait time | | | Resu | ılts | Com- |
|---|------------------|----------------------|---------|-----------------|------|------|--------|
| | | Number of repitation | Average | Minimum time | OK | NO | ment |
| 1 | Distress call | 10 | n.t | n.t | Х | | NOTE 2 |
| 2 | Urgency call | 10 | n.t | n.t | Х | | |
| 3 | Safety call | 10 | n.t | n.t | Х | | |
| 4 | Test safety call | 10 | n.t | n.t | Х | | |
| 5 | Routine call | 10 | n.t | n.t | Х | | |

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| The alert shall be transmitted after 10s | X | | |
| [ETSI EN 300 338-2, n.6.2.2] | | | |
| The EUT shall wait for the channel to become free and then the equipment shall delay transmission of the DSC message for a specified wait time. | X | | |
| [ETSI EN 300 338-2, n.6.2.2] | | | |

NOTE 2

The equipment transmits a message after the free channel with a delay, but estimates of the time was conducted.

| The equipment meets the requirements (yes / no /n.a) | yes |
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3.4. Standby state test

[Rec. ITU-R M.493-13, Ann.1, 12.2] [ETSI EN 300 338-2, n.6.3]

Definition

This test checks options for Standby condition.

Method of measurement and required results

a) Set EUT into standby mode. Test top level information. Verify that:.

| Ν | Top level information | Value | Res | ults | Com- |
|---|--|-------|-----|------|------|
| | (Standby) | | YES | NO | ment |
| 1 | the station MMSI [ETSI EN 300 338-2, n.6.3,a] | | Х | | |
| 2 | the latest position of the vessel [ETSI EN 300 338-2, n.6.3,b] | | Х | | |
| 3 | the UTC time of that position [ETSI EN 300 338-2, n.6.3,c] | | Х | | |
| 4 | Dedicated distress button [ETSI EN 300 338-2, n.6.3,d] | | Х | | |
| 5 | a clearly labelled means to compose a distress alert prior to sending distinct from the dedicated distress button [ETSI EN 300 338-2, n.6.3,e] | | X | | |
| 6 | a clearly labelled means to compose/send a non distress DSC message [ETSI EN 300 338-2, n.6.3,f] | | X | | |
| 7 | a clearly labelled means to compose/send a DROBOSE [ETSI EN 300 338-2, n.6.3,g] | | X | | |

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b) Set EUT into standby mode. Set factory defaults options. Verify that:.

| Ν | N Setup options | | Value | Results | | Com- |
|---|---|--|-------|---------|----|------|
| | | | | | NO | ment |
| 1 | The option to send medical transport DSC messages | Shall be available setup option to set | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,a] | Default setting shall be OFF | OFF | X | | |
| 2 | The option to send neutral craft DSC messages | Shall be available setup option to set | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,b] | Default setting shall be OFF | OFF | X | | |
| 3 | The option to auto acknowledge polling DSC messages | Shall be available setup option to set | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,c] | Default setting shall be ON | ON | X | | |
| 4 | The option to auto acknowledge test DSC messages | Shall be available setup option to set | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,d] | Default setting shall be ON | ON | X | | |
| 5 | The option to auto acknowledge position request DSC messages | Shall be available setup option to set | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,e] | Default setting shall be OFF | ON | X | | |
| 6 | the option to auto acknowledge individually addressed, non | Shall be available setup option to set | Yes | X | | |
| | distress DSC messages | Default setting shall be ON | ON | X | | |
| | [ETSI EN 300 338-2, n.6.3,f] | | | | | |

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c) Set EUT into standby mode. Set factory defaults options. Verify that:.

| Two-tone alarm options | | | | | |
|---|---|--------|---------|----|--------|
| Item | | Value | Results | | Com- |
| | | | ОК | NO | ment |
| The option on MF/HF equipment to set the maximum distance for sounding a two-tone alarm that does not calf terminate upon initiation of a | Shall be available setup option to set the maximum distance | Yes | X | | NOTE 1 |
| not self terminate upon initiation of a received distress automated procedure to some value greater than or equal to 500 nautical miles that | Maximum value shall be greater than or equal to 500 NM | 500 NM | Х | | |
| includes "never self terminate"; | Shall be option " never self terminate " | Yes | Х | | |
| [ETSI EN 300 338-2, n.6.3,g] | | | | | |
| | Default setting shall be 500 NM | Yes | X | | |

NOTE 1

Value can not be changed and is always equal to 500 NM.

d) Set EUT into standby mode. Set factory defaults options of the non automated procedure activity. Verify that:

| Non automated procedure activity option | | | | | |
|--|-----------|--------|----|------|--|
| Item | Value | Result | | Com- | |
| | | YES | NO | ment | |
| The option to set the no activity timeout of the non automated procedure to some value is available | YES | X | | | |
| [ETSI EN 300 338-2, n.6.3,h] | | | | | |
| The option to set the no activity timeout to value ' <u>no</u> <u>timeout'</u> is available | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,h] | | | | | |
| It is possible to change values of timeout | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,h] | | | | | |
| Limits of timeout | 1min – 30 | Х | | | |
| [ETSI EN 300 338-2, n.6.3,h] | min | | | | |
| The default value of timeout shall be set to 10 min | 10 min | Х | | | |
| [ETSI EN 300 338-2, n.6.3,h] | | | | | |

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e) Set EUT into standby mode. Set factory defaults options of the non distress DSC automated procedures activity. Verify that:

| Non distress DSC automated procedure activity option | | | | | |
|--|-----------|--------|----|------|--|
| Item | Value | Result | | Com- | |
| | | YES | NO | ment | |
| The option to set the no activity timeout of the non distress DSC automated procedure to some value <u>is</u> <u>available</u> | YES | X | | | |
| [ETSI EN 300 338-2, n.6.3,i] | | | | | |
| The option to set the no activity timeout to value ' <u>no</u> <u>timeout'</u> is available | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,i] | | | | | |
| It is possible to change values of timeout | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,i] | | | | | |
| Limits of timeout | 1min – 30 | Х | | | |
| [ETSI EN 300 338-2, n.6.3,i] | min | | | | |
| The default value of timeout shall be set to <u>15 min</u> | 15 min | X | | | |
| [ETSI EN 300 338-2, n.6.3,i] | | | | | |

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 f) Set EUT into standby mode. Set factory defaults options of the receiving distress DSC.

f) Set EUT into standby mode. Set factory defaults options of the receiving distress DSC automated procedures activity. Verify that:

| Receiving distress DSC automated procedure activity option | | | | | |
|---|-----------|--------|----|------|--|
| Item | Value | Result | | Com- | |
| | | YES | NO | ment | |
| The option to set the no activity timeout of the receiving distress DSC automated procedure to some value is available | YES | X | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |
| The option to set the no activity timeout to value ' <u>no</u> <u>timeout'</u> is available | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |
| It is possible to change values of timeout | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |
| Limits of timeout | 2min – 30 | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | min | | | | |
| The default value of timeout shall be set to ' <u>no</u> <u>timeout'</u> | OFF | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |

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g) Set EUT into standby mode. Set factory defaults options of the sending distress DSC automated procedures activity. Verify that:

| Sending distress DSC automated procedure activity option | | | | | |
|---|-----------|--------|----|------|--|
| (optional) | | | | | |
| Item | Value | Result | | Com- | |
| | | YES | NO | ment | |
| The option to set any timeout of the unacknowledged sending distress automated procedure <u>is NOT</u> <u>available</u> | NO | X | | | |
| [ETSI EN 300 338-2, n.6.3,k] | | | | | |
| The option to set the no activity timeout of the sending acknowledged distress DSC automated procedure to some value is available (not required) | YES | X | | | |
| [ETSI EN 300 338-2, n.6.4.13] [Rec. ITU-R M.493-13, Annex 4, n.3.1.9.1] | | | | | |
| The option to set the no activity timeout to value ' <u>no</u> <u>timeout'</u> is available | YES | X | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |
| It is possible to change values of timeout | YES | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |
| Limits of timeout | 2min – 30 | Х | | | |
| [ETSI EN 300 338-2, n.6.3,j] | min | | | | |
| The default value of timeout shall be set to ' <u>no</u> <u>timeout'</u> | OFF | X | | | |
| [ETSI EN 300 338-2, n.6.3,j] | | | | | |

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h) Set EUT into standby mode. Set factory defaults options of the communications automated procedures activity. Verify that:

| Communications automated procedure activity option | | | | |
|--|--------------|--------|----|------|
| ltem | Value | Result | | Com- |
| | | YES | NO | ment |
| The option to set the no activity timeout of the communications automated procedure to some value is <u>available</u> | YES | X | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| The option to set the no activity timeout to value ' <u>no</u> <u>timeout'</u> is <u>NOT</u> available | YES | X | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| It is possible to change values of timeout | YES | X | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| Limits of timeout [10 seconds to 10 min] | 10 s - 600 s | X | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| The default value of timeout shall be set to <u>30 seconds</u> | 30 s | X | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |

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| Equipment Under Test: | SAILOR 632 | 20 250W MF/HF DSC Class A | | |

i) Set EUT into standby mode. Set factory defaults options of simultaneous automated procedure (applies only to equipment that supports more than the required minimum of seven). Verify that:

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| Simultaneous automated procedure options | | | | |
|--|-------|--------|-----|------|
| Item | Value | Result | | Com- |
| | | YES | NO | ment |
| Amount of simultaneous automated procedure shall be minimum <u>of seven</u>); | 7 | X | | |
| [ETSI EN 300 338-2, n.6.3,1] | | | | |
| The option to set the maximum amount of simultaneous automated procedure (applies only to equipment that supports more than the required minimum of seven) is available | | n.a | n.a | |
| [ETSI EN 300 338-2, n.6.3,1] | | | | |
| It is possible to change values of amount of simultaneous automated procedure (applies only to equipment that supports more than the required minimum of seven) | | n.a | n.a | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| Limits of amount of simultaneous automated procedure | | n.a | n.a | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |
| The default value shall be set to <u>seven</u> | | Х | | |
| [ETSI EN 300 338-2, n.6.3,m] | | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
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3.5. Distress messages storage test

[IMO Resolution A.806(19), n.3.1] [Resolution MSC.68(68), Annex 3] [ETSI EN 300 338-2, n.6.3,d]

| Scenario | Legend |
|---------------------|-----------------|
| DistressH-20-5.scn | Is not required |
| DistressErrorsH.scn | |

Definition

This test checks distreress messages storage.

| 1 | DSC-TEST | N 01.11 |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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Method of measurement and required results

a) Reset EUT into Standby. Start Scenario *DistressH-20-5.scn*.

The scenario *Distress-20-5.scn* contains 25 calls (distress calls or the calls having a category of distress).

First 22 minutes 10 sec TE sends 20 calls. Verify that all 20 calls are received by EUT.

Since the 30 minute TE sends in addition 5 more calls. Verify that new 5 calls are received by EUT, having removed from memory the oldest.

NOTE: the Scenario is designed for memory of 20 messages. If memory EUT is more, changing of the scenario is required.

| Ν | Subject | Value | Res | ults | Com- |
|---|---|-------|-----|------|-----------------------|
| | | | OK | NO | ment |
| 1 | A printer unit for immediate paper printout of the information content of the message received (optional) | | n.a | n.a | optional |
| | [IMO Resolution A.806(19), n.3.1] | | | | |
| 2 | A minimum of the twenty most recently received distress DSC messages shall be able to be displayed [ETSI EN 300 338-2, n.6.3,d] | 20 | Х | | |
| 3 | Capacity for storing of different received DSC distress messages shall be at least 20 | 20 | X | | Should be at least 20 |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 4 | The most recently received DSC distress alert attempts is stored | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 5 | A single or multi frequency alert attempt shall be recorded as a single DSC message | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 6 | An indication of how many of the alerts in the attempt were received is available | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 7 | Storing the messages until readout and should be erased 48 hours after their reception | Yes | X | | |
| | [Resolution MSC.68(68), Annex 3] | | | | |

DistressH-20-5.scn

| | DSC-TEST DES Laboratory | N 01.11 |
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b) Reset EUT into Standby. Start scenario DistressErrorsH.scn.

MMSI: 273000031 - Distress call attempt (5 sequences with expansion)

MMSI: 273000032 - Two calls with an interval of 30 seconds and onre more on the different friquencies. Should be recorded as one message.

MMSI: 273000033 - Two calls with an interval of 65 seconds. Should be recorded as two separate messages.

MMSI: 273000034 - Distress call attempt (5 sequences with expansion). Each sequence has errors in information Distress coordinates, in different symbols. Should be recorded as one message without a errors.

MMSI: 273000035 - Distress relay with a error in symbol Nature of distress. Should be recorded with the indication of presence of a error in the information.

MMSI: 273000036 - Distress relay with a error in symbol ECC. Should be recorded with the indication of presence of a error in the information.

| DistressErrorsH.scn |
|---------------------|
|---------------------|

| Ν | Subject | Value | Res | ults | Com- |
|---|--|-------|-----|------|------|
| | | | ОК | NO | ment |
| 1 | DSC alerts received within a period of 60 seconds shall be considered part of the same distress alert attempt. | Yes | Х | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 2 | Received messages shall be stored or printed out with the indication of presence of a error in the information even if the received Error Check Character (ECC) does not match. | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |
| 3 | If any errors in the information characters of a received alert are corrected by the reception of other alerts within the attempt, only the corrected version shall be recorded. [ETSI EN 300 338-2, n.6.3,d] | Yes | X | | |
| 4 | An indication of how many of the alerts in the attempt | Yes | Y | | |
| | were received is available | | ~ | | |
| | [ETSI EN 300 338-2, n.6.3,d] | | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
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3.6. Non Distress message storage test

[ETSI EN 300 338-2, n.6.3,f]

| Scenario | Legend |
|-----------------------|-----------------|
| NonDistressH-20-5.scn | Is not required |

Definition

This test checks non distreress messages storage.

Method of measurement and required results

Reset EUT into Standby. Start scenario NonDistressH-20-5.scn. The scenario contains 25 calls (safety and routine).

First 3 minutes TE sends 20 calls. Verify that EUT has received all 20 calls.

Since the 10 minute TE sends in addition 5 more calls. Verify that EUT has received new 5 calls, having removed from memory the oldest.

NonDistressH-20-5.scn

| Ν | Subject | Value | Res | sults | Com- |
|---|---|-------|-----|-------|--------------------------|
| | | | ОК | NO | ment |
| 1 | A printer unit for immediate paper printout of the information content of the message received (optional) | | n.a | n.a | optional |
| | [IMO Resolution A.806(19), n.3.1] | | | | |
| 2 | A minimum of the twenty most recently received non distress DSC messages shall be able to be displayed [ETSI EN 300 338-2, n.6.3,f] | 20 | X | | |
| 3 | Capacity for storing of different received non distress DSC messages shall be at least 20 | 20 | X | | Should be at least 20 |
| | [ETSI EN 300 338-2, n.6.3,f] | | | | |
| 4 | The most recently received non distress DSC messages is stored | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,f] | | | | |
| 5 | Received messages shall be stored or printed out with the indication of presence of a error in the information even if the received Error Check Character (ECC) does not match. | Yes | X | | |
| | [ETSI EN 300 338-2, n.6.3,f] | | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| The equipment meets the requirements (yes / no /ma) | yuu |

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3.7. Sent DSC messages storage test

[ETSI EN 300 338-2, n.6.3,e]

| Scenario | Legend |
|-----------------|-----------------|
| Is not required | Is not required |

Definition

This test checks send DSC messages storage.

Method of measurement and required results

Reset EUT into Standby. Initiate from EUT distress call sending up to limit of storage capacity. Verify that:

| Ν | Subject | Value | Results | | Com- | |
|---|---|-------|---------|----|-----------------------|--|
| | | | ОК | NO | ment | |
| 1 | A minimum of the twenty most recently sent DSC messages is recorded and shall be able to be displayed | 20 | Х | | Should be at least 20 | |
| | [ETSI EN 300 338-2, n.6.3,e] | | | | | |
| 2 | The most recently sent DSC messages is recorded | Yes | Х | | | |
| | [ETSI EN 300 338-2, n.6.3,e] | | | | | |
| 3 | A distress alert attempt is recorded as a single message [ETSI EN 300 338-2, n.6.3,e] | Yes | X | | | |

| he equipment meets the requirements (yes / no /n.a) yes |
|---|
|---|

| | StPetersburg, Russia | 04.02.2011 |
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| Date: | September 2010 – January 2011 | |

DSC-TEST

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4. Shipborne alarms test [ETSI EN 300 338-2 (2010-02), n.6.2.3]

[ETSI EN 300 338-2 (2010-02), Annex D]

| | 1 | DSC-TEST | Ν | 01.11 |
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| | - <u>(</u>]_ | RES Laboratory StPetersburg, Russia | 04 | .02.2011 |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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4.1. Shipborne specific aural alarm to indicate receipt of distress or urgency call or a call having distress category test

[ETSI EN 300 338-2(2010-02), n.6.2.3] [ETSI EN 300 338-2(2010-02), Annex D] [Rec. ITU-R M.493-13, An. 1, n.12.1]

Definition

This test checks that the EUT properly implements two-tone and urgency alarms.

Shipborne alarms should start softly and increase in volume if not silenced by the operator. Distress and urgency calls should have a distinctive two tone alarm. The alarm should consist of two substantially sinusoidal audio-frequency tones, transmitted alternately. One tone should have a frequency of 2 200 Hz and the other a frequency of 1 300 Hz. The duration of each tone should be 250 ms.

Method of measurement and required results

a) Reset EUT into Standby. From TE send DSC message for initiate the receiving distress automatated procedure:

Distress call; Distress relay to All ship; Distress relay to Individual (EUT) station; Distress relay to Geographic area.

| Verify t | hat: |
|----------|------|
|----------|------|

| | | ult | Com-ment |
|---|-----|-----|----------|
| Two-tone alarm | YES | NO | |
| Alarm shall have both a visual and aural component | v | | |
| [ETSI EN 300 338-2, n.6.2.3] | ^ | | |
| Alarm shall provide the reason for and means to terminate alarm [ETSI EN 300 338-2, n.6.2.3] | X | | |
| The operator shall not be able to customize the two-tone alarms [Rec. ITU-R M.493-13, An. 1, n.12.1] | Х | | |
| The operator shall not be able to use for other purpures the two-tone alarms [Rec. ITU-R M.493-13, An. 1, n.12.1] | Х | | |
| Initially be of a power that is clearly distinguishable for first 10 sec [ETSI EN 300 338-2, D.1] | Х | | |
| Start softly to rise within next 10 sec [ETSI EN 300 338-2, D.1] | Х | | |
| Audio-frequency tones are 2200 Hz and 1300 Hz [ETSI EN 300 338-2, D.3] | Х | | NOTE 1 |
| Duration of tones is 250 ms [ETSI EN 300 338-2, D.3] | Х | | |
| There is no possibility to disable alarm and indication [ETSI EN 300 338-2, D.1] | Х | | |
| Reset only manually [ETSI EN 300 338-2, D.1] | X | | |

NOTE 1.

The result has estimated character.

| 1 | DSC-TEST | N 01.11 |
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| Date: | September 2010 – January 2011 | |

b) Reset EUT into Standby. From TE send DSC message for initiate the receiving distress automatated procedure. And next acknowledge the procedure by sentence:

Distress acknowledgement;

Distress relay all ship acknowledgement; Distress relay Individual acknowledgement.

Verify that:

| | | sult | Com- |
|---|----------|------|--------|
| Distress ack alarm | YES | NO | ment |
| | | | |
| Alarm shall have both a visual and aural component $[ETSLEN 200, 228, 2, n, 6, 2, 2]$ | X | | |
| [ETSTEN 500 556-2, II.0.2.5] | | | |
| Additional provide the reason for and means to terminate addition $(ETSLEN 200.228.2 m 6.2.2)$ | X | | |
| [E131 EN 500 556-2, II.0.2.5] The encoder shall not be unable to sustamize the distance calculations | | | - |
| The operator shall not be unable to customize the distress ack alarms | X | | |
| [Rec. 11 U-R M.495-15, All. 1, II.12.1] | | | |
| The operator shall not be unable to use for other purpures the distress ack alarms | X | | |
| [Rec. 11U-R M.493-13, An. 1, n.12.1] | | | |
| Not the alarm shall inrease in volume over the first 10 sec | X | | |
| [ETSI EN 300 338-2, D.1] | | | |
| Audio-frequency tones are 2200 Hz and 1300 Hz | X | | NOTE 1 |
| [ETSI EN 300 338-2, D.3] | | | |
| Duration of tones is 500 ms | X | | |
| [ETSI EN 300 338-2, D.3] | N | | |
| There is no possibility to disable alarm and indication | Y | | |
| [ETSI EN 300 338-2, D.1] | ^ | | |
| Reset only manually | Y | | |
| [ETSI EN 300 338-2, D.1] | ^ | | |

NOTE 1.

The result has estimated character.

| | DSC-TEST | N 01.11 |
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| Equipment Under Test | SALLOP 6320 250W ME/HE DSC Class A | |

Equipment Un SAILOR 6320 250W MF/HF DSC Class A Date: September 2010 – January 2011

c) Reset EUT into Standby. From TE send urgency DSC message for initiate the receiving no distress automatated procedure.

Verify that:

| Urgency alarm | | Result | |
|--|---|--------|--------|
| | | NO | ment |
| Alarm shall have both a visual and aural component [ETSI EN 300 338-2, n.6.2.3] | X | | |
| Alarm shall provide the reason for and means to terminate alarm [ETSI EN 300 338-2, n.6.2.3] | Х | | |
| The operator shall not be unable to customize the urgency alarms [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |
| The operator shall not be unable to use for other purpures the urgency alarms [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |
| Initially be of a power that is clearly distinguishable for first 10 sec [ETSI EN 300 338-2, D.1] | X | | |
| Start softly to rise within next 10 sec [ETSI EN 300 338-2, D.1] | X | | |
| Audio-frequency tones are 2200 Hz and Silence [ETSI EN 300 338-2, D.3] | X | | NOTE 1 |
| Duration of tones is 250 ms [ETSI EN 300 338-2, D.3] | X | | |
| There is no possibility to disable alarm and indication [ETSI EN 300 338-2, D.1] | X | | |
| Reset only manually [ETSI EN 300 338-2, D.1] | X | | |

NOTE 1.

The result has estimated character.

d) Repeat the tests for DSC sequences given in the table.

Reset EUT into Standby. From TE send DSC message, according to the given table. Verify that:



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| Date: | September 2010 – January 2011 | |

| | Initial DSC message | | | Repeat | Com- |
|---|---------------------|----------|---------------|--------------------------------|-------|
| ltem | Sound | Increase | Shut- down | initial DSC messages | ments |
| Pressing the dedicated Distress button | Count | No | N/A | N/A | |
| | X | X | X | Х | |
| Initiating a received distress automated procedure | Two-tone | Yes | Man | Self- terminating | |
| Distress call | X | X | X | X | |
| Initiating a received Distress automated Procedure | Two-tone | Yes | Man | Self- terminating | |
| Distress relay to Individual (EUT) | X | X | X | X | |
| Initiating a received Distress automated Procedure | Two-tone | Yes | Man | Silence/Self- terminating ? | |
| Distress relay to Geographic area | X | X | X | X | |
| Acknowledging a Received distress Automated procedure | Distress ack | No | Man | Self- terminating | |
| Distress acknowledgement | Х | X | X | X | |
| Acknowledging a received distress automated procedure | Distress ack | No | Man | Self- terminating | |
| Distress relay Individual acknowledgement | X | X | X | X | |
| Acknowledging a received distress automated procedure | Distress ack | No | Man | Self- terminating | |
| Distress alert Cancel | Х | X | X | Х | |
| Acknowledging a sent distress automated procedure | Distress ack | No | Man | Self- terminating | |
| Destress acknowledgement | X | X | X | X | |


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| Date: | September 2010 – January 2011 | |

| | Init | ial DSC messa | ige | Repeat | Com- |
|--|----------------------|---------------|---------------|-------------------------|-------|
| Item | Sound | Increase | Shut- down | initial DSC messages | ments |
| Initiating a received urgency non distress automated procedure | Urgency alarm | Yes | Man | Self- terminating | |
| Geographic area RT call Urgency | X | X | X | X | |
| Initiating a received urgency non distress automated procedure | Urgency alarm | Yes | Man | Self- terminating | |
| Geographic area FEC call Urgency | X | X | X | X | |
| Initiating a received urgency non distress automated procedure | Urgency alarm | Yes | Man | Self- terminating | |
| Individual RT call Urgency (to EUT) | X | X | X | X | |
| Acknowledging a sent urgency non distress automated procedure | Urgency ack alarm | Yes | Man | Self- terminating | |
| Individual RT call acknowledgement Urgency (to EUT) | X | X | X | x | |

Summary: Verify that:

| Subject | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| Alarm shall have both a visual and aural component | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| Alarm shall provide the reason for and means to terminate alarm | x | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| There is no possibility to disable alarm and indication | X | | |
| [ETSI EN 300 338-2, D.1] | ~ | | |
| Reset only manually | Y | | |
| [ETSI EN 300 338-2, D.1] | ^ | | |
| The alarm characteristics meet to requirements of table: Sound, | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | ^ | | |
| The alarm characteristics meet to requirements of table: Increase, | Y | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | ^ | | |
| The alarm characteristics meet to requirements of table: Shutdown. | Y | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | ^ | | |

| The equipment meets | the requirements | (yes / no /n.a) |
|---------------------|------------------|-----------------|
| | | |

yes

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4.2. A duplicate reception of distress relay calls test

[ETSI EN 300 338-2(2010-02), Annex D] [Rec. ITU-R M.493-13, An. 1, n.12.1]

For geographic area calls, the alarm appropriate to the category should activate when the receiving station's position is within the area specified by the call or the receiving station's position is not known. The alarm should not be activated where duplicate distress relay calls are received within one hour. A duplicate distress relay call is one having format specifier all ships or geographic area that contains identical message information, as defined in § 8.1 and an identical distress MMSI.

[Rec. ITU-R M.493-13, An. 1, n.12.1]

Definition

This test checks that the EUT properly implements the duplicate reception of distress relay calls having format specifier all ships or geographic area that contains identical message information

Method of measurement and required results

a) Reset EUT into Standby. From TE send DSC message for initiate the receiving distress automatated procedure Distress relay to Geographic area. Verify that:

TestV12V_XXXX.scn 00:00

| Item | | ult | Com- |
|--|-----|-----|------|
| (Initiate Destress relay to Geographic area) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| Alarm shall have both a visual and aural component | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| Alarm shall provide the reason for and means to terminate alarm | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Χ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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b) Change the MMSI of sender. Send within the limits of one hour from initiate call an additional Distress relay call with the identical distress information, but from other sender. Verify that:

| Other sender | Res | ult | Com- |
|--|-----|-----|------|
| (Duplicate Destress relay to Geographic area witin of the one hour) | YES | NO | ment |
| Within of one hour | | | |
| the EUT sounds the self-terminated alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | N | | |
| Alarm shall have both a visual and aural component | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | N | | |
| Alarm shall provide the reason for and means to terminate alarm | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | N | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |

c) Terminate the current distress receiving automated procedure.

Send within the limits of one hour from initiate call an additional Distress relay call with the identical distress information. Verify that:

| Other sender | Res | ult | Com- |
|--|-----|-----|------|
| (Duplicate Destress relay to Geographic area witin of the one | YES | NO | ment |
| hour) | | | |
| Within of one hour | | | |
| the EUT sounds the self terminating alarm, | X | | |
| [Rec. ITU-R M.493-13, Annex 1, n.12.1] | Χ | | |
| Alarm shall have a visual component only | X | | |
| [Rec. ITU-R M.493-13, Annex 1, n.12.1] | Λ | | |
| Alarm shall provide the reason for and means to terminate alarm | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Disabling of aural alarm does not affect handling of call. | X | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | Λ | | |

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| ompany: | Thrane&Thrane | |
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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

d) Terminate the current distress receiving automated procedure.

Change the MMSI of sender. Send <u>after</u> of one hour from initiate call an additional Distress relay to Geographic area call with the identical distress information, but from other sender. Verify that:

| | Res | sult | Com- |
|--|-----|------|------|
| Duplicate of initiate Destress relay to Geographic area after one hour | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| Alarm shall have both a visual and aural component | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| Alarm shall provide the reason for and means to terminate alarm | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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4.3. Shipborne aural alarm to indicate receipt calls other than distress and urgency test

[ETSI EN 300 338-2(2010-02), n.6.2.3] [ETSI EN 300 338-2(2010-02), Annex D] [Rec. ITU-R M.493-13, An. 1, n.12.1]

Definition

This test checks that the EUT properly implements routine alarms.

Method of measurement and required results

a) Reset EUT into Standby. From TE send Safety and Routine DSC message for initiate the receiving non distress automatated procedure:

Geographic area RT call Safety; Individual RT call Safety (to EUT); Individual test call (to EUT); Routine group call RT; Routine individual RT call (to EUT).

Verify that:

| | Res | Result | |
|--|-----|--------|------|
| Routine alarm | YES | NO | ment |
| Alarm shall have both a visual and aural component [ETSI EN 300 338-2, n.6.2.3] | X | | |
| Alarm shall provide the reason for and means to terminate alarm [ETSI EN 300 338-2, n.6.2.3] | X | | |
| Disabling of aural alarm does not affect handling of call [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |
| Initially be of a power that is clearly distinguishable for first 10 sec [ETSI EN 300 338-2, D.1] | X | | |
| Start softly to rise within next 10 sec [ETSI EN 300 338-2, D.1] | X | | |
| The alarm shall auto shutdown [ETSI EN 300 338-2, D.1] | X | | |
| Shall be possibility to disable audible alarm [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |

| | Λ | DSC-TEST | Ν | 01.11 |
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| Equipment Under Test: | SAILOR 632 | 20 250W MF/HF DSC Class A | | |

 Date:
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 b) Reset EUT into Standby. From EUT send Routine DSC message for initiate the receiving no distress automatated procedure. Next acknowledge the automated procedure.

Verify that:

| | Res | sult | Com- |
|---|-----|------|------|
| Routine ack alarm | YES | NO | ment |
| Alarm shall have both a visual and aural component [ETSI EN 300 338-2, n.6.2.3] | X | | |
| Alarm shall provide the reason for and means to terminate alarm [ETSI EN 300 338-2, n.6.2.3] | X | | |
| Disabling of aural alarm does not affect handling of call [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |
| Not the alarm shall inrease in volume over the first 10 sec [ETSI EN 300 338-2, D.1] | X | | |
| The alarm shall auto shutdown [ETSI EN 300 338-2, D.1] | X | | |
| Shall be possibility to disable audible alarm [Rec. ITU-R M.493-13, An. 1, n.12.1] | X | | |

c) Repeat the tests for DSC sequences given in the table.

Reset EUT into Standby. From TE send DSC message, according to the given table. Verify that:



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| Date: | September 2010 – January 2011 | |

| | Init | ial DSC mess | age | Repeat | Com- |
|--|----------------------|--------------|---------------|----------------------|-------|
| ltem | Sound | Increase | Shut- down | messages | ments |
| Geographic area RT call Safety | Routine alarm | Yes | Auto | Self- terminating | |
| | Х | X | X | X | |
| Geographic area FEC call Safety | Routine alarm | Yes | Auto | Self- terminating | |
| | Х | X | X | X | |
| Individual RT call Safety (to EUT) | Routine alarm | Yes | Auto | Self- terminating | |
| | X | X | X | X | |
| Individual RT call acknowledgement Safety | Routine ack alarm | No | Auto | Self- terminating | |
| | Х | X | X | Х | |
| Individual test call (to EUT) | Routine alarm | Yes | Auto | Self- terminating | |
| | X | X | X | X | |
| Individual test call acknowledgement | Routine ack alarm | No | Auto | Self- terminating | |
| | X | X | X | x | |
| Routine group call RT (to EUT) | Routine alarm | No | Auto | Self- terminating | |
| | X | X | X | x | |
| Routine individual RT call (to EUT) | Routine alarm | Yes | Auto | Self- terminating | |
| | X | X | X | X | |
| Routine individual RT ACK (to EUT) | Routine ack alarm | No | Auto | Self- terminating | |
| | X | X | X | X | |

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|---|----|----|---|
| | | | |

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DSC-TEST

Summary: Verify that:

| Subject | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| Alarm shall have both a visual and aural component | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| Alarm shall provide the reason for and means to terminate alarm | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| There is possibility to disable audible alarm | X | | |
| [Rec. ITU-R M.493-13, Annex 1, n.12.1] | Λ | | |
| Disabling of aural alarm does not affect handling of call | X | | |
| [Rec. ITU-R M.493-13, An. 1, n.12.1] | Λ | | |
| The alarm characteristics meet to requirements of table: Sound, | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | Λ | | |
| The alarm characteristics meet to requirements of table: Increase, | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | ~ | | |
| The alarm characteristics meet to requirements of table: Shutdown. | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | ~ | | |

| The equipment meets the requirements (yes / no /n.a) yes |
|--|
|--|

| 1 | DSC-TEST | Ν | 01.11 | |
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| | RES Laboratory StPetersburg, Russia | 04 | 4.02.2011 | |
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| | | | | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

4.4. Shipborne specific aural alarm to indicate receipt of distress or urgency call or a call having distress category with critical errors test

[ETSI EN 300 338-2, Annex D, n.D.2]

If an automated procedure is initiated by a DSC message with critical errors (errors in the information symbols such that the procedure cannot take any action such as generating acknowledgements) the alarm shall self-terminate. <u>The sound</u> of the alarm shall be that it would have had if the DSC message were received <u>without critical errors</u>. The alarm specified in table D.1 (perhaps requiring manual termination) shall be delayed until that time the reception of subsequent or repeat DSC messages allows the procedure to correct the critical errors.

[ETSI EN 300 338-2, Annex D, n.D.2]

| Scenario | Legend |
|----------|--------|
| | |
| | |

Serially for DSC sequences given in the table to execute the following procedures: Reset EUT into Standby. From TE send DSC message, according to the given table. Verify that:



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| ltem | Initial DSC messages | Repitatio | on of DSC me errors | essage w/o | Com- ments |
|---|--------------------------------------|-----------------|------------------------|---------------|---------------|
| | with errors | Sound | Increase | Shut- down | |
| Initiating a received distress automated procedure | Self- terminating two-tone | Two- tone | Yes | N/A | |
| Distress call | X | x | X | X | |
| Initiating a received distress automated procedure | Self- terminating two-tone | Two- tone | Yes | N/A | |
| Distress relay to Individual (EUT) | X | X | X | X | |
| Initiating a received distress automated procedure | Self- terminating two-tone | Two- tone | Yes | N/A | |
| Distress relay to Geographic area | X | X | X | X | |
| Acknowledging a received distress automated procedure | Self- terminating distress ack | Distress ack | No | N/A | |
| Distress acknowledgement | X | X | X | X | |
| Acknowledging a received distress automated procedure | Self- terminating distress ack | Distress ack | No | N/A | |
| Distress relay all ship acknowledgement | X | X | X | x | |
| Acknowledging a received distress automated procedure | Self- terminating distress ack | Distress ack | No | N/A | |
| Distress relay Individual acknowledgement | X | X | X | X | |



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| ltem | Initial DSC messages | Repitati | on of DSC me errors | essage w/o | Com- ments |
|--|--------------------------------------|-------------------------|------------------------|---------------|---------------|
| | with errors | Sound | Increase | Shut- down | |
| Acknowledging a received distress automated procedure | Self- terminating distress ack | Distress ack | No | N/A | |
| Distress alert Cancel | x | X | X | X | |
| Acknowledging a sent distress automated procedure | Self- terminating distress ack | Distress ack | No | N/A | |
| Destress acknowledgement | X | X | X | X | |
| Initiating a received urgency non distress automated procedure | Self- terminating urgency | Urgency alarm | Yes | N/A | |
| Gegraphic area RT call Urgency | x | X | X | x | |
| Initiating a received urgency non distress automated procedure | Self- terminating urgency | Urgency alarm | Yes | N/A | |
| Gegraphic area FEC call Urgency | X | X | X | X | |
| Initiating a received urgency non distress automated procedure | Self- terminating urgency | Urgency alarm | Yes | N/A | |
| Individual RT call Urgency (to EUT) | X | X | X | x | |
| Acknowledging a sent urgency non distress automated procedure | Self- terminating urgency ack | Urgency ack alarm | No | N/A | |
| Individual RT call acknowledgement Urgency (to EUT) | X | X | X | X | |

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Summary: Verify that:

| Subject | | sult | Com- |
|--|-----|------|------|
| | YES | NO | ment |
| Alarm shall have both a visual and aural component | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| Alarm shall provide the reason for and means to terminate alarm | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| The alarm characteristics meet to requirements of table: Sound, | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | Λ | | |
| The alarm characteristics meet to requirements of table: Increase, | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.1]. | Λ | | |
| The alarm shall self-terminate. | X | | |
| [ETSI EN 300 338-2, Annex D, Table D.2]. | ~ | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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5. Sending distress automated procedure

[ETSI EN 300 338-2, n.6.4]

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5.1. Distress button sub procedure tests

[ETSI EN 300 338-2, n.6.4.4]

Definition

This test checks the distress button sub procedure on the EUT.

Method of measurement and required results

Have the EUT and TE in standby. Stop any automatic updates that lead to changes of the position on the EUT and note the MMSI, position, and UTC time of position of the EUT. Make sure the position has enhanced resolution in seconds or fractional minutes. The tests are to be performed using only the distress button (DB) on the EUT. The last test will require returning the EUT to standby. Verify that:

| Item | | ult | Comment |
|---|-----|-----|-----------|
| | YES | NO | |
| Pressing the DB sounds an audio alarm such that one can count seconds by | Х | | |
| it, | 21 | | |
| [ETSI EN 300 338-2, n.6.4.4,b(ii)] | | | |
| pressing the DB invokes a visual indicator such that one can count seconds | Х | | |
| by it, | 21 | | |
| [ETSI EN 300 338-2, n.6.4.4,b(ii)] | | | |
| the seconds remaining to transmission of the alert attempt are displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.4.4,b(i)] | 21 | | |
| release of the DB before 3 s have elapsed stops the sub procedure, | Х | | |
| [ETSI EN 300 338-2, n.6.4.4,c] | 21 | | |
| if the distress button is released before the three seconds have elapsed when | | X | (3)(4)(5) |
| releasing the button the radio shall return to its previous state; | | | (6)(7) |
| [ETSI EN 300 338-2, n.6.4.4,c] | | | |
| after the 3 s have elapsed there a steady tone of 2 s duration, | Х | | |
| [ETSI EN 300 338-2, n.6.4.4,e] | 21 | | |
| the distress alert attempt is sent if the DB is then released after the 3 s, | Х | | |
| [ETSI EN 300 338-2, n.6.4.4,d] | 2 1 | | |
| the distress alert attempt is sent if the DB is continued to be held down. | X | | |
| [ETSI EN 300 338-2, n.6.4.4,d] | - 1 | | |

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(3)

(E1305)

In conditions when the equipment is present two sessions: sending distress automated procedure and receiving distress automated procedure, is active session sending distress automated procedure, and the focus of the session receiving distress automated procedure, the rules for handling distress button do not comply requirements. If the distress button is pressed and released before the three seconds have elapsed when releasing the button the radio change focus and return to sending distress automated procedure, while shall return to the its previous state: receiving distress automated procedure;

[ETSI EN 300 338-2, n.6.4.4,c]

(4) (E1308)

If the operator from receiving distress automated procedure selects option DROBOSE, and than hold the distress button (DB) less than 3 seconds, then radio returns to the Stand-by menu, but shall return to the previous menu - DROBOSE composition menu.

[ETSI EN 300 338-2, n.6.4.4,c]

(5) (E436)

Functioning Distress Button does not meet the requirements of the standard in the following case.

EUT has receiving distress automated procedure. Select option VIEW to display latest distress information. Next, select option SETUP - Rx distress to open log received distress DSC messages menu.

Press and hold the distress button less than 3 seconds. Radio returns to the VIEW menu, but shall return to the previous menu – log menu.

Next, select option ALERET to compose a distress alert. In fact, a menu opens log, rather than compose a distress alert.

Later, when the nominal exit from the LOG menu (via option EXIT), equipment is functioning properly.

[ETSI EN 300 338-2, n.6.4.4,c]

(6)(E670)

Functioning Distress Button does not meet the requirements of the standard in the following case.

EUT has receiving distress automated procedure. Select option VIEW to display latest distress information. Next, select option SETUP - Rx distress to open log received distress DSC messages menu.

Press and hold the distress button less than 3 seconds. Radio returns to the VIEW menu, but shall return to the previous menu – log menu.

Next, select option QUIT to terminate receiving distress automated procedure. In fact, automated procedure terminated but returned a menu opens log, rather than stand-by.

Later, when the nominal exit from the LOG menu (via option EXIT), equipment is functioning properly.

[ETSI EN 300 338-2, n.6.4.4,c]

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(7) (E658)

Functioning Distress Button does not meet the requirements of the standard in the following case.

EUT has two automated procedures: receiving distress automated procedure and any automated procedure. Select option HISTORY to display the information about history of the received DSC distress messages. Press and hold the distress button less than 3 seconds.

a) Radio returns to the stand-by menu, but shall return to the previous menu – HISTORY menu.

b) The operator tries to select from the list the second automated procedure. However, instead of the second automated procedure window appears HISTORY first automated procedure.

[ETSI EN 300 338-2, n.6.4.4,c]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
| The equipment meets the requirements (yes / no /n.a) | no |

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5.2. Default distress alert attempt test

[ETSI EN 300 338-2, n.6.4.4]

Definition

This test checks the sending of the default distress alert attempt on the EUT from standby.

Method of measurement and required results

Place the TE in standby. Using only the distress button on the EUT, send the default distress alert attempt and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| On HF the setting of the watch receiver to scan all six distress frequencis (if | X | | |
| not already doing so); | | | |
| [ETSI EN 300 338-2, n.6.4.2,b(1)] | | | |
| [Rec. ITU-R M. 493-13, Ann. 4, n.3.2.4.5] | | | |
| the nature of distress on the TE is undesignated, | X | | |
| the MMSI of the vessel in distress on the TE is that of the EUT, | X | | |
| the position on the TE is that of the EUT, | X | | |
| the position on the TE includes the enhanced resolution, | X | | |
| the UTC time of the position on the TE is that of the EUT, | X | | |
| the means of subsequent communication on the TE is radio telephone, | X | | |
| The alert is received on all 6 distress frequencies on the TE (2187.5; 4297.5; 6312.0; 8414.5; 12577.0; 16804,5) [ETSI EN 300 338-2, n.6.4.5,d,f] | X | | |
| the frequency of subsequent communication is 8291 kHz in HF, | X | | |
| You can speak to the EUT from the TE on the 8291 kHz in HF , | X | | |
| You can speak to the TE from the EUT on the 8291 kHz in HF . | X | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | , |

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5.3. Default distress alert attempt consistency tests

[ETSI EN 300 338-2, n.6.4.4]

Definition

This test checks that sending the default distress alert attempt always transmits the default values [ETSI EN 300 338-2, n.6.4.4,d]. It also tests of the sending of the single frequency distress alert attempt on HF equipment.

Method of measurement and required results

a) From standby on the EUT select the option to compose a distress alert. Select any nature of distress except "undesignated". Send the distress alert attempt from the EUT and verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| On HF the setting of the watch receiver to scan all six distress frequencis (if | X | | |
| not already doing so); | | | |
| [ETSI EN 300 338-2, n.6.4.2,b(1)] | | | |
| [Rec. ITU-R M. 493-13, Ann. 4, n.3.2.4.5] | | | |
| The distress button is required to send the distress alert attempt, | X | | |
| The enhanced position information is only sent on each distress alert, | X | | |
| The nature of distress on the TE is that selected on the EUT, | X | | |
| The alert is received on all 6 distress frequencies on the TE [ETSI EN 300 338-2, n.6.4.4,d(5)] | X | | |
| the frequency of subsequent communication is 8291 kHz in HF, | X | | |
| You can speak to the EUT from the TE, | X | | |
| You can speak to the TE from the EUT. | X | | |

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Return the EUT and TE to standby and use the distress button without entering parameters of the alert attempt via a menu or equivalent on the EUT to send the default distress alert attempt. Verify that:

| | •••••• |
|----|--------|
| NO | ment |
| | |
| | NO |

b) From standby on the EUT select the option to compose a distress alert. Select any nature of distress except "undesignated". On HF equipment select the single frequency method on 4 MHz. Send the distress alert attempt from the EUT and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| On HF the setting of the watch receiver to scan all six distress frequencis (if | X | | |
| not already doing so); | | | |
| [ETSI EN 300 338-2, n.6.4.2,b(1)] | | | |
| [Rec. ITU-R M. 493-13, Ann. 4, n.3.2.4.5] | | | |
| The distress button is required to send the distress alert attempt, | X | | |
| The enhanced position information is only sent on the 5 th distress alert, | X | | |
| The alert is received on 4 MHz distress frequencies on the TE | X | | |
| the frequency of subsequent communication is 4125 kHz in HF , | X | | |
| The nature of distress on the TE is that selected on the EUT, | X | | |
| You can speak to the EUT from the TE, | X | | |
| You can speak to the TE from the EUT. | X | | |

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Return the EUT and TE to standby and use the distress button without entering parameters of the alert attempt via a menu or equivalent on the EUT to send the default distress alert attempt. Verify that:

| Item | Result | | Com- |
|---|--------|----|------|
| | YES | NO | ment |
| All the conditions listed under the default distress alert attempt are true (nature | Х | | |
| of distress is "undesignated", sending on all 6 frequencies). | 21 | | |
| [ETSI EN 300 338-2, n.6.4.4.,d] | | | |

| The equipment meets the requirements (yes / no /n.a) yes |
|--|
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5.4. Transmission of the alert attempt tests

[ETSI EN 300 338-2, n.6.4.5] [Rec ITU-R M.493-13, Ann.1, n. 11.1]

Definition

This test checks the facilities of the sending of the single frequency and multifrequency distress alert attempt on HF equipment.

Method of measurement and required results

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call

a) Single frequency attempt;

b) Multi-frequency attempt.

[Rec ITU-R M.493-13, Ann.1, n. 11.1] [ETSI EN 300 338-2, n.6.4.5]



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| Item | | sult | Com- |
|--|----|------|--------|
| | OK | NO | ment |
| MF/HF equipment should be capable of using single frequency call | Х | | |
| attempts. | | | |
| [ETSI EN 300 338-2, n.6.4.5,d] | | | |
| [Rec ITU-R M.493-11, Ann.1, n. 11.1] | | | |
| The appropriate frequencies for transmission single frequency alert shall | Х | | |
| be determined from the selected frequencies. | | | |
| [ETSI EN 300 338-2, n.6.4.5,a] | | | |
| The single frequency alert shall be capable to send on any 6 distress | X | | |
| trequencies | | | |
| (2187.5; 4297.5; 6312.0; 8414.5; 12577.0; 16804,5) | | | |
| [ETSI EN 300 338-2, n.6.4.5,d] | | | |
| MF/HF equipment should be capable of using multifrequency call | Х | | |
| attempts. | | | |
| $\begin{bmatrix} EISI EN 300 338-2, n.6.4.5, e \end{bmatrix}$ | | | |
| [Rec 110-R M.493-11, Ann.1, n. 11.1] | | | |
| Multi-frequency call attempts should always include at least the MF and | Х | | |
| HF 8 MHZ band DSC distress and safety frequencies | | | |
| $\begin{bmatrix} E1SI EN 500 558-2, n.0.4.5, e \end{bmatrix}$ | | | |
| [Rec 110-K M.495-11, Allil.1, ll. 11.1] | V | | |
| of each elert in the multi-frequency etternat | X | | NOTE 1 |
| rest = 1200228 2 m 6.45 cl | | | |
| [ETSTEIN 500 556-2, II.0.4.5,e] Where a distract alert attempt contains more than one consecutive | V | | |
| distrass alort on the same frequency, these consecutive alorts should be | X | | |
| transmitted with no gap between the and of one call and the start of the | | | |
| dot pattern of the following call | | | |
| [ETSLEN 300 338 2 n 6.4.5 i] | | | |
| $\begin{bmatrix} \text{Rec ITII-R M 493-11 Ann 1 n 11 1} \end{bmatrix}$ | | | |
| For single frequency attempt the extended position information shall be | V | | |
| sent on only the 5th alert. | ~ | | |
| [FTSI FN 300 338-2 n 6 4 5 i] | | | |
| For multi frequency attempt, the extended position information shall be | V | | |
| sent on each alert. | ~ | | |
| [ETSI EN 300 338-2, n.6.4.5.k] | | | |
| On HF the multi frequency attempt using all six frequencies. | Y | | |
| [ETSI EN 300 338-2, n.6.4.4,d(5)] | ~ | | |
| For an HF single frequency attempt a frequency is chosen from a list of | Y | | |
| six possible frequencies (default all six) previously set up by the | Λ | | |
| operator during equipment installation. Each time the attempt is | | | |
| automatically (or manually) repeated the next frequency in the list is | | | |
| used until all frequencies are utilized at which time the cycle repeats; | | | |
| [ETSI EN 300 338-2, n.6.4.5,d] | | | |

NOTE 1

The test was performed without ATU.

| The equipment meets the requirements (yes / no /n.a) |
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5.5. Display test

[ETSI EN 300 338-2, n.6.4.3]

Definition

This test checks that the required items of the automated procedure are properly displayed on the EUT.

Method of measurement and required results

This test requires visual inspection only of the EUT interface upon/after sending a distress alert attempt from the EUT without handling the equipment. Send the default distress alert attempt from the EUT and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the fact one is engaged in sending a distress is displayed at top level, | Х | | (8) |
| [ETSI EN 300 338-2, n.6.4.3,(1)] | | | |
| the EUT indicates that it is transmitting at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3,(10)a] | | | |
| On HF the frequencies on witch the alert are sent is displayed at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3,(8)] | | | |
| the remaining time to the next automated sending of the distress alert attempt is | Х | | (8) |
| displayed at top level, | | | |
| [ETSI EN 300 338-2, n.6.4.3,(2)] | | | |
| indicate whether the procedure is on hold or is active (after acknowledgement) | Χ | | (8) |
| is displayed at top level at top level, | ~ | | |
| [ETSI EN 300 338-2, n.6.4.3,(4)] | | | |
| the distress information is displayed at top level, | | X | (8) |
| [ETSI EN 300 338-2, n.6.4.3,(5)] | | ~ | |
| the time to the next automated sending from the start of transmission is between | X | | |
| 3,5 min and 4,5 min, (this test is repeated several times; the test personnel shall | Λ | | |
| check that the interval is different each time.) | | | |
| [ETSI EN 300 338-2, n.6.4.2,b(3)] | | | |
| On HF the frequency of subsequent communication is displayed at top level, | X | | |
| [ETSI EN 300 338-2, n.6.4.9] | Λ | | |
| [ETSI EN 300 338-2, n.6.4.3(7)] | | | |
| the EUT indicates at top level that it is waiting for an acknowledgement after | X | | |
| the distress alert attempt is sent, | Λ | | |
| [ETSI EN 300 338-2, n.6.4.3,(10)b] | | | |
| the valid operator options is displayed at top level, | X | | |
| [ETSI EN 300 338-2, n.6.4.3,(11)] | Λ | | |
| the option to pause the countdown to the next distress alert attempt is available, | X | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)i] | Λ | | |
| the option to resend the distress alert attempt is available. | X | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)ii] | Λ | | |
| the option to cancel the distress alert is available, | X | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)iii], | Λ | | |
| the option to put on hold the distress sending procedure is NOT available, | X | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)], | ~ | | |

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(E1326) If operator selects options "POS" input of position information is not dispalayed "top level" information.

[ETSI EN 300 338-2, n.6.4.3,(5)] [ETSI EN 300 338-2, n.6.4.3,(4)] [ETSI EN 300 338-2, n.6.4.3,(2)] [ETSI EN 300 338-2, n.6.4.3,(1)]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
| | |

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5.6. Operator options prior to receiving distress alert acknowledgement test

[ETSI EN 300 338-2, n.6.4.2]

Definition

This test checks the operator options previous to being acknowledged. The cancel option shall be tested in its own section.

Method of measurement and required results

Continuing from the automated procedure of the previous test or after sending a default distress alert attempt from the EUT verify that:

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the operator is able to pause the countdown to the next distress alert attempt, [ETSI EN 300 338-2, n.6.4.2,b(8)i] | Х | | |
| the operator is able to resume the countdown to the next distress alert attempt, [ETSI EN 300 338-2, n.6.4.2,b(8)i] | Х | | |
| the operator able to resend the distress alert attempt before the countdown has elapsed, $ ETSLEN 200,238,2,n\in 4,2$ b(7) | X | | |
| the unacknowledged procedure cannot be terminated either by the operator or the equipment, | X | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)i] upon resending, the EUT indicates that it is retransmitting, [ETSI EN 300 338-2, n.6.4.3.(10)a] | X | | |
| the time to the next automated sending is reset to between 3,5 min and 4,5 min, [ETSI EN 300 338-2, n.6.4.2,b(3)] | Х | | |
| the valid operator options is displayed, [ETSI EN 300 338-2, n.6.4.3,(11)] | Χ | | |
| the option to pause the countdown to the next distress alert attempt is available, [ETSI EN 300 338-2, n.6.4.2,b(8)i] | Х | | |
| the option to resend the distress alert attempt is available. [ETSI EN 300 338-2, n.6.4.2,b(8)ii] | Х | | |
| the option to cancel the distress alert is available, [ETSI EN 300 338-2, n.6.4.2,b(8)iii], | Х | | |
| the option of selecting the six frequencies of subsequent communications is available (HF only), [ETSI EN 300 338-2, n.6.4.2,b(8)iv], | | X | (9) |
| the option to put on hold the distress sending procedure is NOT available (prior to acknowledgement), [ETSI EN 300 338-2, n.6.4.2,b(8)], | X | | |
| the option to terminate the distress sending procedure is <u>NOT</u> available (prior to acknowledgement), [ETSI EN 300 338-2, n.6.4.13], | X | | |

(9) (E1303)

The operator has the ability to set for distress communication arbitrary frequencies, including and not allowed for phone mode (eg 2187.5 kHz DSC frequency).

[ETSI EN 300 337-2, n. 6.4.2,b(8)iv] [ITU-R M.493-13, Ann.4, n.3.1.6]

The equipment meets the requirements (yes / no /n.a)

no

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5.7. Automatic resending of the distress alert attempt test

[ETSI EN 300 338-2, n.6.4.2]

Definition

This test checks that the distress alert attempt is automatically resent at the proper time.

Method of measurement and required results

Continuing from the automated procedure of the previous test or after sending a default distress alert attempt from the EUT let the countdown to the automatic resending of the distress alert attempt elapse and verify that:

| Item | Result | | Com- |
|--|--------|----|------|
| | YES | NO | ment |
| On HF the operator shall have at least a 10 seconds warning prior to an | Х | | |
| automated resending of the alert attempt where the operator may pause the | 21 | | |
| resending in case engaged in traffic. | | | |
| [ETSI EN 300 338-2, n.6.4.10] | | | |
| [Rec.ITU-R M.493-13, Ann.,4, n.3.1.3.2] | | | |
| after the warning the operator is able to easily pause and then resume the | Х | | |
| countdown, | | | |
| [ETSI EN 300 338-2, n.6.4.2,b(8)] | | | |
| the distress alert attempt is automatically resent when the remaining time goes | Х | | |
| to zero, | 2 . | | |
| [ETSI EN 300 338-2, n.6.4.2,b(7)] | | | |
| the EUT indicates that it is transmitting, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3,10(a)] | 23 | | |
| the time to the next automated sending from the start of transmission is between | Х | | |
| 3,5 min and 4,5 min, | ~ | | |
| [ETSI EN 300 338-2, n.6.4.2,b(3)] | | | |
| the TE receives the distress alerts. | X | | |
| | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | , |

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5.8. Cancelling the distress alert test

[ETSI EN 300 338-2, n.6.4.11]

Definition

These tests check that the sending distress automated procedure follows the proper distress alert cancellation protocol. Cancelling a distress alert involves sending the self addressed distress alert acknowledgment followed by a voice cancel on the corresponding subsequent communications channel on all bands utilized by the distress alert attempts (on VHF there is only the channel 70 DSC and channel 16 voice and on MF there is only 2 187,5 DSC and 2 182 voice or 2 174,5 data). For the purposes of this set of tests, the 'subsequent communication' cancel shall be referred to as a cancellation by voice, even though it may be a data transmission such as NBDP.

Method of measurement and required results

a) Send a default distress alert attempt from the EUT (RT for subsequent communication). The received distress automated procedure shall start on the TE. Upon completion of the alert attempt on the EUT select the option to cancel the alert attempt and verify that:

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| Item Res | | ult | Com- |
|---|-----|-----|------|
| | YES | NO | ment |
| The radio shall prompt the operator to confirm continuing with the cancel, or to | Х | | |
| abort the cancel procedure. | 23 | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| Upon selection of the cancel option the equipment should provide an | Х | | |
| explanation of the cancel procedure, and for HF the frequencies requiring | | | |
| cancellation shall be indicated to the operator (up to 6 on HF) | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| Prior to selecting a channel to cancel, the operator is able to exit the cancel | Х | | |
| procedure, | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| [Rec.ITU-R M.493-13, Ann.4,n.3.2.4.4.1] | | | |
| If is selected the cancel option the sending distress automated procedure will | Х | | |
| be resumed. | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| if the distress alert was sent on HF, the EUT should transmit the distress cancel | Х | | |
| on the DSC distress frequencies of <u>all</u> bands that were used for the HF distress | | | |
| alerts. | | | |
| [ETSI EN 300 338-2, n.6.4.11(3)] | | | |
| The self cancel is displayed and recognized on the TE, | Χ | | |
| | | | |
| The operator is informed when the EUT is ready to give the manual (voice) | Х | | |
| | | | |
| [E1SI EN 300 338-2, n.6.4.11] | | | |
| If telephony is selected the general receiver and transmitter shall in a sequence | Х | | |
| automatically be tuned to the subsequent communication frequency for all | | | |
| channels the cancel distress DSC call have been transmitted on. | | | |
| [ETSTEIN 500 556-2, II.0.4.11] | | | |
| For each channel the operator shall be prompted to make the voice cancellation | Х | | |
| and the appropriate text for the voice cancellation shall be displayed. | | | |
| [EISIEN 500 556-2, II.0.4.11] The constant shall extremely dea the unice conset on each sharmed hefers the | | | |
| The operator shall acknowledge the voice cancel on each channel before the | Х | | |
| equipment is tuned to the next communication frequency. $ETSI EN 200,228,2,m \in 4,111$ | | | |
| ETSTEN JUU JJ0-2, II.0.4.11] Frequencies that have been concelled shell be indicated | | | (10) |
| Frequencies that have been cancened shall be indicated. | | X | (10) |
| DISTENSION 500-2, II.0.4.11] | V | | |
| the cancel procedure until all utilized channels have been cancelled | X | | |
| IETSI EN 300 338 2 n 6 4 111 | | | |
| [E131 EN 300 336-2, n.0.4.11] | | 1 | |

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| The operator is able to re-do the cancel operation on a band/channel, | X | | |
| [ETSI EN 300 338-2, n.6.4.11] | ~ | | |
| A warning is provided that the cancellation has already been done on this | Х | | |
| band/channel, | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| [Rec. ITU-R M.493-13, Annex 4, n.3.2.4.4.7] | | | |
| The operator's voice cancellation is heard on the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.4.11] | 23 | | |
| Completion of the cancellation shall place the sending distress automated | Х | | |
| procedure in the acknowledged state. | 2. | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| When the <i>cancel procedure</i> is completed the fact that a cancel was performed | Х | | |
| should be displayed. | 2. | | |
| [Rec. ITU-R M.493-13, An.4, n.3.2.4.4.8.3] | | | |
| The radio shall display to the operator the stages of the cancellation procedure | Х | | |
| such as "waiting for the operator to proceed" or equivalent, "transmitting the | | | |
| DSC cancel" or equivalent, "radio tuned for the voice cancel", or equivalent, | | | |
| "cancel procedure done" or equivalent. | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |

b) Send a distress alert attempt from the EUT (FEC for subsequent communication). The received distress automated procedure shall start on the TE. Upon completion of the alert attempt on the EUT select the option to cancel the alert attempt and verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| The radio shall prompt the operator to confirm continuing with the cancel, or to | X | | |
| abort the cancel procedure. | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| Upon selection of the cancel option the equipment should provide an | Х | | |
| explanation of the cancel procedure, and for HF the frequencies requiring | | | |
| cancellation shall be indicated to the operator (up to 6 on HF) | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| Prior to selecting a channel to cancel, the operator is able to exit the cancel | Х | | |
| procedure, | ~ | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| [Rec.ITU-R M.493-13, Ann.4,n.3.2.4.4.1] | | | |
| If is selected the cancel option the sending distress automated procedure will | Х | | |
| be resumed. | ~ | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| if the distress alert was sent on HF, the EUT should transmit the distress cancel | Х | | |
| on the DSC distress frequencies of <u>all</u> bands that were used for the HF distress | | | |
| alerts. | | | |
| [ETSI EN 300 338-2, n.6.4.11(3)] | | | |

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| The self cancel is displayed and recognized on the TE, | Х | | |
| | | | |
| The operator is informed when the EUT is ready to give the "voice cancel" by | Х | | |
| data (telex). | | | |
| After the transmission of all of the self-addressed distress alert | | | |
| acknowledgment, the operator shall be given the subsequent communication | | | |
| options to "voice cancel" by either telephony or <u>data (telex)</u> . | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| In case data was selected for "voice cancel" the general receiver and transmitter | | X | (11) |
| shall in a sequence <u>automatically be tuned to the subsequent</u> | | | |
| <u>communication frequency for all channels</u> the cancel distress DSC call have | | | |
| been transmitted on, and automatically send the cancel. | | | |
| [E1SI EN 300 338-2, n.6.4.11] | | | |
| Frequencies that have been cancelled shall be indicated. | Х | | |
| [E1SI EN 300 338-2, n.6.4.11] | | | (10) |
| On HF once any single channel is cancelled, the operator shall be unable to exit | | X | (10) |
| the cancel procedure until all utilized channels have been cancelled. | | | |
| [E1SI EN 300 338-2, n.6.4.11] | | | |
| The operator is able to re-do the cancel operation on a band/channel, | Х | | |
| [E151 EN 500 558-2, n.0.4.11] | | | |
| A warning is provided that the cancellation has already been done on this | Х | | |
| $[ETSLEN 200, 229, 2, m \in A, 11]$ | | | |
| [EISIEN 500 536-2, II.0.4.11] The energy of the energy of the terms of the TE | V | | |
| The operator's data cancentation is received on the TE, [ETSI EN 200, 328, 2, n 6.4, 11] | X | | |
| [LISTER 500 550-2, 11.0.4.11] Completion of the cancellation shall place the sending distress automated | v | | |
| procedure in the acknowledged state | X | | |
| [ETSI EN 300 338-2, n 6.4.11] | | | |
| When the <i>cancel procedure</i> is completed the fact that a cancel was performed | V | | |
| should be displayed. | ~ | | |
| [Rec. ITU-R M.493-13, An.4, n.3.2.4.4.8.3] | | | |
| The radio shall display to the operator the stages of the cancellation procedure | Y | | |
| such as "waiting for the operator to proceed" or equivalent, "transmitting the | Λ | | |
| DSC cancel" or equivalent, "radio tuned for the voice cancel", or equivalent, | | | |
| "cancel procedure done" or equivalent. | | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |

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(10) (E1011)

In the condition when the channel was busy and the channel was not DSC and voice cancelled, equipment indicates that the cancellation was made. Operator able to exit from sending distress automated procedure. While on HF once any single channel is cancelled, the operator shall be unable to exit the cancel procedure until all utilized channels have been cancelled.

[ITU-R M.493-13, Ann.4, n.3.2.4.4.8.1] [ETSI EN 300 338-2, n.6.4.11]

(11) (E1012)

In case data was selected for "voice cancel" the EUT does not automatically send the Telex cancel. [ETSI EN 300 338-2, n.6.4.11]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
|--|----|

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| Equipment Under Test: | SAILOR 6 | 320 250W MF/HF DSC Class A | | |

5.9. Cancelling during the sending of a distress alert attempt test

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[ETSI EN 300 338-2, n.6.4.11]

Definition

Date:

This test makes sure that no distress alert attempt is stopped in the middle of a distress alert (a distress alert attempt consists of several distress alerts).

Method of measurement and required results

Place the TE and EUT in standby. Send a default distress alert from the. If possible, on HF wait until at least one of the constituent distress alerts have been sent before cancelling. The received distress automated procedure shall start on the TE. Verify that:

| ltem | Res | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| any distress alert started is sent to completion, | X | | |
| [ETSI EN 300 338-2, n.6.4.11] | | | |
| [ETSI EN 300 338-2, n.6.4.2,c(2)] | | | |
| [IMO MSC/Circ.862, 1.5] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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| Company: | Thrane&T | Thrane | | |
| Equipment Under Test: | SAILOR 6 | 320 250W MF/HF DSC Class A | | |
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5.10. Handling distress alert acknowledgements test

[ETSI EN 300 338-2, n.6.4.12]

Definition

This test checks that the sending distress automated procedure responds correctly to distress alert acknowledgements and that any auto timeout option that may be provided for the acknowledged sending distress automated procedure functions properly. (Recall that unacknowledged sending distress procedures SHALL NOT have an auto timeout option).

Method of measurement and required results

a) Set the EUT and TE in standby and send a default distress alert attempt from the EUT (RT for subsequent communication) such that the received distress automated procedure is once again initiated on the TE. A distress acknowledgement shall then be sent from the TE. If the EUT provides an automatic timeout option for the acknowledged sending distress procedure, set the automated timeout to a value that gives one enough time to complete the tests. Note that some manufacturers may provide more sophisticated timeout options in the equipment setup as well as more sophisticated operation options to control the automated timeout and respond to any warnings. These tests only address the minimum requirement of at least a 10 s aural and visual warning and stopping the timeout. After the entire set of tests is completed, reset the timeout on the EUT to 'no timeout'. Verify that:

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| Item | | Result | |
|--|---|--------|------|
| | | NO | ment |
| a received distress alert acknowledgment message appears and corresponding | X | | |
| alarm sounds, | ~ | | |
| [ETSI EN 300 338-2, n.6.4.8] | | | |
| the means to silence the alarm is displayed on the EUT, | Χ | | |
| the alarm can only be silenced manually, | X | | |
| the automatic resending of the alert attempt is terminated, [ETSLEN 300 338-2 n 6.4.2 c(1)] | Χ | | |
| the EUT indicates that the distress event has been acknowledged, [ETSI EN 300 338-2, n.6.4.3(10)c] | X | | |
| the time since acknowledgment is displayed, [ETSI EN 300 338-2, n.6.4.3(3)] | X | | |
| the MMSI of the sender is displayed, [ETSI EN 300 338-2 n 6.4 3(9)] | Χ | | |
| On HF the subsequent communication frequency is tuned to the band of the acknowledgement. [ETSI EN 300 338-2, n.6.4.10] | X | | |
| Upon reception of the first distress alert acknowledgement, the tuning shall occur <u>after</u> the manual silencing of the alarm. [ETSI EN 300 338-2, n.6.4.10] | X | | |
| the operator is no longer able to resend the distress alert attempt, [ETSI EN 300 338-2, n.6.4.2.c(4)] | Х | | |
| the option to pause the countdown (or elapsed time) is no longer available, [ETSI EN 300 338-2 $n 6.4.2 c(4)$] | Х | | |
| the option to <i>cancel</i> the alert is no longer available, [ETSI EN 300 338-2, n.6.4.2,c(4)] | X | | |
| the option to terminate the sending distress automated procedure is now available, [ETSI EN 300 338-2, n.6.4.2,c(4)]iii | X | | |
| the option to put the sending distress automated procedure on hold is now available, [ETSI EN 300 338-2, n.6.4.2,c(4)]ii | X | | |
| indicate whether the procedure is on hold or is active (after acknowledgement); [ETSI EN 300 338-2, n.6.4.3(4)] | Χ | | |
| The option to selecting amongst the six frequencies of subsequent communications (HF only) is available. [ETSI EN 300 338-2, n.6.4.2,c(4)]i | X | | |
| if there is a timeout, a visual and aural warning appears at least 10 s before termination with the option to stop the termination. | X | | |
| the operator can speak to the TE from the EUT on the RT frequency, | X | | |
| the operator can speak to the EUT from the TE on the RT frequency, | X | | |

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b) Set the EUT and TE in standby and send a default distress alert attempt from the EUT (FEC for subsequent communication) such that the received distress automated procedure is once again initiated on the TE. A distress acknowledgement shall then be sent from the TE. Verify that:


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| Item | | Result | |
|--|---|--------|------|
| | | NO | ment |
| a received distress alert acknowledgment message appears and corresponding | Χ | | |
| alarm sounds, | | | |
| [ETSI EN 300 338-2, n.6.4.8] | | | - |
| the means to silence the alarm is displayed on the EUT, | X | | |
| the alarm can only be silenced manually, | Х | | |
| the automatic resending of the alert attempt is terminated, [ETSI EN 300 338-2, n.6.4.2,c(1)] | X | | |
| the EUT indicates that the distress event has been acknowledged, [ETSI EN 300 338-2, n.6.4.3(10)c] | X | | |
| the time since acknowledgment is displayed, [ETSI EN 300 338-2, n.6.4.3(3)] | X | | |
| the MMSI of the sender is displayed, [ETSI EN 300 338-2, n.6.4.3(9)] | Х | | |
| On HF the subsequent communication frequency is tuned to the band of the acknowledgement. [ETSI EN 300 338-2, n.6.4.10] | X | | |
| Upon reception of the first distress alert acknowledgement, the tuning shall occur <u>after</u> the manual silencing of the alarm. [ETSI EN 300 338-2, n.6.4.10] | Х | | |
| the operator is no longer able to resend the distress alert attempt, [ETSI EN 300 338-2, n.6.4.2,c(4)] | X | | |
| the option to pause the countdown (or elapsed time) is no longer available, [ETSI EN 300 338-2, n.6.4.2,c(4)] | Х | | |
| the option to <i>cancel</i> the alert is no longer available, [ETSI EN 300 338-2, n.6.4.2,c(4)] | Х | | |
| the option to terminate the sending distress automated procedure is now available, [ETSI EN 300 338-2, n.6.4.2,c(4)]iii | | X | (12) |
| the option to put the sending distress automated procedure on hold is now available, [ETSI EN 300 338-2, n.6.4.2,c(4)]ii | X | | |
| indicate whether the procedure is on hold or is active (after acknowledgement); [ETSI EN 300 338-2, n.6.4.3(4)] | X | | |
| The option to selecting amongst the six frequencies of subsequent NBDP communications (HF only) is available. [ETSI EN 300 338-2, n.6.4.2,c(4)]i | Х | | |
| if there is a timeout, a visual and aural warning appears at least 10 s before termination with the option to stop the termination. | X | | |
| the operator can send telex to the TE from the EUT on the NBDP frequency, | Х | | |
| the operator can send telex to the EUT from the TE on the NBDP frequency, | X | | |

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(12) (E521) (E1039) (E1082)

For the case when equipment is engaged in the NBDP communications option "Terminate" is blocked. When choosing an operator option "Terminate" a warning appears : "Unable to comply. Please terminate telex connection".

That is, the operator shall terminate at the Message Terminal (separate unit SAILOR 6006) the telex session communication first. Only after that may terminate the DSC procedure from the control unit SAILOR 6301.

[ETSI EN 300 338-2, n.6.4.13]

| The equipment meets the requirements (yes / no /n.a) no | |
|---|--|
|---|--|

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5.11. Handling additional distress DSC messages pertinent to the automated procedure test

[ETSI EN 300 338-2, n.6.4.7] [ETSI EN 300 338-2, n.6.4.8]

Definition

This test checks the handling of distress DSC messages pertinent to the sending distress automated procedure after acknowledgement.

Method of measurement and required results

The sending distress automated procedure on the EUT shall first be acknowledged by the TE. Additional distress DSC messages shall then be sent from the TE concerning the same distress event being handled by the sending distress automated procedure on the EUT. The region of any area addressed DSC messages composed on the TE shall be specified to encompass the EUT. Verify that:

| Item Result | | ult | Com- |
|--|-----|-----|------|
| | YES | NO | ment |
| a repeat distress alert acknowledgment sounds the self-terminating alarm on the EUT, [ETSI EN 300 338-2, n.6.4.8] | X | | |

Change the MMSI of the TE and verify that:

| Item Result | | Com- | |
|--|-----|------|------|
| | YES | NO | ment |
| After the sending distress automated procedure has been acknowledged all DSC | Х | | |
| messages describing the same distress event are pertinent to the procedure. Of | | | |
| these DSC messages, all ships, group, and area distress relays may be ignored. | | | |
| [ETSI EN 300 338-2, n.6.4.7] | | | |
| DSC messages shall be recorded in the log. | X | | |
| [ETSI EN 300 338-2, n.6.4.7] | ~ | | |
| a distress relay addressed to the EUT starts the received distress automated | X | | |
| procedure, | - ~ | | |
| | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | |

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5.12. Handling distress alert acknowledgements for other distress event test (prior to acknowledgement)

[ETSI EN 300 338-2, n.6.4.7] [ETSI EN 300 338-2, n.6.4.12]

Definition

This test checks that the sending distress automated procedure responds correctly to distress alert acknowledgements with not are pertinent the currently active automated send distress atempt procedure.

Method of measurement and required results

Set the EUT and TE in standby and send a default distress alert attempt from the EUT. Send from TE DSC distress acknowledgements as listed in the table. Verify that the stage of the procedure is "waiting for acknowledgement".:

| Scenario | Legend |
|-------------------|---------------|
| TestV12H_0075.scn | TestV12D_0001 |
| TestV12H_0076.scn | TestV12D_0001 |
| TestV12H_0077.scn | TestV12D_0001 |
| TestV12H_0078.scn | TestV12D_0001 |
| TestV12H_0079.scn | TestV12D_0001 |
| TestV12H_0080.scn | TestV12D_0001 |

EUT MMSI ship in distress: 273000000 Nature of distress: Undesignated Position: 00 00.0000N 000 00 0000E

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| auinment Under Test | CALLOD (| 220 250W ME/HE DSC Class A | | |

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Result:

a) Reset EUT into standby. Initiate from EUT automated sending distress alert procedure. Next without delay start from TE Scenario TestV12H_0075.scn.

Prior to acknowledgment of the sending distress automated procedure only the distress acknowledgement describing the same distress event is pertinent to the procedure. All other DSC messages shall be ignored and only recorded in the log.

[ETSI EN 300 338-2, n.6.4.7]

TestVD12H_0075

| Item | Log | Alarm | Stage of current Automated procedure | Comments |
|---|-----|-------|---|-------------------------------------|
| Distress call (other distress event) MMSI another | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress acknowledgement (other distress event) MMSI another | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress acknowledgement (other distress event) Ship in distres MMSI same Nature another | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress relay ACK Individual (to EUT other distress event) | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress relay RT All ships (same distress event) | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress relay ACK RT All ships (same distress event) | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress Alert Cancel (Other distress event) | Yes | No | Wait for ack | Should not ACK current procedure |
| Distress acknowledgement (other distress event) Type of Subsequent Communication another (FEC) | Yes | No | Wait for ack | Should not ACK current procedure |

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b) Reset EUT into standby. Initiate from EUT automated sending distress alert procedure. Next without delay start from TE Scenario as listed in the table.

The procedure shall be considered acknowledged upon reception of the first distress alert acknowledgement concerning <u>the same distress event</u>.

[ETSI EN 300 338-2, n.6.4.12]

| | Alarm | Stage of current Automated | Comments |
|---|--------------------|-------------------------------|---------------------------------|
| ltem | | procedure | |
| Distress acknowledgement (same distress event) Distress coordinates another TestV12H 0076.scn | Distress Ack alarm | ACKNOWLEDGED | Should ACK current procedure |
| Distress acknowledgement (same distress event) Time of Distress coordinates another TestV12H_0077.scn | Distress Ack alarm | ACKNOWLEDGED | Should ACK current procedure |
| Distress acknowledgement (same distress event) Distress coordinates and time another TestV12H_0078.scn | Distress Ack alarm | ACKNOWLEDGED | Should ACK current procedure |
| Distress acknowledgement (same distress event) Distress coordinates unknown TestV12H_0079.scn | Distress Ack alarm | ACKNOWLEDGED | Should ACK current procedure |

| The equipment meets | the requirements | (ves | / no /n.a) | |
|---------------------|------------------|---|------------|--|
| The equipment meete | and requiremente | (,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | , | |

yes

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5.13. Use of the distress button priority test

[ETSI EN 300 338-1, n.4.7]

Definition

This test checks the critically important feature that the distress button is able to send the default distress alert attempt regardless of the state of the EUT.

Method of measurement and required results

This test requires that the EUT be placed in as many as reasonable of its possible states. Instructions are given to place the EUT in one of these states. The default distress alert attempt is then started using the distress button. It is encouraged but not required that the EUT immediately terminate any ongoing automated procedures.

a) From standby on the EUT select the option to send an individual DSC message of priority routine. Enter/select the MMSI of the desired recipient. Before the DSC message is actually sent, start the default distress alert attempt using the dedicated distress button and verify that:

| Item | | Result | | |
|---|-----|--------|------|--|
| | YES | NO | ment | |
| the three second countdown is followed by the two second steady alarm, | Х | | | |
| the received distress procedure is started on the TE, | Х | | | |
| the distress information on the TE is the default values and the sender is the EUT, | X | | | |

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| quipment Under Test: | SALLODA | 220 250W ME/HE DSC Class A | | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

b) From standby select the option to send an individual DSC message of priority routine. Enter/select the MMSI of the desired recipient and send the DSC message. The sending non distress DSC automated procedure shall start on the EUT. Start the default distress alert attempt using the dedicated distress button and verify that:

| Item | | Result | | |
|---|-----|--------|------|--|
| | YES | NO | ment | |
| the three second countdown is followed by the two second steady alarm, | Х | | | |
| the received distress procedure is started on the TE, | Х | | | |
| the distress information on the TE is the default values and the sender is the EUT, | Х | | | |

c) From standby start the default distress alert attempt on the EUT using the dedicated distress button. When transmission begins, release the distress button. When the received distress DSC automated procedure starts on the TE, press the dedicated distress button on the EUT once again and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the action of pushing the distress button is ignored, | | | |
| the ongoing sending distress alert automated procedure on the EUT is uninterrupted. | X | | |

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d) Set the EUT into standby. Send a distress alert attempt from the TE. After the received distress DSC automated procedure starts on the EUT, return the TE to standby and start the default distress alert attempt on the EUT using the dedicated distress button and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the three second countdown is followed by the two second steady alarm, | Χ | | |
| the received distress procedure is started on the TE, | Χ | | |
| the distress information on the TE is the default values and the sender is the EUT, | X | | |

e) Set the EUT into standby. Send an individual non distress DSC message of priority urgency from the TE addressed to the EUT. After the received non distress DSC automated procedure starts on the EUT, start the default distress alert attempt on the EUT using the dedicated distress button and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the three second countdown is followed by the two second steady alarm, | Χ | | |
| the received distress procedure is started on the TE, | Χ | | |
| the distress information on the TE is the default values and the sender is the EUT, | Х | | |

| e equipment meets the requirements (yes / no /n.a) yes |
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5.14. Handling received DSC messages prior and after to acknowledgement the sendining distress alert automated procedure test

[ETSI EN 300 338-2, n.6.4.7]

Definition

This test checks that the sending distress automated procedure responds correctly to incomming calls with are not pertinent the currently active automated send distress atempt procedure but pertinent to the station.

Method of measurement and required results

Set the EUT and TE in standby and send a default distress alert attempt from the EUT. Send from TE DSC calls as listed in the table prior and after acknowledge. Verify that:

Prior to acknowledgment of the sending distress automated procedure only the distress acknowledgement describing the same distress event is pertinent to the procedure. All other DSC messages shall be ignored and only recorded in the log.

After the sending distress automated procedure has been acknowledged all DSC messages describing the same distress event are pertinent to the procedure. Of these DSC messages, all ships, group, and area distress relays may be ignored. DSC messages not pertinent to the procedure shall be allocated to the appropriate automated procedure or initiate their own automated procedure on hold.

[ETSI EN 300 338-2, n.6.4.7]

| Scenario | Legend |
|-------------------|---------------|
| TestV12H_0081.scn | TestV12D_0001 |

EUT MMSI ship in distress: 273000000 Nature of distress: Undesignated Position: 00 00.0000N 000 00 0000E

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a) Reset EUT into Standby. From EUT send Distress call attempt. Verify that automated procedure is initiated. From TE send serially the calls listed in the table witch pertinent to station, but not for the currently active automated procedure. Verify that:

00:00 Initiale Distress call 01:00 starting of sending calls listed in the table.

| N | DSC sentence | Verify | | | | Com- |
|---|--------------------------------------|------------------------|-------|-----------------|--------|------|
| | | Procedure sub-stage | Alarm | Indica- tion | Logged | ment |
| 1 | Distress relay RT Individual | Wait for Ack | No | No | Yes | |
| 2 | Geographic Area RT call Safety | Wait for Ack | No | No | Yes | |
| 3 | Geographic Area RT call Urgency | Wait for Ack | No | No | Yes | |
| 4 | Distress alert | Wait for Ack | No | No | Yes | |
| 5 | Individual RT call Urgency | Wait for Ack | No | No | Yes | |
| 6 | Distress relay RT Geographic Area | Wait for Ack | No | No | Yes | |
| 7 | Distress relay RT Individual | Wait for Ack | No | No | Yes | |
| 8 | Distress acknowledgement | Wait for Ack | No | No | Yes | |

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| inment Under Test | SAILOR 6 | 320 250W ME/HE DSC Class A | | | |

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| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| The sub-stage of the procedure should not be changed: "waiting for acknowledgement", [ETSI EN 300 338-2, n.6.4.12] | X | | |
| The reception of the call should not sounds the alarm, [ETSI EN 300 338-2, n.6.4.8] | | | |
| The calls should be recorded in the log, [ETSI EN 300 338-2, n.6.4.7] | Х | | |

b) Repeat the test **<u>after acknowledgement</u>** the automated procedure.

| Ν | DSC sentence | | Com- | | | |
|---|--------------------------------------|-------------------------|-------|-----------------|----------------------------------|------|
| | | Procedure sub- stage | Alarm | Indica- tion | Initiate procedure on hold | ment |
| 1 | Distress relay RT Individual | Acknowledged | Yes | Yes | Yes | |
| 2 | Geographic Area RT call Safety | Acknowledged | Yes | Yes | Yes | |
| 3 | Geographic Area RT call Urgency | Acknowledged | Yes | Yes | Yes | |
| 4 | Distress alert | Acknowledged | Yes | Yes | Yes | |
| 5 | Individual RT call Urgency | Acknowledged | Yes | Yes | Yes | |
| 6 | Distress relay RT Geographic Area | Acknowledged | Yes | Yes | Yes | |
| 7 | Distress relay RT Individual | Acknowledged | Yes | Yes | Yes | |
| 8 | Distress acknowledgement | Acknowledged | Yes | Yes | Yes | |

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| The sub-stage of the procedure should be: "alert acknowledged", [ETSI EN 300 338-2, n.6.4.3] | X | | |
| DSC messages, all ships, group, and area distress relays may be ignored (for the same distress event) [ETSI EN 300 338-2, n.6.4.7] | X | | |
| DSC messages not pertinent to the procedure shall be allocated to the appropriate automated procedure or initiate their own automated procedure on hold. [ETSI EN 300 338-2, n.6.4.7] | X | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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5.15. Termination of the acknowledged sendining distress alert automated procedure test

[ETSI EN 300 338-2, n.6.4.13]

Definition

This test checks the termination of the acknowledged sending distress alert automated procedure.

Method of measurement and required results

Set the EUT and TE in standby and send a default distress alert attempt from the EUT. Send from TE DSC acknowledgement.

a) Manually terminate the procedure. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| Prior to acknowledgement the procedure shall not be terminated by the operator | Х | | |
| or the equipment | | | |
| [ETSI EN 300 338-2, n.6.4.13] | | | |
| After acknowledgement the termitation options is available | | X | (12) |
| [ETSI EN 300 338-2, n.6.4.13] | | ~ | |

b) Set timeout of the acknowledged sending distress alert automated procedure (if available - optionaly). Repeat the test. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| Prior to acknowledgement the procedure shall not be terminated by the operator | Х | | |
| or the equipment | | | |
| [ETSI EN 300 338-2, n.6.4.13] | | | |
| After acknowledgement the auto termitation options is available | Х | | |
| [ETSI EN 300 338-2, n.6.4.13] | ~ | | |
| At least 10 seconds prior to automated termination a visual and discrite aural | | | |
| warning displayed | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.9.1] | | | |
| [ETSI EN 300 338-2, n.6.4.13] | | | |
| the reason for and means to silence the alarm is displayed on the EUT, | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.1.1] | | | |
| The option to stop of termination is available | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.9.2] | ~ | | |

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(12) (E521) (E1039)

For the case when equipment is engaged in the NBDP communications option "Terminate" is blocked. When choosing an operator option "Terminate" a warning appears : "UNABLE TO COMPLY. PLEASE TERMINATE TELEX CONNECTION"..

That is, the operator shall terminate at the Message Terminal (separate unit SAILOR 6006) the telex session communication first. Only after that may terminate the DSC procedure from the control unit SAILOR 6301.

[ETSI EN 300 338-2, n.6.4.13]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
|--|----|

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5.16. Automated tuning test

[ETSI EN 300 338-2, n.6.4.10]

Definition

This test checks automatic tuning at reception of acknowledgement.

Method of measurement and required results

a) From standby send the default distress alert attempt from the EUT and verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| On HF the setting of the watch receiver to scan all six distress frequencis (if not already doing so); [ETSI EN 300 338-2, n.6.4.2,b(1)] | X | | |
| [Rec. ITU-R M. 493-13, Ann. 4, n.3.2.4.5] | | | |
| The alert is received on all 6 distress frequencies on the TE | X | | |
| the frequency of subsequent communication is 8291 kHz in HF, | X | | |
| You can speak to the EUT from the TE, | X | | |
| You can speak to the TE from the EUT. | X | | |

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| uinment Under Test | SALLOR | 5320 250W ME/HE DSC Class A | | |

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b) A distress acknowledgement shall then be sent on the 4 MHz from the TE. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| a received distress alert acknowledgment message appears and corresponding | Х | | |
| alarm sounds, | 23 | | |
| [ETSI EN 300 338-2, n.6.4.8] | | | |
| the means to silence the alarm is displayed on the EUT, | Χ | | |
| the alarm can only be silenced manually, | Х | | |
| the automatic resending of the alert attempt is terminated, | X | | |
| [ETSI EN 300 338-2, n.6.4.2,c(1)] | Λ | | |
| the EUT indicates that the distress event has been acknowledged, | X | | |
| [ETSI EN 300 338-2, n.6.4.3(10)c] | Λ | | |
| the time since acknowledgment is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3(3)] | 23 | | |
| the MMSI of the sender is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3(9)] | | | |
| On HF the subsequent communication frequency is tuned to the 4 MHz band of | Х | | |
| the acknowledgement. | | | |
| [ETSI EN 300 338-2, n.6.4.10] | | | |
| Upon reception of the first distress alert acknowledgement, the tuning shall occur | Х | | |
| <u>after</u> the manual silencing of the alarm. | | | |
| [ETSI EN 300 338-2, n.6.4.10] | | | |
| There is NOT a warning before the automated tuning changes frequency | Х | | |
| [<i>Rec. ITU-R M.493-13, Ann.4, n.3.1.3.2</i>] | | | |
| [ETSI EN 300 338-2, n.6.4.10] | | | |
| the operator can speak to the TE from the EUT on the RT 4 MHz frequency, | X | | |
| the operator can speak to the EUT from the TE on the RT 4 MHz frequency, | X | | |

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c) Send the same distress acknowledgement on the 6 MHz from the TE. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| Shall sound the self terminating alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.4.8] | ~ | | |
| The MMSI of the sender is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.4.3(9)] | Λ | | |
| Subsequent acknowledgements from the same source demanding changes in | Х | | |
| subsequent communication frequencies shall occur automatically. | 2 . | | |
| [ETSI EN 300 338-2, n.6.4.8] | | | |
| There is a warning before the automated tuning changes frequency | | X | (13) |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.3.2] | | | |
| [ETSI EN 300 338-2, n.6.4.10] | | | |
| The operator can speak to the TE from the EUT on the RT 6 MHz frequency, | Х | | |
| | 2 . | | |
| The operator can speak to the EUT from the TE on the RT 6 MHz frequency, | Х | | |
| | ~ | | |

d) Change the MMSI of sender of distress acknowledgement and send the acknowledgement on the 12 MHz from the TE. Verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| Shall sound the self terminating alarm, | X | | |
| [ETSI EN 300 338-2, n.6.4.8] | ~ | | |
| the MMSI of the sender is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.4.3(9)] | ~ | | |
| Subsequent acknowledgments from a different source shall indicate to the | Х | | |
| operator by some means that a change in frequency is requested, however, in the | | | |
| absence of any operator action, the tuning shall not occur. | | | |
| [ETSI EN 300 338-2, n.6.4.8] | | | |
| the operator can speak to the TE from the EUT on the RT 6 MHz frequency, | Х | | |
| | 23 | | |
| the operator can speak to the EUT from the TE on the RT 6 MHz frequency, | X | | |
| | 23 | | |

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e) From standby send the default distress alert attempt from the EUT. Press on the EUT PTT and wait the automated resending of the alert attempt. Verify that:

| Item | Res | ult | Com- |
|--|-----|-----|------|
| | YES | NO | ment |
| On HF the operator shall have at least a 10 seconds warning prior to an automated resending of the alert attempt where the operator may pause the resending in case engaged in traffic. [ETSI EN 300 338-2, n.6.4.10] | Х | | |

(13) (E1307)

There is a warning before the automated tuning changes frequency, but does not display the new frequency information. DSC warning text: "New communication frequency was requested by latest received call". No display reception frequency in the window of visual indication of reception DSC distress message too.

[Rec. ITU-R M.493-13, Ann.4, n.3.1.3.2] [ETSI EN 300 338-2, n.6.4.10]

| The equinment meets the requirements (yes / no /n a) | no |
|--|-----|
| The equipment meets the requirements (yes / no /n.a) | 110 |

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5.17. Distress alert composition test

[ETSI EN 300 338-2, n.6.2.1] [ETSI EN 300 338-2, n.6.4.4]

Definition

This test checks the ability of the EUT to transmit the distress information correctly for different values of the nature of distress and from different positions on the globe.

Method of measurement and required results

Set the EUT and TE into standby. Configure the EUT to be located in the Western half of the Southern Hemisphere. Select the option to send a distress. Choose 'sinking' as the nature of distress. Send the distress alert attempt and verify that:

| Item | Res | ult | Com- |
|---|-----|-----|------|
| | YES | NO | ment |
| the dedicated distress button is required to send the alert attempt on the EUT, | X | | |
| a received distress automated procedure starts on the TE, | X | | |
| the position reported on the TE is that of the EUT, | X | | |
| the nature of distress is 'sinking', | X | | |
| one is able to speak to the TE from the EUT, | X | | |
| one is able to speak to the EUT from the TE. | X | | |

Set the EUT and TE into standby. Configure the EUT to be located in the different Hemisphere and different nature of distress. Send the distress alert attempt.

| The equipment meets the requirements (yes / no /n.a) | yes |
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5.18. Watchkeeping receiver test

[ETSI EN 300 338-1, n.8.1] [ETSI EN 300 338-2, n.5.1.1]

Definition

This test checks ability of correct work of the on watchkeeping receiver by sending of a default distress attempt.

Method of measurement and required results

Set the EUT and TE into standby. Configure the watchkeeping receiver of the EUT to scan of the 3 frequencies: 2 187.5 MHz, 8 414.5 MHz, 12 577.0 MHz. From standby send the default distress alert attempt from the EUT and verify that:

| Item | Res | ult | Com- |
|---|-----|-----|------|
| | YES | NO | ment |
| the dedicated distress button is required to send the alert attempt on the EUT, | Х | | |
| a received distress automated procedure starts on the TE, | Х | | |
| On HF the setting of the watch receiver to scan all six distress frequencis; [ETSI EN 300 338-2, n.6.4.2,b(1)] [Rec. ITU-R M. 493-13, Ann. 4, n.3.2.4.5] | X | | |
| one is able to speak to the TE from the EUT on the 8 MHz, | Х | | |
| one is able to speak to the EUT from the TE on the 8 MHz. | Х | | |
| the receiver shall not require a dot pattern preceding the phasing sequence for correct bit phasing and unambiguous determination of the positions of the characters within a DSC message sequence; [ETSI EN 300 338-1, n.8.1,b] | X | | |
| on MF/HF the decoder shall stop the scanning of the dedicated watch receiver only if the length of the dot pattern preamble is greater than 20; [ETSI EN 300 338-1, n.8.1,d] | X | | |

| The equipment meets the requirements (yes / no /n.a) | ves |
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5.19. Information contents of distress alert attempt tests. Distress call with position in the NW quadrant

[Rec. ITU-R M.493-13, Ann.3 n.3.2.1]

Method of testing.

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call sequences with position in the NW quadrant.

Result required.

Transmitted and received sequences are compared in content. The EUT should transmit distress calls correctly.

| Scenario | Legend |
|-----------------|-------------|
| Is not required | TestH_1_1_2 |

The transmission of distress call for a case, when "Distress coordinates" in a quadrant NW is tested.

TE is set to a receive mode DSC of the messages (Run Manual mode).

For EUT two cases are simulated:

a) "Distress coordinates" are entered manually.

b) "Distress coordinates" are entered automatically through the interface. Run Legend TestH_1_1_2.

By means of the menu the call of distress is composed. The transmission of attempt of call of distress is activated. TE receives the messages. The contents transmitted EUT of call of distress is inspected.

The tables are filled. Required results are given in the table.

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Results:

| | Nature of Distress | Possibility of sending | | Result | | Comment | |
|----|---------------------------------|---------------------------|----|--------|----|--|--|
| | | YES | NO | ОК | NO | | |
| 1 | Fire, explosion | X | | X | | | |
| 2 | Flooding | X | | Х | | | |
| 3 | Collision | X | | Х | | | |
| 4 | Grounding | X | | Х | | | |
| 5 | Listing, in danger of capsizing | X | | X | | | |
| 6 | Sinking | X | | Х | | | |
| 7 | Disabled and adrift | X | | Х | | | |
| 8 | Undesignated distress | X | | Х | | | |
| 9 | Abandoning ship | X | | X | | | |
| 10 | Piracy/armed robbery attack | X | | Х | | | |
| 11 | Man overboard | X | | X | | | |
| 12 | Other | | X | X | | Should not be possible of sending of distress call | |

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(1) Manual entry

| Distress coordinates and Time | | | | | | | |
|-------------------------------|---------------|-----------|--------|------|---------|--|--|
| ltem | EUT | Recei | Re | sult | Comment | | |
| | | | | YES | NO | | |
| Latitude | 12°34' 5678 N | Main | 1234N | X | | | |
| | | Expansion | 5678 | X | | | |
| Longitude | 065°43 9876 W | Main | 06543W | X | | | |
| | | Expansion | 9876 | X | | | |
| UTC | 12:34 | 12:34 | | X | | | |

(2) Automatic position updating (Legend: *TestH_1_1_2*)

| Distress coordinates and Time | | | | | | | |
|-------------------------------|----------------|----------------|--------|-----|------|---------|--|
| ltem | EUT | Received by TE | | Re | sult | Comment | |
| | | | | YES | NO | | |
| Latitude | 01°11' 1111 N | Main | 0111N | X | | | |
| | | Expansion | 1111 | X | | | |
| Longitude | 045°57' 1234 W | Main | 04557W | X | | | |
| | | Expansion | 1234 | X | | | |
| UTC | 00:00 | | 00:00 | | | | |

| Subsequent communication | Possi of ser | bility ding | Result | | Comment |
|--------------------------|-----------------|----------------|--------|----|-----------------------------------|
| | YES | NO | OK | NO | |
| J3E TP | X | | X | | |
| F1B/J2B TTY-FEC | X | | X | | |
| No information | | X | X | | Should not be possible of sending |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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5.20. Information contents of distress alert attempt tests. Distress call with position in the NE quadrant

[Rec. ITU-R M.493-13, Ann.3 n.3.2.1]

Method of testing.

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call sequences with position in the NE quadrant.

Result required.

Transmitted and received sequences are compared in content. The EUT should transmit distress calls correctly.

| Scenario | Legend |
|-----------------|-------------|
| Is not required | TestH_1_1_3 |

The transmission of distress call for a case, when "Distress coordinates" in a quadrant NE is tested.

TE is set to a receive mode DSC of the messages (Run Manual mode).

For EUT two cases are simulated:

a) "Distress coordinates" are entered manually.

b) "Distress coordinates" are entered automatically through the interface. Run Legend TestH_1_1_3.

By means of the menu the call of distress is composed. The transmission of attempt of call of distress is activated. TE receives the messages. The contents transmitted EUT of call of distress is inspected.

The tables are filled. Required results are given in the table.

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Results:

| | Nature of Distress | Possibility of sending | | Result | | Comment | |
|----|---------------------------------|------------------------|----|--------|----|--|--|
| | | YES | NO | ОК | NO | | |
| 1 | Fire, explosion | Х | | Х | | | |
| 2 | Flooding | X | | X | | | |
| 3 | Collision | X | | X | | | |
| 4 | Grounding | X | | X | | | |
| 5 | Listing, in danger of capsizing | X | | X | | | |
| 6 | Sinking | X | | Х | | | |
| 7 | Disabled and adrift | X | | X | | | |
| 8 | Undesignated distress | X | | Х | | | |
| 9 | Abandoning ship | Х | | X | | | |
| 10 | Piracy/armed robbery attack | X | | X | | | |
| 11 | Man overboard | X | | X | | | |
| 12 | Other | | X | X | | Should not be possible of sending of distress call | |

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(1) Manual entry

| Distress coordinates and Time | | | | | | | | |
|-------------------------------|---------------|----------------|--------|-------------------|----|------|---------|--|
| ltem | EUT | Received by TE | | Received by TE Re | | sult | Comment | |
| | | | | YES | NO | | | |
| Latitude | 12°34' 5678 N | Main | 1234N | X | | | | |
| | | Expansion | 5678 | X | | | | |
| Longitude | 065°43 9876 E | Main | 06543E | X | | | | |
| | | Expansion | 9876 | X | | | | |
| UTC | 12:34 | 12:34 | | X | | | | |

(2) Automatic position updating (Legend: *TestH_1_1_3*)

| Distress coordinates and Time | | | | | | | |
|-------------------------------|----------------|----------------|--------|-----|------|---------|--|
| ltem | EUT | Received by TE | | Re | sult | Comment | |
| | | | | YES | NO | | |
| Latitude | 01°11' 1111 N | Main | 0111N | X | | | |
| | | Expansion | 1111 | X | | | |
| Longitude | 045°57' 1234 E | Main | 04557E | X | | | |
| | | Expansion | 1234 | X | | | |
| UTC | 00:00 | 00:00 | | X | | | |

| Subsequent communication | Possibility of sending | | Result | | Result | | Comment |
|--------------------------|---------------------------|----|--------|----|-----------------------------------|--|---------|
| | YES | NO | OK | NO | | | |
| J3E TP | X | | X | | | | |
| F1B/J2B TTY-FEC | X | | X | | | | |
| No information | | X | X | | Should not be possible of sending | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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5.21. Information contents of distress alert attempt tests. Distress call with position in the SW quadrant

[Rec. ITU-R M.493-13, Ann.3 n.3.2.1]

Method of testing.

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call sequences with position in the SW quadrant.

Result required.

Transmitted and received sequences are compared in content. The EUT should transmit distress calls correctly.

| Scenario | Legend |
|-----------------|-------------|
| Is not required | TestH_1_1_4 |

The transmission of distress call for a case, when "Distress coordinates" in a quadrant NE is tested.

TE is set to a receive mode DSC of the messages (Run Manual mode).

For EUT two cases are simulated:

a) "Distress coordinates" are entered manually.

b) "Distress coordinates" are entered automatically through the interface. Run Legend TestH_1_1_4.

By means of the menu the call of distress is composed. The transmission of attempt of call of distress is activated. TE receives the messages. The contents transmitted EUT of call of distress is inspected.

The tables are filled. Required results are given in the table.

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Results:

| | Nature of Distress | Possibility of sending | | Result | | Comment |
|----|---------------------------------|------------------------|----|--------|----|--|
| | | YES | NO | ОК | NO | |
| 1 | Fire, explosion | Х | | Х | | |
| 2 | Flooding | X | | X | | |
| 3 | Collision | X | | X | | |
| 4 | Grounding | X | | X | | |
| 5 | Listing, in danger of capsizing | X | | X | | |
| 6 | Sinking | X | | Х | | |
| 7 | Disabled and adrift | X | | X | | |
| 8 | Undesignated distress | X | | Х | | |
| 9 | Abandoning ship | Х | | X | | |
| 10 | Piracy/armed robbery attack | X | | X | | |
| 11 | Man overboard | X | | X | | |
| 12 | Other | | X | X | | Should not be possible of sending of distress call |

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(1) Manual entry

| Distress coordinates and Time | | | | | | |
|-------------------------------|----------------|------------|--------|------|---------|--|
| ltem | EUT | Recei | Re | sult | Comment | |
| | | | | YES | NO | |
| Latitude | 00°12' 3456 S | Main 0012S | | Х | | |
| | | Expansion | 3456 | Х | | |
| Longitude | 000°12' 6543 W | Main | 00012W | Х | | |
| | | Expansion | 6543 | Х | | |
| UTC | 08:08 | | X | | | |

(2) Automatic position updating (Legend: TestH_1_1_4)

| Distress coordinates and Time | | | | | | | |
|-------------------------------|----------------|-----------|--------|------|---------|--|--|
| ltem | EUT | Recei | Re | sult | Comment | | |
| | | | | YES | NO | | |
| Latitude | 12°34' 5678 S | Main | 1234S | X | | | |
| | | Expansion | 5678 | X | | | |
| Longitude | 123°45' 0789 W | Main | 12345W | X | | | |
| | | Expansion | 0789 | X | | | |
| UTC | 00:00 | | X | | | | |

| Subsequent communication | Possi of ser | bility ding | Result | | Result | | Comment |
|--------------------------|-----------------|----------------|--------|----|-----------------------------------|--|---------|
| | YES | NO | ОК | NO | | | |
| J3E TP | X | | X | | | | |
| F1B/J2B TTY-FEC | X | | X | | | | |
| No information | | X | X | | Should not be possible of sending | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
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| | |

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5.22. Information contents of distress alert attempt tests. Distress call with position in the SE quadrant

[Rec. ITU-R M.493-13, Ann.3 n.3.2.1]

Method of testing.

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call sequences with position in the SE quadrant.

Result required.

Transmitted and received sequences are compared in content. The EUT should transmit distress calls correctly.

| Scenario | Legend |
|-----------------|-------------|
| Is not required | TestH_1_1_5 |

The transmission of distress call for a case, when "Distress coordinates" in a quadrant NE is tested.

TE is set to a receive mode DSC of the messages (Run Manual mode).

For EUT two cases are simulated:

a) "Distress coordinates" are entered manually.

b) "Distress coordinates" are entered automatically through the interface. Run Legend $TestH_1_1_5$.

By means of the menu the call of distress is composed. The transmission of attempt of call of distress is activated. TE receives the messages. The contents transmitted EUT of call of distress is inspected.

The tables are filled. The required outcomes are reduced in the table.

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Results:

| | Nature of Distress | Poss of se | Possibility of sending | | sult | Comment |
|----|---------------------------------|---------------|---------------------------|----|------|--|
| | | YES | NO | ОК | NO | |
| 1 | Fire, explosion | X | | X | | |
| 2 | Flooding | X | | Х | | |
| 3 | Collision | X | | X | | |
| 4 | Grounding | X | | X | | |
| 5 | Listing, in danger of capsizing | X | | X | | |
| 6 | Sinking | X | | Х | | |
| 7 | Disabled and adrift | X | | X | | |
| 8 | Undesignated distress | X | | X | | |
| 9 | Abandoning ship | X | | X | | |
| 10 | Piracy/armed robbery attack | X | | Х | | |
| 11 | Man overboard | X | | X | | |
| 12 | Other | | X | X | | Should not be possible of sending of distress call |

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(1) Manual entry

| Distress coordinates and Time | | | | | | | | |
|-------------------------------|----------------|-----------|-----------------------|----|---------|--|--|--|
| ltem | EUT | Recei | Received by TE Result | | Comment | | | |
| | | | YES | NO | | | | |
| Latitude | 00°12' 3456 S | Main | 0012S | X | | | | |
| | | Expansion | 3456 | X | | | | |
| Longitude | 000°12' 6543 E | Main | 00012E | X | | | | |
| | | Expansion | 6543 | X | | | | |
| UTC | 08:08 | 08:08 | | X | | | | |

(2) Automatic position updating (Legend: TestH_1_1_5)

| Distress coordinates and Time | | | | | | | | | |
|-------------------------------|----------------|-----------|----------------|-----|----|----------------|--|------|---------|
| ltem | EUT Re | | Received by TE | | | Received by TE | | sult | Comment |
| | | | | YES | NO | | | | |
| Latitude | 12°34' 5678 S | Main | 1234S | X | | | | | |
| | | Expansion | 5678 | X | | | | | |
| Longitude | 123°45' 0789 E | Main | 12345E | X | | | | | |
| | | Expansion | 0789 | X | | | | | |
| UTC | 00:00 | 00:00 | | X | | | | | |

| Subsequent communication | Possibility of sending | | Result | | Comment |
|--------------------------|---------------------------|----|--------|----|-----------------------------------|
| | YES | NO | OK | NO | |
| J3E TP | X | | X | | |
| F1B/J2B TTY-FEC | X | | X | | |
| No information | | X | X | | Should not be possible of sending |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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5.23. Distress call with expansion sequence

[ITU-R M.821-1, Annex 1, Item 2.1.2.1] [ETSI EN 300 338-1, n.4.10]

Method of testing.

The EUT and TE are connected. The EUT is set to generate, encode and transmit the DSC distress call full format with expansion sequences:

a) with position information (4 digits is used); (TestH_1_1_6_1)

b) with position information (1 digits is used); (TestH 1 1 6 2)

c) no data available.

[ITU-R M.821-1, Annex 1, Item 2.1.2.1]

Result required.

Transmitted and received sequences are compared in content. The EUT should transmit distress calls with expansion sequence correctly.

| Scenario | Legend |
|-----------------|---------------|
| Is not required | TestH_1_1_6_1 |
| Is not required | TestH_1_1_6_2 |

Results

| | Structure of the expansion sequence | | ults | Comment |
|---|-------------------------------------|----|------|---------|
| | (expan 1) | OK | NO | |
| 1 | 4 digits is used | X | | |
| 2 | 1 digits is used | X | | |
| 3 | No data available | X | | |

NOTE:

Where manual input is used and no enhanced position information is available then distress alert should not use the expansion message. See ITU-R Recommendation M.821 [i.5], clause 3.1. "The expansion message field with enhanced position resolution may be appended to any standard DSC transmission sequences which include position information, provided the data is available".

[ETSI EN 300 338-1, n.4.10]

See Rec.ITU-R M.493-13, Annex 1, n. 11.4.

Immediately following a distress alert a DSC expansion message giving enhanced position resolution according to Recommendation ITU-R M.821 should be transmitted in the following manner.

See Rec.ITU-R M.821. Table 3.

Command character is 126, if data is not available.

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(a) Legend: TestH_1_1_6_1

| ltem | EUT | Received by TE | | Result | | Comment |
|-----------|----------------|----------------|--------|--------|----|---------|
| | | | | YES | NO | |
| Latitude | 00°12' 3456 S | Main | 0012S | X | | |
| | | Expansion | 3456 | X | | |
| Longitude | 000°12' 6543 E | Main | 00012E | X | | |
| | | Expansion | 6543 | X | | |
| UTC | 08:08 | 08:08 | | X | | |

(b) Legend: TestH_1_1_6_2

| ltem | EUT | Received by TE | | Re | sult | Comment |
|-----------|-------------|----------------|--------|-----|------|---------|
| | | | | YES | NO | |
| Latitude | 12°34' 8 N | Main | 1234N | X | | |
| | | Expansion | 8000 | X | | |
| Longitude | 089°45' 9 W | Main | 08945W | X | | |
| | | Expansion | 9000 | X | | |
| UTC | 00:00 | 00:00 | | X | | |

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| ltem | Rece | Received by TE | | sult | Comment | |
|-----------|--------------|---------------------|-----|------|--|--|
| | | | YES | NO | | |
| Latitude | Main | Can not be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. | |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] | |
| | | | | | See NOTE | |
| Longitude | Main | Can not be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. | |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] | |
| | | | | | See NOTE | |
| UTC | Cannot be in | ncluded | X | | The EUT should transmit "UTC time" as the digit 8 repeated 4 times. | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|
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5.24. Distress call, "Distress coordinates" cannot be included

The transmission of distress call attempt without usage of facilities of a composition of message by means of the menu is tested. The check will be carried for two cases:

a) the position information of a vessel is unknown;

TE is set in a receive mode DSC of the messages (Run Manual mode).

For EUT two cases are simulated:

a) "Distress coordinates" cannot be included;

The transmission of attempt of distress call is activated. TE receives the messages. The contents transmitted EUT of distress call is inspected.

The tables are filled. Required results are given in the table.

| Scenario | Legend |
|-----------------|-----------------|
| Is not required | Is not required |

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a)

| "Distress coordinates" cannot be included | | | | | |
|---|-----------------------|-----------------------|---------|----|--|
| Item | Received by TE Result | | Comment | | |
| | | | YES | NO | |
| Latitude | Main | Cannot be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| Longitude | Main | Cannot be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| UTC | Cannot be in | ncluded | X | | The EUT should transmit "UTC time" as the digit 8 repeated 4 times. |
| Nature of Distress | Un | designated | X | | |
| Type of Communication | | J3E TP | X | | |

| The equipment meets the requirements (yes / no /n.a) yes | |
|--|--|
|--|--|

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5.25. Updating position test

[ETSI EN 300 338-2, n.6.4.6]

Definition

This test checks the ability of the EUT to updating of position information in the automated distress alert sending procedure.

Method of measurement and required results

a) Set the EUT and TE into standby. Select the option to send a distress alert. Manually input position information and send distress call. Next try to change the position information. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the dedicated distress button is required to send the alert attempt on the EUT, [ETSI EN 300 338-2, n.6.4.4] | Х | | |
| a received distress automated procedure starts on the TE, | Х | | |
| the position reported on the TE is that of the EUT, | Х | | |
| the nature of distress as selected by operator, | Х | | |
| When the distress alert attempt is resend the position and UTC time is updated, | Х | | |
| one is able to speak to the TE from the EUT, | Х | | |
| one is able to speak to the EUT from the TE. | Х | | |

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b) Set the EUT and TE into standby. Set automatically input position information. Select the option to send a distress alert and send distress call. Next try to change the position information. Verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the dedicated distress button is required to send the alert attempt on the EUT, [ETSI EN 300 338-2, n.6.4.4] | Х | | |
| a received distress automated procedure starts on the TE, | Х | | |
| the position reported on the TE is that of the EUT, | Х | | |
| the nature of distress as selected by operator, | Х | | |
| When the distress alert attempt is resend the position and UTC time is updated, [ETSI EN 300 338-2, n.6.4.6] | Х | | |
| one is able to speak to the TE from the EUT, | X | | |
| The option to set manually input position updating is available | Х | | |
| one is able to speak to the EUT from the TE. | Х | | |

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c) Set the EUT and TE into standby. Set position information "Distress coordinates" and "UTC time" cannot be included. Send default distress alert. Verify that:

| "Distress coordinates" cannot be included | | | | | |
|---|---------------|--|--------|----|--|
| ltem | Rece | eived by TE | Result | | Comment |
| | | | YES | NO | |
| Latitude | Main | digit 9 repeated 10 times | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. [Rec. ITU-R M.493-12, Ann.1, n.8.1.2.4] |
| | Expansion | expansion sequence with command character 126 | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| Longitude | Main | he digit 9 repeated 10 times | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | expansion sequence with command character 126 | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| UTC | the digit 8 r | epeated 4 times | X | | The EUT should transmit "UTC time" as the digit 8 repeated 4 times. |
| | | | | | [Rec. ITU-R M.493-12, Ann.1, n.8.1.3.3] |

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d) Set the EUT and TE into standby. Set position information "Distress coordinates" with expansion sequences:

with position information (4 digits is used);
 with position information (1 digits is used);

3) no data available.

Send default distress alert. Verify that: [ETSI EN 300 338-1, n.4.10] Rec.ITU-R M.493-13, Annex 1, n. 11.4.

Rec.ITU-R M.821, Table 3.

| 1 | 1 |) |
|---|---|---|
| J | T | J |

| Item | EUT | Received by TE | | Re | sult | Comment |
|-----------|----------------|----------------|--------|-----|------|---------|
| | | | | YES | NO | |
| Latitude | 00°12' 3456 S | Main | 0012S | X | | |
| | | Expansion | 3456 | X | | |
| Longitude | 000°12' 6543 E | Main | 00012E | X | | |
| | | Expansion | 6543 | X | | |
| UTC | 08:08 | | 0808 | X | | |

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| (2) | | | | | | |
|-----------|-------------|-----------|----------------|-----|------|--|
| ltem | EUT | Receiv | Received by TE | | sult | Comment |
| | | | | YES | NO | _ |
| Latitude | 12°34' 8 N | Main | 1234N | X | | |
| | | Expansion | 8000 | X | | The EUT should transmit as 8000 |
| | | | | | | [Rec. ITU-R M.821-1, Ann.1, n.2.1.2.4.] |
| Longitude | 089°45' 9 W | Main | 08945W | X | | |
| | | Expansion | 9000 | X | | The EUT should transmit as 9000 [Rec. ITU-R M.821-1, Ann.1, n.2.1.2.4.] |
| UTC | 00:00 | 0 | 000 | X | | |

(3)

| ltem | Rece | eived by TE | Result | | Comment |
|-----------|--------------|------------------------|--------|----|--|
| | | | YES | NO | |
| Latitude | Main | Can not be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| Longitude | Main | Can not be included | X | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| UTC | Cannot be in | ncluded | X | | The EUT should transmit "UTC time" as the digit 8 repeated 4 times. |

The equipment meets the requirements (yes / no /n.a)

yes

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6. Receiving distress automated procedure [ETSI EN 300 338-2, n.6.5]

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6.1. Received distress automated procedure started by a distress alert test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

Definition

This test checks the behaviour of the automated procedure through the "normal" sequence of receiving a distress alert attempt, perhaps a repeat of the attempt and a few distress relays, and then a distress alert acknowledgement.

| Scenario | Legend | | |
|---------------|------------|--|--|
| TestV12H_0040 | TestH_0N0E | | |
| TestV12H_0041 | TestH_0N0E | | |

TestV12H_0040 – Default distress call (RT); TestV12H_0041 - Distress call (FEC);

Method of measurement and required results

a) Make sure that the position on the TE has enhanced resolution in fractional minutes. Send the default distress alert attempt from the TE <using the distress button>. Verify that:

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TestV12H_0040.scn

00:00

| Default Destress alert (RT) | | | |
|---|-----|--------|---------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | | X | (E1328) |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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b) Reset the EUT to standby. From the TE send a distress with subsequent communication FEC and verify that:

TestV12H_0041.scn

00:00

| Destress alert (FEC) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 23 | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 23 | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 23 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | | X | (14) |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| The frequency of NBDP subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the operator is informed that the procedure is <u>waiting for an</u> | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| You can send telex to the EUT from the TE, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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For all receiving distress automated procedures: When the operator selects the option HISTORY, the radio opens the new window witch macks the top level information (the elapsed time, stage of the automated procedure, operator options). While during the automated procedure the at top level the elapsed time, stage of the automated procedure, operator options shall be displayed.

[ETSI EN 300 338-2, n.6.7.3]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
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6.2. Received distress automated procedure started by a distress relay to Geographic area test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

Definition

This test checks the set up of the automated procedure when the first received distress DSC message of a distress event is a distress relay.

| Scenario | Legend |
|---------------|------------|
| TestV12H_0042 | TestH_0N0E |
| TestV12H_0043 | TestH_0N0E |

TestV12H_0042 - Distress relay Geographic area RT undesignated TestV12H_0043 – Distress relay Geographic area FEC

Method of measurement and required results

a) Reset the EUT to standby. From the TE send a distress relay on behalf of someone else addressed to Geographic area. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

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TestV12H_0042.scn 00:00

| Destress Relay to Geographic area RT undesignated | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the elapsed time since the procedure started is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| indicate whether the procedure is on hold or is active is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay , alert acknowledgement, relay acknowledgement), sender, | | | |
| and intended destination (individual, <u>area</u> , all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | | | |
| <u>acknowledgement,</u> | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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b) Reset the EUT to standby. From the TE send a distress relay on behalf of someone else addressed to Geographic area, subsequent communication FEC. Provide parameters for all five components of the distress information. Verify that:

TestV12H_0043.scn 00:00

| Destress Relay to Geographic area (FEC) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | 7 | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 7 | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 21 | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 21 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | 21 | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), sender, | | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| You can send telex to the EUT from the TE, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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(4) (E1308)

If the operator from receiving distress automated procedure selects option DROBOSE, and than hold the distress button (DB) less than 3 seconds, then radio returns to the Stand-by menu, but shall return to the previous menu – DROBOSE composition menu.

[ETSI EN 300 338-2, n.6.4.4,c]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
|--|----|

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6.3. Received distress automated procedure started by a distress alert acknowledgement test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0044 | TestH_0N0E |
| TestV12H_0045 | TestH_0N0E |

TestV12H_0044 - Distress ACK RT undesignated TestV12H_0045 – Distress ACK FEC

Definition

This test checks the set up of the automated procedure when the first received distress class DSC message of a distress event is a distress alert acknowledgement.

Method of measurement and required results

a) Reset the EUT to standby. From the TE send a distress alert acknowledgement and verify that:

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TestV12H_0044.scn

| Distress alert (RT) acknowledgement | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 2 2 | | |
| the elapsed time since the procedure started is displayed (the elapsed time since | Х | | |
| acknowledgement), | | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSIEN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [ETSTEN 300 338-2, 1] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [E151 EN 300 558-2, II.0.5.5,K] | | | |
| the operator is informed that the procedure is <u>acknowledged</u> , $ETSI EN 200.228.2 \times 6.5.21(2)$ | X | | |
| [ETSTEN 500 556-2, II.0.5.5,I(5)] | V | | |
| [ETSI EN 300 338 2 n 6 5 6] | X | | |
| Vou can speak to the TE from the EUT | V | | |
| 100 can speak to the 1B from the BOT, | X | | |
| [115] 14 500 550-2, 11.0.5.0] | | 1 | |

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b) Reset the EUT to standby. From the TE send a distress alert acknowledgement (FEC) and verify that:

TestV12H_0045.scn

| Distress alert (FEC) acknowledgement | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | 21 | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed (the elapsed time since | Х | | |
| acknowledgement), | | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | X | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | χ | | |
| the type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, all ships) of the latest | 21 | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | χ | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | 21 | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | 21 | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is <u>acknowledged</u> , | X | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| You can send telex to the EUT from the TE, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| The equipment meets the requirements (ves / no /n.a) | ves |
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| | y 50 |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.4. Received distress automated procedure started by a distress relay to All ships test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

Definition

This test checks the set up of the automated procedure when the first received distress DSC message of a distress event is a distress relay. (for reverse compatibility).

| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0082 | Is not required |
| TestV12H_0083 | Is not required |

TestV12H_0082 - Distress relay All ships RT undesignated TestV12H_0083 – Distress relay All ships FEC

Method of measurement and required results

a) Reset the EUT to standby. From the TE send a distress relay on behalf of someone else addressed to all ships. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

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TestV12H_0082.scn 00:00

| Destress Relay to All ships RT undesignated | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 23 | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, <u>all ships</u>) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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b) Reset the EUT to standby. From the TE send a distress relay on behalf of someone else addressed to all ships FEC. Provide parameters for all five components of the distress information (Distress relay FEC). Verify that:

TestV12H_0083.scn 00:00

| Destress Relay to All ships FEC | | | |
|---|-----|-----|------|
| Item | | ult | Com- |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 7 | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSTEN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, <u>all snips</u>) of the fatest received DSC | | | |
| IETSI EN 200 228 2 m 6 5 2 fl | | | |
| The frequency of subsequent communication is displayed (HE only) | V | | |
| Includency of subsequent communication is displayed (III only) | X | | |
| The frequencies on witch the DSC messages have been received (HE only) | v | | |
| IFTSI FN 300 338-2 jl | Χ | | |
| the history of at least the received DSC messages reveals that the following | v | | |
| have been received | Λ | | |
| [ETSI EN 300 338-2, n.6.5, 3, k] | | | |
| the operator is informed that the procedure is waiting for an | Y | | |
| acknowledgement, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| You can send telex to the EUT from the TE, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can send telex to the TE from the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | 2 . | | |

| The equipment meets the requirements (yes / no /n.a) yes |
|--|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.5. Received distress automated procedure started by a distress relay to All ships acknowledgement test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

Definition

This test checks the set up of the automated procedure when the first received distress class DSC message of a distress event is a distress relay acknowledgement. (for reverse compatibility).

| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0046 | Is not required |
| TestV12H_0047 | Is not required |

TestV12H_0046 - Distress relay ACK All ships RT undesignated TestV12H_0047 – Distress relay ACK All ships FEC

Method of measurement and required results

a) Reset the EUT to standby. From the TE send a distress relay acknowledgement (Distress relay ACK RT All ships) and verify that:

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TestV12H_0046.scn

| Distress relay alert acknowledgement (1) | | | |
|---|-----|-----|------|
| Item | | ult | Com- |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 21 | | |
| the elapsed time since the procedure started is displayed (the elapsed time since | Х | | |
| acknowledgement), | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | X | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | Λ | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), | X | | |
| sender, and intended destination (individual, area, all ships) of the latest | Λ | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | X | | |
| have been received, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | Λ | | |
| The frequencies on witch the DSC messages have been received (HF only) | Y | | |
| [ETSI EN 300 338-2, i] | Λ | | |
| the history of at least the received DSC messages reveals that the following | Y | | |
| have been received, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is acknowledged , | X | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | Λ | | |
| You can speak to the EUT from the TE, | Y | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

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b) Reset the EUT to standby. From the TE send a distress relay acknowledgement (Distress relay ACK All ships FEC) and verify that:

TestV12H_0047.scn

| Distress relay alert All ships acknowledgement FEC | | | |
|--|-----|----------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed (the elapsed time since | Х | | |
| acknowledgement), | | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, <u>relay acknowledgement</u>), | X | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [E1S1 EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [E151 EN 300 338-2, n.o.5.3,K] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [E151 EN 500 556-2, II] The frequencies on witch the DSC measures have been received (UE only) | V | | |
| The frequencies on which the DSC messages have been received (HF only) | Х | | |
| [EISIEN 300 336-2, 1] the history of at least the manipud DSC measures reveals that the following | | | |
| have been received | X | | |
| [ETSUEN 300 338 2 n 6 5 3 k] | | | |
| the operator is informed that the procedure is acknowledged | V | | |
| IETSI EN 300 338-2 n 6 5 3 1(3)] | Χ | | |
| You can send telev to the FUT from the TF | v | | |
| IFTSI FN 300 338-2 n 6 5 6] | ~ | | |
| You can send telex to the TE from the FUT | v | <u> </u> | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |
| L | | 1 | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

6.6. Received distress automated procedure started by an individually addressed distress relay test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0048 | Is not required |

TestV12H_0048 - Distress relay to Individual station RT undesignated MMSI EUT is 273000000

Definition

This test checks the set up of the automated procedure when the first received distress DSC message of a distress event is a distress relay addressed only to the station.

Method of measurement and required results

Reset the EUT to standby. From the TE send a distress relay addressed to the EUT.. Verify that:

| | DSC-TEST |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

| ItemResultYESNOthe EUT sounds the two tone alarm, [ETSI EN 300 338-2, n.6.5.5]Xthe reason for and means to silence the alarm is displayed, [ETSI EN 300 338-2, n.6.2.3]Xthe alarm can only be silenced manually, [ETSI EN 300 338-2, n.6.5.5]X | Com- ment |
|--|--------------|
| YESNOthe EUT sounds the two tone alarm, [ETSI EN 300 338-2, n.6.5.5]Xthe reason for and means to silence the alarm is displayed, [ETSI EN 300 338-2, n.6.2.3]Xthe alarm can only be silenced manually, [ETSI EN 300 338-2, n.6.5.5]X | |
| the EU1 sounds the two tone alarm, X [ETSI EN 300 338-2, n.6.5.5] X the reason for and means to silence the alarm is displayed, X [ETSI EN 300 338-2, n.6.2.3] X the alarm can only be silenced manually, X [ETSI EN 300 338-2, n.6.5.5] X | |
| [E1SI EN 300 338-2, n.6.5.5] the reason for and means to silence the alarm is displayed, [ETSI EN 300 338-2, n.6.2.3] the alarm can only be silenced manually, [ETSI EN 300 338-2, n.6.5.5] | |
| the reason for and means to silence the alarm is displayed, X [ETSI EN 300 338-2, n.6.2.3] X the alarm can only be silenced manually, X [ETSI EN 300 338-2, n.6.5.5] X | |
| [ETSI EN 300 338-2, n.6.2.5] the alarm can only be silenced manually, [ETSI EN 300 338-2, n.6.5.5] | |
| [ETSI EN 300 338-2, n.6.5.5] | |
| [E131 EN 500 538-2, II.0.5.5] | |
| the fact one is encoded in receiving a distance is displayed. | |
| IETSI EN 200 238 2 n 6 5 3 al | |
| [E151 EN 500 556-2,II.0.5.5,d] | |
| IETSI EN 300 338-2 n 6 5 3 bl | |
| indicate whether the procedure is on hold or is active is displayed V | |
| IETSI EN 300 338-2 n 6 5 3 dl | |
| the latest distress information (MMSL of vessel in distress nature of distress V | |
| position, time of position, comms) is displayed and correct. | |
| [ETSI EN 300 338-2.n.6.5.3.e] | |
| the position contains the enhanced resolution data | |
| [ETSI EN 300 338-2,n.6.5.3,e] | |
| the type (alert, relay , alert acknowledgement, relay acknowledgement), sender, X | |
| and intended destination (individual, area, all ships) of the latest received DSC | |
| message is displayed; | |
| [ETSI EN 300 338-2, n.6.5.3,f] | |
| The frequency of subsequent communication is displayed (HF only) | |
| [ETSI EN 300 338-2, h] | |
| The frequencies on witch the DSC messages have been received (HF only) | |
| [ETSI EN 300 338-2, i] | |
| the history of at least the received DSC messages reveals that the following X | |
| have been received, | |
| [ETSI EN 300 338-2, n.6.5.3,k] | |
| the operator is informed that the procedure is waiting to send X | |
| acknowledgement, | |
| [ETSI EN 300 338-2, n.6.5.3,l(1)] | |
| You can speak to the EUT from the TE, | |
| [E151 EN 500 558-2, n.0.5.0] | |
| $\begin{bmatrix} 1 \text{ Out can speak to the LE from the EUT,} \\ \begin{bmatrix} \text{ETSUEN 200.238.2. n.6.5.6} \end{bmatrix}$ | |

| The equipment meets the requirements (yes / no /n.a) | y |
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| | |

yes

| DSC-TEST |
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| StPetersburg, Russia |

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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.7. Received distress automated procedure started by the sending of a DROBOSE test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3]

The receiving distress automated procedure is initiated either by the reception of the first multi-station distress DSC message of a distress event, the reception of the first individually addressed distress DSC message of a distress event, or the sending of a DROBOSE. [ETSI EN 300 338-2, n.6.5.1]

Definition

This test checks the set up of the automated procedure when the first distress DSC message of a distress event is a sending by EUT a DROBOSE.

Method of measurement and required results

a) Reset the EUT to standby. From the EUT send a distress relay on behalf of someone else addressed to Individual station. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

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Select option 'send DROBOSE'. Verify that:

| ltem | | Result | |
|--|-----|--------|--------|
| Opion DROBOSE Distress relay | YES | NO | ment |
| the option to send a individual distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a Geographic area distress relay available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9,b] | | | |
| the default shall be a individual distress relay | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | ~ | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default format shall be individual | Х | | |
| [ETSI EN 300 338-2, A.2] | 23 | | |
| the default vessel in distress MMSI shall be Unknown | Х | | |
| [ETSI EN 300 338-2, A.2] | 23 | | |
| the default Nature shall be a Undesignated | Х | | |
| [ETSI EN 300 338-2, A.2] | 2 1 | | |
| the default Distress Communication shall be a Phone | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default Position and UTC shall be Unknown | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| The default destination MMSI shall be some invalid indicator | Х | | NOTE 1 |
| [ETSI EN 300 338-2, A.2] | | | |
| The option to select the frequency on which the DSC message will be sent | Х | | |
| | | | |
| The MMSI of the vessel in distress, format, nature and position, <subsequent< td=""><td>Х</td><td></td><td></td></subsequent<> | Х | | |
| communications> shall be reset when the operator selects the option to | | | |
| compose the DROBOSE at some later time. | | | |
| [ETSI EN 300 338-2, A.2] | | | |

NOTE 1 EUT uses empty field.

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From EUT send a individual DROBOSE. Verify that:

| DROBOSE Destress Relay to Individual Station | | | |
|---|-----|------|------|
| Item | Res | sult | Com- |
| | YES | NO | ment |
| the EUT does NOT sound any alarm. | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | ^ | | |
| the fact one is engaged in received a distress automated procedure is displayed: | V | | |
| [ETSI EN 300 338-2 n 6 5 3 a] | ^ | | |
| the elansed time since the procedure started is displayed | v | | |
| IFTSLEN 300 338-2 n 6 5 3 bl | ^ | | |
| indicate whether the procedure is on hold or is active is displayed | v | | |
| IETSLEN 300 338.2 n 6.5.3 dl | X | | |
| the latest distrass information (MMSL of vascal in distrass nature of distrass | V | | |
| neities time of position commo) is displayed and correct | X | | |
| IETSI EN 200 228 2 m 6 5 2 al | | | |
| [E151 EN 500 558-2,ii.o.5.5,e] | N | | |
| the position contains the enhanced resolution data | Х | | |
| [E1SI EN 300 338-2,n.o.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | X | | |
| and intended destination (individual, area, all ships) of the latest received | | | |
| (sending) DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of sending DROBOSE is displayed | X | | |
| | | | |
| the history of at least the received DSC messages reveals that the following | N/A | N/A | N/A |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for acknowledgement , | X | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | 21 | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | ~ | | |
| the elapsed time are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | ~ | | |
| the stage are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | X | | 1 |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Y | | 1 |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |

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b) Reset the EUT to standby. From the EUT send a distress relay on behalf of someone else addressed to Geographic area. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

Select option 'send DROBOSE'. Verify that:

| ltem | Res | ult | Com- |
|--|-----|-----|------|
| Opion DROBOSE Distress relay | YES | NO | ment |
| the option to send a individual distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a Geographic area distress relay available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | 23 | | |
| [ETSI EN 300 338-2,n.6.5.9,b] | | | |
| the default shall be a individual distress relay | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default format shall be individual | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default vessel in distress MMSI shall be Unknown | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default Nature shall be a Undesignated | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default Distress Communication shall be a Phone | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| the default Position and UTC shall be Unknown | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| The default destination MMSI shall be some invalid indicator | Х | | |
| [ETSI EN 300 338-2, A.2] | | | |
| The MMSI of the vessel in distress, format, nature and position, <distress< td=""><td>Х</td><td></td><td></td></distress<> | Х | | |
| communication> shall be reset when the operator selects the option to compose | | | |
| the DROBOSE at some later time. | | | |
| [ETSI EN 300 338-2, A.2] | | | |
| Upon selection of the option to send a non-individually addressed relay a | Χ | | |
| warning is provided, | | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.2] | | | |

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From EUT send DROBOSE to Geographic area. Verify that:

| DROBOSE Destress Relay to Geographic area | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT does NOT sound any alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in received a distress automated procedure is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the elapsed time since the procedure started is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| indicate whether the procedure is on hold or is active is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | X | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received | | | |
| (sending) DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | N/A | N/A | N/A |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | X | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [E1SI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, (ETSLEN 200, 228, 2, n, 6, 5, 2, -(5)) | X | | |
| [ETSTEN 500 558-2, II.O.S.2,g(5)] | N | | |
| The option to terminate the procedure is available, $[ETSI EN 200.228, 2, n, 6, 5, 2, \alpha(6)]$ | X | | |
| [ETSTEN 500 556-2,II.0.5.2,g(0)] | v | | |
| [ETSI EN 300 338 2 n 6 5 3] | X | | |
| the stage are visible at top level | v | | |
| [FTSI FN 300 338.2 n 6 5 3] | X | | |
| the valid operator options are visible at top level | v | | |
| [FTSI FN 300 338.2 n 6 5 3] | X | | |
| [ETSI EN 300 338-2 n 6 5 3 i] | | | |
| [[1101 11, 500 550 2, h.0.5.5,]] | | | |

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| DROBOSE Destress Relay to Geographic area <continue></continue> | | | |
|---|-----|-----|------|
| Item | Res | ult | Com- |
| | YES | NO | ment |
| The tuning to the subsequent communication frequencies channel shall occur automatically. | X | | |
| You can speak to the EUT from the TE, [ETSI EN 300 338-2, n.6.5.6] | X | | |
| You can speak to the TE from the EUT, [ETSI EN 300 338-2, n.6.5.6] | X | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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6.8. Distress event self cancel recognition receiving test

[ETSI EN 300 338-2, n.6.5.2] [ETSI EN 300 338-2, n.6.5.3] [ETSI EN 300 338-2, n.6.5.8]

Definition

This test checks that the automated procedure recognizes the distress event self cancel (a distress alert self cancel is a distress alert acknowledgement sent by the vessel in distress) and that the automated timeout option functions properly.

| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0049 | Is not required |

00:00 Distress call 03:00 Self cancel

Method of measurement and required results

Reset the EUT into standby. Send the default distress alert attempt from the TE. Silence the alarms on the EUT. When the TE is finished sending the distress alert attempt, send the self addressed distress alert acknowledgement and verify that:

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| Item | | sult | Com- |
|---|-----|------|------|
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the elapsed time since the procedure started is displayed (the elapsed time since | Х | | |
| acknowledgement), | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 21 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | 21 | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | 21 | | |
| the type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | - | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is <u>acknowledged</u> " <u>Cancelled</u> ", | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| [ETSI EN 300 338-2, n.6.5.8] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes | |
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6.9. Handling received DSC messages pertinent to the automatic procedure

[ETSI EN 300 338-2, n.6.5.4] [ETSI EN 300 338-2, n.6.5.5]

DSC messages pertinent to the station but not the procedure shall be allocated to the appropriate automated procedure or initiate their own automated procedure on hold.

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time). However, individually addressed DSC messages shall initiate their own automated procedures on hold if engaged in a received distress procedure handling multi-station (for example, all ships, area) addressed DSC messages or vice versa.

[ETSI EN 300 338-2, n.6.5.4]

In a given procedure, only the reception of the initial DSC message and the DSC message that <u>first acknowledges</u> the procedure shall sound an alarm unique to the DSC message type (with the two-tone sound reserved for the distress alert or relay if it initiates the procedure) which shall be manually silenced.

All subsequent examples of the DSC messages shall only sound <u>the self terminating alarm</u>. [ETSI EN 300 338-2, n.6.5.5]

| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0050 | Is not required |

00:00 Initiated Distress call

05:00 Distress call for same distress event but new distress coordinates

- 10:00 Distress relay to All ships for same distress event but new distress coordinates
- 15:00 Distress relay to Individual station EUT 273000000 (new distress coordinates) (Channel 2)
- 20:00 Distress relay to All ships for same distress event but new distress coordinates (MMSI ship in distress is unknown)

Channel 1: 8414.5 kHz Channel 2: 2187.5 kHz.
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a) Reset tht EUT into Standby. From TE send Distress call on the 8 MHz. Verify that the automated procedure is initiated. Silence the alarm manually.

TestV12H_0050.scn 00:00

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, 1] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [EISIEN 300 338-2, II.0.5.3,K] | | | |
| the operator is informed that the procedure is <u>waiting for an</u> | Х | | |
| $\frac{a \text{ cknowledgement}}{(ETSI EN 200.228.2 m 6.5.21(2))}$ | | | |
| [ETSTEN 500 556-2, II.0.5.5,I(5)] The tuning to the subsequent communication frequencies on the 2 MHz shall | V | | |
| I ne tuning to the subsequent communication frequencies on the 8 MHz shall | | | |
| IFTSI FN 300 338-2 n 6 5 61 | | | |
| Vou can speak to the EUT from the TE on the 8 MHz | | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 8 MHz. | V | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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b) Change the position information (position and UTC time). From TE send the same distress event Distress call. Verify that:

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| Item | | ult | Com- |
|---|-----|-----|------|
| Distress call (new distress coordinates and time) | YES | NO | ment |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| The reason for and means to silence the self-terminating alarm displayed, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.5] | 23 | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | 23 | | |
| Elapsed time sinc the procedure started should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 23 | | |
| The type (alert, relay, alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, all ships) of the latest | 23 | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Χ | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | 23 | | |
| The option to send a distress alert acknowledgement is available (MF), | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | 2.2 | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | 23 | | |
| the stage are visible at top level (waiting for acknowledgement), | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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c) Change the position information (position and UTC time) and send from TE the DSC distress relay to All ships for same distress event.

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| Item | Res | ult | Com- |
|---|-----|-----|------|
| Distress relay to All ships | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc the procedure started should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, $(5.2 - (1))$ | Х | | |
| [ETSTEN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available, [ETELEN 200, 229, 2 + (5, 2, -(2))] | Х | | |
| [E 151 EN 500 538-2, n.0.3, 2, g(2)] | | | |
| [EISIEN 500 536-2,11.0.3.9] the entire to conduct distance relay color color and compare is NOT evolution | | | |
| The option to send a distress relay acknowledgement is <u>NOT</u> available, [ETSI EN 200.229.2 n.6.5.2 a(2)] | X | | |
| [E151 EN 500 536-2, II.0.3.2, g(5)] [ETSLEN 300 338 2 n 6 5 9] | | | |
| the option to activate or place the procedure on hold is available | V | | |
| [ETSLEN 300 338-2 n 6.5.2 $g(5)$] | X | | |
| the option to terminate the procedure is available | V | | |
| [ETSLEN 300 338-2 n 6 5 2 $\sigma(6)$] | ^ | | |
| the elapsed time are visible at top level | V | | |
| [ETSI EN 300 338-2. n.6.5.3] | ^ | | |
| the stage are visible at top level (waiting for acknowledgement), | Y | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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| npany: | Thrane&Thrane | |
| ipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |

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d) Change the position information (position and UTC time) and send on the 2 MHz from TE the DSC distress relay to <u>Individual station</u> (MMSI is EUT) for same distress event. Verify that:

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time). However, individually addressed DSC messages shall initiate their own automated procedures on hold if engaged in a received distress procedure handling multi-station (for example, all ships, area) addressed DSC messages or vice versa.

[ETSI EN 300 338-2, n. 6.5.4]

NOTE: The DSC distress relay to *Individual station* does not pertinent to the current automatic procedure initiated by reception of distress call.

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| Individual Distress relay alert | | | | |
|---|--------|----------|------|--|
| Item | Result | | Com- | |
| | YES | NO | ment | |
| the EUT sounds the two tone alarm, | X | | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | | |
| the reason for and means to silence the alarm is displayed, | X | | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | | |
| the alarm can only be silenced manually, | X | | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | | |
| Initiate their own automated procedures on hold | Y | | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | | |
| The position of the distress information should not be changed. | Y | | | |
| [ETSI EN 300 338-2, n.6,5,5] | ~ | | | |
| Elapsed time sinc the procedure started should not be changed | V | | | |
| ETSI EN 300 338-2 n 6 5 5 | ^ | | | |
| The type (alert relay alert acknowledgement relay acknowledgement) | V | | | |
| sender and intended destination (individual area all shins) of the latest | ^ | | | |
| received DSC message is displayed (should not be changed): | | | | |
| [FTSI FN 300 338-2 n 6 5 3 f] | | | | |
| The ability to display information about the history of at least the received DSC | v | | | |
| messages pertipent to the procedure. | ~ | | | |
| IFTSI FN 300 338-2 n 6 5 3 h] | | | | |
| The option to send a distress relay is NOT available | v | | | |
| [FTSI EN 300 338-2 n 6 5 2 $\sigma(1)$] | Χ | | | |
| The option to send a distress alert acknowledgement is NOT available | v | | | |
| [ETSI EN 300 338-2 n 6 5 2 $\sigma(2)$] | Χ | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | | |
| the option to send a distrass relay acknowledgement is NOT available | v | | | |
| [ETSLEN 300 338 2 n 6.5.2 g(3)] | X | | | |
| [ETSI EN 300 338-2 n 6 5 9] | | | | |
| the option to activate or place the procedure on hold is available | v | | | |
| [ETSI EN 300 338-2 $n 6.5.2 g(5)$] | Χ | | | |
| the option to terminate the procedure is available | V | | | |
| [ETSI EN 300 338-2 n 6 5 2 $\sigma(6)$] | Χ | | | |
| the alansed time are visible at top level | v | | | |
| $[\text{FTSI FN } 300 \; 338-2 \; \text{ n } 65 \; 3]$ | Χ | | | |
| the stage are visible at top level (waiting for acknowledgement) | v | | | |
| [ETSI EN 300 338-2 n 6 5 3] | Χ | | | |
| the valid operator options are visible at top level | v | | | |
| IFTSI FN 300 338-2 n 6 5 31 | Χ | | | |
| [ETSI EN 300 338-2 n 6 5 3 i] | | | | |
| The frequency of subsequent communication is displayed (HE only) | v | | | |
| [ETSI EN 300 338-2. h] | Λ | | | |
| The frequencies on witch the DSC messages have been received (HE only) | v | <u> </u> | | |
| [ETSI EN 300 338-2, i] | Λ | | | |
| the history of at least the received DSC messages reveals that the following | V | | | |
| have been received. | ~ | | | |
| [ETSI EN 300 338-2, n.6.5.3.k] | | | | |

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| Date: | September 2010 – January 2011 | | |

| Individual Distress relay alert <continue></continue> | | | |
|---|-----------|----|------|
| Item | Result Co | | Com- |
| | YES | NO | ment |
| The tuning to the subsequent communication frequencies on the 2 MHz shall | X | | |
| NOT occur upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 8 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 8 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

f) Change the position information (position and UTC time) and send from TE the DSC distress relay to All (MMSI ship in distress is unknown). Verify that:

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time).

[ETSI EN 300 338-2, n. 6.5.4]

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| 20 | 00 | |
|----|-----|--|
| 20 | .00 | |

| Distress relay to All ships (MMSI is unknown) YES NO ment (new distress coordinates and time) | |
|--|---|
| (new distress coordinates and time) | Distress relay to All ships (MMSI is unknown) |
| | (new distress coordinates and time) |
| the EUT sounds the two tone alarm | UT sounds the two tone alarm |
| [ETSI EN 300 338-2, n.6.5.5] | I EN 300 338-2, n.6.5.5] |
| The reason for and means to silence the alarm displayed, | eason for and means to silence the alarm displayed, |
| [ETSI EN 300 338-2, n.6.5.5] | I EN 300 338-2, n.6.5.5] |
| Initiate their own automated procedures on hold X | te their own automated procedures on hold |
| [ETSI EN 300 338-2, n.6.5.5] | I EN 300 338-2, n.6.5.5] |
| [ETSI EN 300 338-2, n.6.9.2,b] | I EN 300 338-2, n.6.9.2,b] |
| The type (alert, relay , alert acknowledgement, relay acknowledgement), | ype (alert, relay , alert acknowledgement, relay acknowledgement), |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | r, and intended destination (individual, area, <u>all ships</u>) of the latest |
| received DSC message is displayed | ved DSC message is displayed |
| [ETSI EN 300 338-2, n.6.5.3,e] | I EN 300 338-2, n.6.5.3,e] |
| The ability to display information about the history of at least the received DSC X | bility to display information about the history of at least the received DSC |
| messages pertinent to the procedure; | ages pertinent to the procedure; |
| [ETSI EN 300 338-2, n. 6.5.3, h] | I EN 300 338-2, n. 6.5.3, h] |
| The option to send a distress relay is available, | option to send a distress relay is available, |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | I EN 300 338-2,n.6.5.2,g(1)] |
| The option to send a distress alert acknowledgement is NOT available, | pption to send a distress alert acknowledgement is NOT available, |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | I EN 300 338-2,n.6.5.2,g(2)] |
| [ETSI EN 300 338-2,n.6.5.9] | I EN 300 338-2,n.6.5.9] |
| the option to send a distress relay acknowledgement is NOT available, | ption to send a distress relay acknowledgement is <u>NOT</u> available, |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | I EN 300 338-2,n.6.5.2,g(3)] |
| [ETSI EN 300 338-2,n.6.5.9] | I EN 300 338-2,n.6.5.9] |
| the option to activate or place the procedure on hold is available, | ption to activate or place the procedure on hold is available, |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | I EN 300 338-2, n.6.5.2,g(5)] |
| the option to terminate the procedure is available, | ption to terminate the procedure is available, |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | I EN 300 338-2,n.6.5.2,g(6)] |
| the elapsed time are visible at top level, X | apsed time are visible at top level, |
| [ETSI EN 300 338-2, n.6.5.3] | I EN 300 338-2, n.6.5.3] |
| the stage are visible at top level (waiting for acknowledgement), | age are visible at top level (waiting for acknowledgement), |
| [ETSI EN 300 338-2, n.6.5.3] | I EN 300 338-2, n.6.5.3] |
| the valid operator options are visible at top level, | alid operator options are visible at top level, |
| [ETSI EN 300 338-2, n.6.5.3] | I EN 300 338-2, n.6.5.3] |
| [ETSI EN 300 338-2, n.6.5.3,j] | I EN 300 338-2, n.6.5.3,j] |
| You can speak to the EUT from the TE on the 8 MHz, | can speak to the EUT from the TE on the 8 MHz, |
| [ETSI EN 300 338-2, n.6.5.6] | I EN 300 338-2, n.6.5.6] |
| You can speak to the TE from the EUT on the 8 MHz, | can speak to the TE from the EUT on the 8 MHz, |
| [ETSI EN 300 338-2, n.6.5.6] | I EN 300 338-2, n.6.5.6] |

(*) It is contradictory test

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g) **Reset the EUT into Standby**. Send on the 2 MHz from TE the DSC distress relay to All ships (MMSI ship in distress is unknown). Verify that:

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time).

[ETSI EN 300 338-2, n. 6.5.4]

TestV12H_0153.scn 00:00

| Item | | Result | |
|--|-----|--------|------|
| Destress Relay to All ships RT (MMSI ship in distress is unknown) | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress- UNKNOWN, nature | Х | | |
| of distress, position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the position contains the enhanced resolution data | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | X | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [E151 EN 300 338-2, n.0.5.3,1(3)] | | | |
| You can speak to the EU1 from the 1E on the 2 MHz, $ETSUEN 200.228.2 \times (5.6)$ | Х | | |
| [E151 EN 500 558-2, n.0.5.0] | 17 | | |
| You can speak to the 1E from the EU1 on the 2 MHz, $ETSUEN 200.228.2 \times (5.6)$ | Х | | |
| [E151 EN 300 338-2, n.6.5.6] | | | |

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h) Send from TE Distress call with new distress event (new MMSI ship in distress and Nature). Verify that:

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| Item | | Result | |
|---|-----|--------|------|
| Distress call | YES | NO | ment |
| (new MMSI ship in distress and Nature) | | | |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | 21 | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | 21 | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an acknowledgement, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| the option to send a distress relay is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the option to send a distress alert acknowledgement is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.9.2)] | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.9.2] | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the elapsed time, stage, valid operator options, are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |

| RES Laboratory StPetersburg, Russia 04.02.2011 | |
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| | |
| Company: Thrane&Thrane | |
| Equipment Under Test: SAILOR 6320 250W MF/HF DSC Class A | |
| Date: September 2010 – January 2011 | |

Select current active automated procedure. Verify that:

| Item | | sult | Com- |
|--|-----|------|------|
| (Initiate Destress Relay Unknown ship in distress) | YES | NO | ment |
| Active state of procedure is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | 23 | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| DSC-TEST |
|-----------------------|
| RES Laboratory |
| StPetersburg, Russia |

04.02.2011

| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

i) Change the position information (position and UTC time). From TE send the same distress event for initiate procedure (Nature and subsequent communication) Distress call. Verify that:

TestV12H_0153.scn

04:00

| Item(*) | | Result | |
|--|---|--------|------|
| Distress call | | NO | ment |
| (the same Nature and subsequent communication and new | | | |
| position) | | | |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| Elapsed time sinc the procedure started should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (<u>alert</u> , relay, alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available (MF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

(*) It is contradictory test

| DSC-TEST |
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| RES Laboratory |
| StPetersburg, Russia |

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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

j) Change the position information (position and UTC time) and the MMSI ship in distress. From TE send the same distress event (Nature and subsequent communication) Distress call. Verify that:

TestV12H_0153.scn

06:00

| ltem(*) | | Result | |
|--|-----|--------|------|
| Distress call | YES | NO | ment |
| (the same Nature and subsequent communication and new | | | |
| position and MMSI ship in distress) | | | |
| The alarm self terminates, | X | | |
| [EISIEN 300 338-2, n.o.5.5] | | | |
| [ETSI EN 300 338-2, n.6.5.5] | X | | |
| The changed position is displayed in the distress information on the EUT. [ETSI EN 300 338-2, n.6.5.3,e] | X | | |
| Elapsed time sinc the procedure started should not be changed, | Х | | |
| The type (alert, relay, alert acknowledgement, relay acknowledgement), sender, and intended destination (individual, area, all ships) of the latest received DSC message is displayed; | X | | |
| [EISIEN 500 338-2, n.6.5.3,I] The shility to diamlay information shout the history of at least the received DSC. | | | |
| messages pertinent to the procedure; [ETSI EN 300 338-2, n, 6.5.3, h] | X | | |
| The option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| The option to send a distress alert acknowledgement is available (MF), [ETSI EN 300 338-2,n.6.5.2,g(2)] [ETSI EN 300 338-2,n.6.5.9] | X | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, [ETSI EN 300 338-2,n.6.5.2,g(3)] [ETSI EN 300 338-2,n.6.5.9] | Х | | |
| the option to activate or place the procedure on hold is available, [ETSI EN 300 338-2, n.6.5.2,g(5)] | Х | | |
| the option to terminate the procedure is available, [ETSI EN 300 338-2,n.6.5.2,g(6)] | X | | |
| the elapsed time are visible at top level, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (waiting for acknowledgement), [ETSI EN 300 338-2, n.6.5.3] | X | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

(*) It is contradictory test

| | DSC-TEST | N 01.11 |
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| | RES Laboratory StPetersburg, Russia | 04.02.2011 |
| Company: | Thrane& Thrane | |
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Select current active automated procedure. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress Relay Unknown ship in distress) | YES | NO | ment |
| Active state of procedure is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | 23 | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 23 | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | 23 | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | 23 | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Send on the 2 MHz from TE the DSC distress relay to All ships (MMSI ship in distress is unknown the same Nature of disress and Subsequent communication) and new position information. Verify that:

TestV12H_0153.scn

| 08: | 00 |
|-----|----|
| | |

| Item | | ult | Com- |
|--|-----|-----|------|
| Destress Relay to All ships RT (MMSI ship in distress is unknown) | YES | NO | ment |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information of the initiated | Х | | |
| procedure. | 2. | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc the procedure started should not be changed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

6.10. Handling received DSC messages pertinent to the station, but not pertinent to the automatic procedure test

[ETSI EN 300 338-2, n.6.5.4]

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event.

[ETSI EN 300 338-2, n.6.5.4]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0051 | TestH_0N0E |

00:00 Initiated Distress call MMSI ship in distress is 273000001

05:00 Distress call new distress event MMSI ship in distress is 273000002 10:00 Initiated Distress call MMSI ship in distress is 273000001 but new distress coordinates and Nature of distress

15:00 Distress relay to All ships MMSI ship in distress is 273000003

20:00 Distress ACK for MMSI ship in distress is 273000004

25:00 Urgency Geographic area RT call

30:00 Safety Individual RT call to EUT

Channel 1: 4207.5 kHz

DSC-TEST RES Laboratory St.-Petersburg, Russia N 01.11

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| Company: | Thrane&Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

a) Reset the EUT into Standby. From TE send Distress call. Verify that the automated procedure is initiated. Silence the alarm manually.

TestV12H_0051.scn 00:00

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, 1] | | | |
| the operator is informed that the procedure is <u>waiting for an</u> | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,f(3)] | | | |
| The tuning to the subsequent communication frequencies on the 4 MHz shall | Х | | |
| occur automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | | | |
| [E151 EN 500 558-2, n.6.5.6] | | | |
| You can speak to the 1E from the EU1, | Х | | |
| [E1SI EN 300 338-2, n.6.5.6] | | | |

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| Date: | September 2010 – January 2011 | |

b) Send from TE Distress call for new distrtess event (change MMSI ship in distress). Verify that:

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| Distress call (New MMSI ship in distress) | | | |
|---|------|--------|--|
| | | Result | |
| Item | | YES NO | |
| | . 20 | | |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [E1SI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all snips) of the fatest received DSC | | | |
| $[\text{ETSLEN 300 338}_2 \text{ n 653 fl}]$ | | | |
| the history of at least the received DSC messages reveals that the following | v | | |
| have been received | Χ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| The frequency of subsequent communication is displayed (HF only) | Y | | |
| [ETSI EN 300 338-2, h] | Λ | | |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [ETSI EN 300 338-2, i] | Λ | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | |
| [E1SIEN 300 338-2,n.6.9.2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Χ | | |
| [ETSTEN 500 556-2, II. 0.9.2] the ention to estivate or place the proceedure on hold is evoluble | V | | |
| IFTSI EN 300 338-2 n 6 9 21 | X | | |
| the option to terminate the procedure is available | v | | |
| [ETSI EN 300 338-2.n.6.9.2] | ~ | | |
| the elapsed time, stage, valid operator options, are visible at top level. | Y | | |
| [ETSI EN 300 338-2, n.6.5.3] | ~ | | |
| You can speak to the EUT from the TE on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | - ` | | |

| | 1 | DSC-TEST | N | 01.11 |
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| | - <u></u> | RES Laboratory StPetersburg, Russia | 04 | 4.02.2011 |
| Company: | Thrane&Thre | ane | | |
| Equipment Under Test: | SAILOR 632 | 0 250W MF/HF DSC Class A | | |
| Date: | September 20 | 10 – January 2011 | | |

Select current active automated procedure. Verify that:

| Item | Res | sult | Com- |
|--|-----|------|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Χ | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | 23 | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Select new on hold procedure and select option 'terminate'.

| Ν | 01 | .1 | 1 |
|---|----|----|---|
| | | | |

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| Date: | September 2010 – January 2011 | |

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c) Send initiate Disttress call but new Nature of distress and distress coordinates. It is new distress event. Verify that:

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| Item | | Result | |
|--|----------|--------|------|
| Distress call for initiate MMSI | YES | NO | ment |
| (new Nature of distress) | | | |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | X | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [ETSI EN 300 338-2, 1] | | | |
| the history of at least the received DSC messages reveals that the following | X | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an acknowledgement, | X | | |
| [E1S1EN 300 338-2, n.6.5.3,f(3)] | | | |
| the option to send a distress relay is NOT available, | X | | |
| [ETSTEN 300 338-2, n. 6. 9. 2] | | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | |
| [E151 EN 500 556-2, II.0.9.2)] the entire to cond a distance relay colorowind compart is NOT evoluble | V | | |
| IETSI EN 200 228 2 n 6 0 21 | X | | |
| [E131 EN 500 556-2, II.0.9.2] the ention to estivate or place the precedure on hold is evoluble | V | | |
| IETSI EN 300 338 2 n 6 0 21 | X | | |
| [LTSTEN 500 556-2, II.0.7.2] the option to terminate the proceedure is available | V | | |
| IETSI EN 300 338 2 n 6 0 2 | X | | |
| the elanced time stage valid operator options are visible at top level | v | | |
| IETSI EN 300 338-2 n 6 5 3] | × | | |
| You can speak to the EUT from the TE on the 4 MHz | v | | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |
| You can speak to the TE from the EUT on the 4 MHz. | Y | | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |

| | DSC-TEST | N 01.11 |
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| | RES Laboratory StPetersburg, Russia | 04.02.2011 |
| Company: | Thrane& Thrane | |
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| | | |

 Date:
 Sallok 0320 250W MFITF DSC Class A

 Date:
 September 2010 – January 2011

Select current active automated procedure. Verify that:

| Item | Res | ult | Com- |
|--|-----|-----|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 23 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Select new on hold procedure and select option 'terminate'.

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RES Laboratory

d) Send from TE Distress relay to All ships with new distress event (new MMSI ship in distress). Verify that:

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| Item | Res | sult | Com- |
|--|-----|------|------|
| Distress relay to All ships | YES | NO | ment |
| (new MMSI ship in distress) | | | |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | Х | | |
| and intended destination (individual, area, all ships) of the latest received DSC | | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is waiting for an acknowledgement, | Х | | |
| [E1S1EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is NOT available, | Х | | |
| [E1S1EN 300 338-2, n. 6. 9. 2] | | | |
| the option to send a distress alert acknowledgement is NOT available, | Х | | |
| [E151 EN 300 558-2, fl. 0.9.2)] | | | |
| The option to send a distress relay acknowledgement is NOT available, $[ETSLEN 200, 228, 2, n \in 0, 2]$ | X | | |
| [E151 EN 500 556-2,11.0.9.2] | V | | |
| I I I I I I I I I I I I I I I I I I I | X | | |
| [ETSTEN 500 556-2, II.0.9.2] the option to terminate the proceedure is evailable | V | | |
| $\begin{bmatrix} \text{resphere to terminate the procedure is available,} \\ \begin{bmatrix} \text{resp} \\ 0 \end{bmatrix} \begin{bmatrix} \text{resp} \\ 0 \end{bmatrix} \begin{bmatrix} \text{resp} \\ 0 \end{bmatrix}$ | X | | |
| [E151 EN 500 556-2, II.0.9.2] | V | | |
| IETSLEN 300 338.2 n 6.5.3 | X | | |
| You can sneak to the FUT from the TE on the 4 MHz | v | | |
| [FTSI FN 300 338-2 n 6 5 6] | Χ | | |
| You can speak to the TE from the EUT on the 4 MHz | v | 1 | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |

| | Λ | DSC-TEST | N 01.11 |
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| | ~ <u>/</u> /_ | RES Laboratory StPetersburg, Russia | 04.02.2011 |
| Company: | Thrane&T | <i>`hrane</i> | |
| Equipment Under Test: | SAILOR 6 | 320 250W ME/HE DSC Class A | |

| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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| | | |

Select current active automated procedure. Verify that:

| Item | Res | ult | Com- |
|--|-----|-----|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Χ | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Select new on hold procedure and select option 'terminate'.

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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e) Send from TE distress ACK with new distress event (new MMSI ship in distress). Verify that:

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| Item | Res | sult | Com- |
|---|----------|------|------|
| Distress ACK | YES | NO | ment |
| (new MMSI ship in distress) | | | |
| the EUT sounds the distress ack alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | 24 | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| Initiate their own automated procedures on hold | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), sender, | X | | |
| and intended destination (individual, area, all ships) of the latest received DSC | Λ | | |
| message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The frequency of subsequent communication is displayed (HF only) | Y | | |
| [ETSI EN 300 338-2, h] | ~ | | |
| The frequencies on witch the DSC messages have been received (HF only) | Y | | |
| [ETSI EN 300 338-2, i] | ~ | | |
| the history of at least the received DSC messages reveals that the following | Y | | |
| have been received. | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is acknowledged. | Y | | |
| [ETSI EN 300 338-2, n.6.5.3.1(5)] | ~ | | |
| the option to send a distress relay is NOT available. | Y | | |
| [ETSI EN 300 338-2.n.6.9.2] | ^ | | |
| the option to send a distress alert acknowledgement is NOT available. | Y | | |
| [ETSI EN 300 338-2.n.6.9.2)] | ^ | | |
| the option to send a distress relay acknowledgement is NOT available. | v | | |
| [ETSI EN 300 338-2.n.6.9.2] | ^ | | |
| the option to activate or place the procedure on hold is available. | Y | | |
| [ETSI EN 300 338-2, n.6.9.2] | ^ | | |
| the option to terminate the procedure is available | V | | |
| [ETSI EN 300 338-2.n.6.9.2] | ^ | | |
| the elapsed time, stage, valid operator options, are visible at top level | V | | |
| [ETSI EN 300 338-2, n.6.5.3] | ^ | | |
| You can speak to the EUT from the TE on the 4 MHz | V | | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |
| You can speak to the TE from the EUT on the 4 MHz | V | | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |
| | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Select current active automated procedure. Verify that:

| Item | Res | sult | Com- |
|--|-----|------|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Select new on hold procedure and select option 'terminate'.

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f) Send from TE DSC urgency Geographic area RT. Verify that:

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25:00

| Item | | Result | |
|---|-----|--------|------|
| Urgency Geographic area RT call | YES | NO | ment |
| the EUT sounds the urgency alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| Initiate their own automated procedures on hold | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the information content of the received DSC message is displayed and correct, | Х | | |
| [ETSI EN 300 338-2,n.6.7.3,f] | | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.9.2] | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the elapsed time, stage, valid operator options, are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [ETSI EN 300 338-2, i] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

Select current active automated procedure. Verify that:

| ltem | Res | ult | Com- |
|--|-----|-----|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and not updated, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | 21 | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | - • | | |

Select new on hold procedure and select option 'terminate'.

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g) Send from TE DSC Safety Individual call RT 4125 kHz to EUT. Verify that:

TestV12H_0051.scn 30:00

| Item | Res | ult | Com- |
|---|-----|-----|------|
| Safety Individual call | YES | NO | ment |
| the EUT sounds the Routine alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | |
| Initiate their own automated procedures on hold | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | |
| the information content of the received DSC message is displayed and correct, | Х | | |
| [ETSI EN 300 338-2,n.6.7.3,f] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.9.2] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.9.2] | | | |
| the elapsed time, stage, valid operator options, are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the option to send a Individual acknowledgement is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.9.2)] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| You can speak to the EUT from the TE on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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Select current active automated procedure. Verify that:

| Item | Res | ult | Com- |
|--|-----|-----|------|
| (Initiate Destress alert) | YES | NO | ment |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 23 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and not updated, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| Elapsed time sinc the current procedure started should not updated, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the stage are visible at top level (waiting for acknowledgement), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level and NOT changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | 23 | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | 23 | | |

Select new on hold procedure and select option 'terminate'.

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| The equipment meets the requirements (yes / no /ma) | ycs |

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6.11. Acknowledgement of receiving distress automated procedure test

[ETSI EN 300 338-2 (2010-12), n. 6.5.8] [ETSI EN 300 338-2 (2010-12), n. 6.5.5]

The procedure handling all-ships and area distress DSC messages and distress alerts shall be considered acknowledged upon reception of the first distress alert acknowledgement or all ships distress relay acknowledgement.

A self addressed distress alert acknowledgement sent by the vessel in distress shall be recognized as a self cancel.

The procedure handling a received individually addressed distress relay shall be considered acknowledged when the operator first transmits the corresponding individually addressed distress relay acknowledgement to the sender.

The procedure handling a distress relay sent to an individual station shall be considered acknowledged when the first corresponding individually addressed distress relay acknowledgement is received from that station.

[ETSI EN 300 338-2 (2010-12), n. 6.5.8]

In a given procedure, only the reception of the initial DSC message and the DSC message that first acknowledges the procedure shall sound an alarm unique to the DSC message type (with the two-tone sound reserved for the distress alert or relay if it initiates the procedure) which shall be manually silenced.

All subsequent DSC messages that are pertinent to the procedure shall sound the self terminating alarm.

[ETSI EN 300 338-2 (2010-12),n. 6.5.5]

| The equipment meets the requirements (yes / no /n.a) | n.a |
|--|-----|
|--|-----|

| 1 | DSC-TEST | N 01.11 |
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| Thursday | Thurses | |

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6.12. Acknowledgement of receiving distress automated procedure activated by distress call (RT) test

[ETSI EN 300 338-2 (2010-12), n. 6.5.8] [ETSI EN 300 338-2 (2010-12), n. 6.5.5]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0052 | TestH_0N0E |
| TestV12H_0053 | TestH_0N0E |

TestV12H_0052.scn

00:00 Distress call from MMSI 273000001; 05:00 Distress ACK for ship in distress MMSI 273000001

TestV12H_0053.scn

00:00 Distress call from MMSI 273000001; 05:00 Distress relay All ships ACK for ship in distress MMSI 273000001

Method of measurement and required results

a) Reset the EUT to standby. From the TE send a distress alert. Silence alarm manually.

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TestV12H_0052 00:00

| Item | | Result | |
|---|-----|--------|------|
| (Initiate Destress RT alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 23 | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Χ | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,f(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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From TE send DSC distress acknowledgement. Verify that:

TestV12H_0052.scn

| Distress alert acknowledgement | | | |
|--|-----|--------|------|
| (Default RT) | | | |
| ltem | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (<u>distress ack</u>), | Х | | |
| [E1S1 EN 300 338-2, n.6.5.5] | | | |
| the reason for and means to silence the alarm is displayed, (ETEN EN 200.228.2 m C.2.2) | Х | | |
| [E151 EN 300 338-2, n.6.2.3] | | | |
| [ETSI EN 300 338-2, n.6.5.5] | X | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), | X | | |
| sender, and intended destination (individual, area, all ships) of the latest | Λ | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is " <u>acknowledged</u> ", | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available, | X | | |
| [E1S1EN 300 338-2,n.6.5.2,g(2)] | | | |
| [E151 EN 300 558-2, fl. 0.5.9] | V | | |
| IETSI EN 300 338 2 n 6 5 2 g(2)] | X | | |
| [ETSI EN 300 338 2 n 6 5 0] | | | |
| the option to activate or place the procedure on hold is available | v | | |
| [ETSI EN 300 338-2, n.6.5.2.g(5)] | Χ | | |
| the option to terminate the procedure is available. | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | Λ | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | 7 | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | - • | | |
| You can speak to the EUT from the TE, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.6] | - | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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b) Reset the EUT to standby. From the TE send a distress alert. Silence alarm manually.

TestV12H_0053 00:00

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress RT alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | I |
| the elapsed time since the procedure started is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| Active state of procedure is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | I |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | X | | |
| acknowledgement, | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,f(3)] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | ~ | | |
| the option to send a distress alert acknowledgement is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | ~ | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | Λ | | I |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | Λ | | I |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [ETSI EN 300 338-2, i] | ~ | | |
| The tuning to the subsequent communication frequencies shall occur | X | | |
| automatically upon reception of a distress DSC message. | ~ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | - | | l |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

DSC-TEST

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St.-Petersburg, Russia

From TE send DSC distress relay acknowledgement to all ships (BQ) for current distress event. Verify that:

TestV12H_0053.scn

05:00

| Relay distress alert acknowledgement All Ships (BQ) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), | X | | |
| sender, and intended destination (individual, area, all ships) of the latest | Λ | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | ~ | | |
| the history of at least the received DSC messages reveals that the following | X | | |
| have been received, | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is "acknowledged", | X | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | 21 | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | - | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

The equipment meets the requirements (yes / no /n.a)

yes

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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

6.13. Acknowledgement of receiving distress automated procedure activated by Distress relay (RT) test

[ETSI EN 300 338-2,n.6.5.8] [ITU-R M.493-13, Ann.4, n.3.2.3.4]

| Scenario | Legend |
|-----------------|------------|
| TestV12H_0054 | TestH_0N0E |
| TestV12H_0055 | TestH_0N0E |
| TestV12H_0055-1 | TestH_0N0E |

<u>TestV12H_0054</u>

00:00 Distress relay All ships MMSI ship in distress is 273000001 00:05 Distress ACK for MMSI 273000001

TestV12H_0055

00:00 Distress relay All ships MMSI ship in distress is 273000001 00:05 Distress relay All ships ACK for MMSI 273000001

TestV12H_0055-1

00:00 Distress relay Geographic area MMSI ship in distress is 273000001 00:05 Distress ACK for MMSI 273000001

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| Date: | September 2010 – January 2011 | |

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a) Reset the EUT to standby. From the TE send a distress relay All ships. Silence alarm manually.

TestV12H_0054.scn

| Item | | Result | |
|---|----|--------|------|
| (Initiate Distress relay to All ships (RT)) | | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 23 | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 23 | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | 23 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | 23 | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

From TE send DSC distress acknowledgement for current distress event. Verify that:

TestV12H_0054.scn

| Distress alert acknowledgement (Default RT) | | | |
|---|-----|----|------|
| ltem Result Cr | | | Com- |
| | YES | NO | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack) | v | NO | mont |
| [ETSI EN 300 338-2, n.6.5.5] | ^ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [E151 EN 300 338-2, n.6.5.3,I] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Х | | |
| [E151 EN 500 556-2, II.0.5.5,C] | V | | |
| have been received | X | | |
| $[ETSLEN 300 338_2 n 65.3 k]$ | | | |
| the operator is informed that the procedure is " acknowledged " | v | | |
| [ETSI EN 300 338-2, n.6.5.3.1(5)] | Λ | | |
| the option to send a distress relay is available. | V | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | ^ | | |
| the option to send a distress alert acknowledgement is NOT available, | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,] | | | |
| I ne trequency of subsequent communication is displayed (HF only) | Х | | |
| [EISIEN 300 335-2, II] The frequencies on witch the DSC messages have been received (UE color) | ¥ | | |
| FTSI EN 300 338 2 jl | X | | |
| Vou can speak to the EUT from the TE | V | | |
| [FTSI FN 300 338.2 n 6 5 6] | X | | |
| You can speak to the TE from the EUT | v | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
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| Equipment Under Test: | SAILOR 6320 | 250W MF/HF DSC Class A | |
| Date: | September 201 | 10 – January 2011 | |

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b) Reset the EUT to standby. From the TE send a distress relay alert. Silence alarm manually.

TestV12H_0055.scn

| Item | | Result | |
|--|----|--------|------|
| (Initiate Distress relay to All ships (RT)) | | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [E1SI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The frequency of subsequent communication is displayed (HF only) | | | |
| [E1SI EN 300 338-2, n] | | | |
| The trequencies on witch the DSC messages have been received (HF only) | | | |
| [ETSTEN 300 538-2, 1] The turing to the subscreent communication from such as the ll comm | N/ | | |
| The tuning to the subsequent communication frequencies shall occur | | | |
| automaticany upon reception of a distress DSC message. | | | |
| Vou can speak to the EUT from the TE | V | | |
| [ETSIEN 300 338 2 n 6 5 6] | X | | |
| Vou can speak to the TE from the EUT | v | | |
| [ETSIEN 300 338 2 n 6 5 6] | X | | |
| [E151 EA 500 550-2, II.0.5.0] | | | |
04.02.2011

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ment

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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

DSC-TEST

RES Laboratory

St.-Petersburg, Russia

From TE send DSC distress relay All ships acknowledgement for current distress event (BQ). Verify that:

TestV12H_0055.scn 05:00

Relay distress alert All ships acknowledgement All Ships (BQ) Item Result YES the EUT sounds the distress alert acknowledgement alarm (distress ack), Х [ETSI EN 300 338-2, n.6.5.5] the reason for and means to silence the alarm is displayed, Х [ETSI EN 300 338-2, n.6.2.3] the alarm can only be silenced manually, Х [ETSI EN 300 338-2, n.6.5.5] the latest distress information (MMSI of vessel in distress, nature of distress, Х position, time of position, comms) is displayed, [ETSI EN 300 338-2,n.6.5.3,e] the type (alert, relay, alert acknowledgement, relay acknowledgement), Х sender, and intended destination (individual, area, all ships) of the latest received DSC message is displayed; [ETSI EN 300 338-2, n.6.5.3,f] the elapsed time since acknowledgement (after acknowledgment) is displayed, Х [ETSI EN 300 338-2, n.6.5.3,c] the history of at least the received DSC messages reveals that the following Х have been received, [ETSI EN 300 338-2, n.6.5.3,k] the operator is informed that the procedure is "acknowledged", Х [ETSI EN 300 338-2, n.6.5.3,l(5)] the option to send a distress relay is available, Х [ETSI EN 300 338-2,n.6.5.2,g(1)] the option to send a distress alert acknowledgement is NOT available, Х [ETSI EN 300 338-2,n.6.5.2,g(2)] [ETSI EN 300 338-2,n.6.5.9] the option to send a distress relay acknowledgement is NOT available, Х [ETSI EN 300 338-2,n.6.5.2,g(3)] [ETSI EN 300 338-2,n.6.5.9] the option to activate or place the procedure on hold is available, Х [ETSI EN 300 338-2, n.6.5.2,g(5)] the option to terminate the procedure is available, Х [ETSI EN 300 338-2,n.6.5.2,g(6)]

the valid operator options are visible at top level,

You can speak to the EUT from the TE,

You can speak to the TE from the EUT,

The frequency of subsequent communication is displayed (HF only)

The frequencies on witch the DSC messages have been received (HF only)

[ETSI EN 300 338-2, n.6.5.3] [ETSI EN 300 338-2, n.6.5.3,j]

[ETSI EN 300 338-2, n.6.5.6]

[ETSI EN 300 338-2, n.6.5.6]

[ETSI EN 300 338-2, h]

[ETSI EN 300 338-2, i]

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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

c) Reset the EUT to standby. From the TE send a distress relay to Geographic area. Silence alarm manually.

TestV12H_0055-1.scn

00:00

| Item | | Result | |
|---|-----|--------|------|
| (Initiate Distress relay to Geographic area (RT)) | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The frequency of subsequent communication is displayed (HF only) | X | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | X | | |
| [EISIEN 300 338-2, 1] | | | |
| The tuning to the subsequent communication frequencies shall occur | | | |
| automatically upon reception of a distress DSC message. | | | |
| [E1S1 EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | | | |
| [E151 EN 300 338-2, n.6.5.6] | | | |

DSC-TEST RES Laboratory St.-Petersburg, Russia

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04.02.2011

| Company: | Thrane& Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

From TE send DSC distress acknowledgement for current distress event. Verify that:

TestV12H_0055-1.scn

05:00

| Distress alert acknowledgement (Default RT) | | | | | |
|--|-----|------|------|--|--|
| Item Result | | sult | Com- | | |
| | YES | NO | ment | | |
| the EUT sounds the distress alert acknowledgement alarm (distress ack), | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | 7 | | | | |
| the reason for and means to silence the alarm is displayed, | Х | | | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | | | |
| the alarm can only be silenced manually, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | | | |
| position, time of position, comms) is displayed, | | | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | | |
| the type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | | X | (15) | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | | | |
| received DSC message is displayed; | | | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | | | | | |
| the history of at least the received DSC messages reveals that the following | Х | | | | |
| have been received, | | | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | | | |
| the operator is informed that the procedure is "acknowledged", | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | | | | | |
| the option to send a distress relay is available, | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | - | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | | |
| the option to activate or place the procedure on hold is available, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | | | |
| the option to terminate the procedure is available, | Х | | | | |
| [E1S1EN 300 338-2,n.0.5.2,g(6)] | | | | | |
| the valid operator options are visible at top level, (ETSLEN 200, 228, 2, m, 6.5, 2) | X | | | | |
| [E151 EN 500 538-2, n.0.5.5] [ET51 EN 200 229 2 m 6 5 2 i] | | | | | |
| [E151 EN 500 556-2, II.0.5.5,]] The frequency of subsequent communication is displayed (IIE only) | N | | | | |
| The frequency of subsequent communication is displayed (FF only) | Х | | | | |
| [EISIEN 500 556-2, II] The frequencies on witch the DSC measures have been received (UE only) | N | | | | |
| FIGURE 1 SUBJECT IN THE DSC IN ISSUES HAVE DEED RECEIVED (IF ONLY) | X | | | | |
| Vou can sneak to the EUT from the TE | M | | | | |
| $[ETSI EN 300 338_2 n 6 5 6]$ | X | | | | |
| You can speak to the TE from the EUT | v | | | | |
| $[ETSI EN 300 338_2 n 6 5 6]$ | X | 1 | | | |
| [1151 11 500 550-2, 11.0.5.0] | | 1 | | | |

| 1 | DSC-TEST | N 01.11 |
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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

(15) (E1312)

TE sent a distress relay to Geographic area. EUT initiated receiving distress automated procedure. Next, TE sent the distress alert acknowledgement for the same distress event. EUT displayed in the INFO window the latest distress information:

The type of call: "DISTRESS ACK";

Intended destination: "TO: AREA".

While the intended destination for the distress alert acknowledgement shall be "All ships".

[ETSI EN 300 338-2, n.6.5.3,e,f]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.14. Acknowledgement of receiving distress automated procedure activated by Distress relay to Individual station (RT) test

[Rec. ITU-R M.493-13, Ann.4, n.3.2.3.5.1] [ETSI EN 300 338-2, n.6.5.8] [ETSI EN 300 338-2, n.6.5.9]

Ships receiving a distress relay call transmitted by a coast station shall not use DSC to acknowledge the call, but should acknowledge the receipt of the call by radiotelephony on the distress traffic channel in the same band in which the relay call was received, i.e. 2 182 kHz on MF, channel 16 on VHF.

[Rec. ITU-R M.541-9, Ann.3, n.1.5]

The sending or receiving of individually addressed relays <u>should initiate their own</u> automated procedure separate from the automated procedure that may be handling distress DSC

[Rec. ITU-R M.493-13, Ann.4, n.3.2.3.5.1]

The procedure handling a received individually addressed distress relay shall be considered acknowledged when the operator first transmits the corresponding individually addressed distress relay acknowledgement to the sender.

The procedure handling a distress relay sent to an individual station shall be considered acknowledged when the first corresponding individually addressed distress relay acknowledgement is received from that station.

[ETSI EN 300 338-2, n.6.5.8]

The procedure shall automatically compose the distress DSC messages referenced above except:

a) the distress relay where the operator shall have the option to select the addressing mode and address where the default shall be individual and on MF/HF the communications mode; and

b) in a procedure handling an individually addressed relay or relay acknowledgement, the operator shall have the option to send an all ships relay acknowledgement in addition to the default individual relay acknowledgement even though this DSC message is typically forbidden to be sent by ship stations. (Note that it is only possible to send an individually addressed distress relay acknowledgement upon reception of an individually addressed relay).

[ETSI EN 300 338-2, n.6.5.9]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0056 | TestH_0N0E |

00:00 Distress relay to Individual station EUT MMSI 273000000

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| | ∽∕ᡶ᠋ѕ | StPetersburg, Russia | 04 | 1.02.2011 |
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| Company: | Thrane&Thr | rane | | |
| Equipment Under Test: | SAILOR 632 | 0 250W MF/HF DSC Class A | | |
| Date: | September 20 | 010 – January 2011 | | |

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a) Reset the EUT to standby. From the TE send a relay distress alert Individual to EUT. Silence the alarm manually.

TestV12H_0056 00:00

| Item | Res | ult | Com- |
|---|-----|-----|------|
| Initiate Individual Distress relay | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting to send | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,f(1)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement to Individual station is | Х | | |
| available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to send a distress relay acknowledgement to All ship is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, i] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| | 1 | DSC-TEST | N | 01.11 |
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| any: | Thrane&T | Thrane | | |
| mant I Indan Taati | CALLOD (| | 4 | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

Select option 'send distress relay acknowledgement'. Verify that:

| Item | Res | ult | Com- |
|--|-------------------|-----|---------|
| Opion Acknowledgement a Individual Distress relay | YES | NO | ment |
| the option to send a individual distress relay acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | <i>7</i> 1 | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a All ships distress relay acknowledgement is available, | Х | | ITU-R |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | contra- |
| [ETSI EN 300 338-2,n.6.5.9,b] | | | diction |
| the default shall be a individual distress relay acknowledgement | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| The procedure shall automatically compose the distress relay acknowledgement | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |

From EUT send a individual distress relay acknowledgement. Verify that:

| Relay distress alert acknowledgement to Individual | station | | |
|---|---------|-----|------|
| Item | Res | ult | Com- |
| | YES | NO | ment |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | ~ | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | ~ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is "acknowledged", | Χ | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | 23 | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Χ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| StPetersburg, Russia | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

b) Reset the EUT to standby. From the TE send a relay distress alert Individual to EUT. Silence the alarm manually.

TestV12H_0056

00:00

| Item | Res | ult | Com- |
|---|-----|-----|------|
| Initiate Individual Distress relay | YES | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 7 | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting to send | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(1)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement to All ships is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement to Individual station is | Х | | |
| available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [E1S1EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [E1S1 EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [E151 EN 300 338-2, n.6.5.6] | | | |

| | DSC-TEST | N 01.11 |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Select option 'send distress relay acknowledgement'. Verify that:

| Item | Res | ult | Com- |
|--|-----|-----|---------|
| Opion Acknowledgement a Distress relay to All ships | YES | NO | ment |
| the option to send a individual distress relay acknowledgement is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a All ships distress relay acknowledgement is available, | Х | | ITU-R |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | contra- |
| [ETSI EN 300 338-2,n.6.5.9,b] | | | diction |
| the default shall be a individual distress relay acknowledgement | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | ~ | | |
| Upon selection of the option to send a distress relay acknowledgement to | Х | | |
| Geographic area a warning is provided, | ~ | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.4] | | | |
| The procedure shall automatically compose the distress relay acknowledgement | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | ~ | | |

| | Λ | DSC-TEST | Ν | 01.11 | |
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| | ~~~ | RES Laboratory StPetersburg, Russia | 04 | 4.02.2011 | |
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| Equipment Under Test: | SAILOR 6 | 320 250W MF/HF DSC Class A | | | |

 Date:
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From EUT send a distress relay acknowledgement to all ships. Verify that:

| Relay distress alert acknowledgement to All sh | ips | | |
|--|-----|------|------|
| Item | Res | sult | Com- |
| | YES | NO | ment |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | Λ | | |
| the history of at least the received DSC messages reveals that the following | X | | |
| have been received, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is "acknowledged", | X | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | ~ | | |
| the option to send a distress relay is available, | | X | (16) |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | ~ | |
| the option to send a distress alert acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | 23 | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

(16) (E1033)

The automated procedure initiated by sending distress relay to all ships acknowledgement has not the option to send distress relay.

[ETSI EN 300 338-2,n.6.5.2,g(1)] [ETSI EN 300 338-2,n.6.5.9]

| a) |
|----|
|----|

no

| DSC-TEST |
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| StPetersburg, Russia |

04.02.2011

| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

6.15. Acknowledgement of receiving distress automated procedure activated by the sending of a DROBOSE test

[ETSI EN 300 338-2, n.6.5.8]

The procedure handling all-ships and area distress DSC messages and distress alerts shall be considered acknowledged upon reception of the first distress alert acknowledgement or all ships distress relay acknowledgement.

The procedure handling a distress relay sent to an individual station shall be considered acknowledged when the first corresponding individually addressed distress relay acknowledgement is received from that station.

[ETSI EN 300 338-2, n.6.5.8]

Definition

This test checks the set up of the automated procedure when the first distress DSC message of a distress event is a sending by EUT a DROBOSE.

Method of measurement and required results

a) Reset the EUT to standby. From the EUT send a distress relay on behalf of someone else addressed to Individual station. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

| DSC-TEST | | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

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| DROBOSE Destress Relay to Individual Station | | | | |
|---|-----|--------|------|--|
| Item | | Result | | |
| | YES | NO | ment | |
| the EUT does NOT sound any alarm, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | | |
| the fact one is engaged in received a distress automated procedure is displayed; | Х | | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | | |
| the elapsed time since the procedure started is displayed, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | | |
| position, time of position, comms) is displayed and correct, | | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | |
| the position contains the enhanced resolution data | Х | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | |
| the operator is informed that the procedure is waiting to send | Х | | | |
| acknowledgement, | | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(1)] | | | | |
| the option to send a distress relay is available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available, | Х | | | |
| [E1SI EN 300 338-2,n.6.5.2,g(2)] | | | | |
| [ETSTEN 300 338-2,n.o.5.9] | | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | | |
| [E151 EN 300 338-2, n.6.5.2, g(3)] | | | | |
| [EISIEN 300 338-2, fl. 0.5.9] | | | | |
| the option to activate or place the procedure on hold is available, (ETSUEN 200.228.2 m 6.5.2 m (5.1)) | X | | | |
| $\begin{bmatrix} E1S1 EN 300 358-2, n.0.5.2, g(5) \end{bmatrix}$ | | | | |
| The option to terminate the procedure is available, $[ETSUEN 200, 228, 2, n, 6, 5, 2, \alpha(6)]$ | Х | | | |
| [E1SI EN 500 556-2,II.0.5.2,g(0)] | | | | |
| The elapsed time are visible at top level, [ETSUEN 200, 228, 2, n, 6, 5, 2] | X | | | |
| [ETSTEN 500 556-2, II.0.5.5] | | | | |
| [ETSI EN 200 228 2 m 6.5 2] | X | | | |
| [ETSTEN 500 556-2, II.0.5.5] | V | | | |
| [ETSI EN 300 328 2 m 6.5 3] | X | | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | | |
| The tuning to the subsequent communication frequencies shall occur | V | | | |
| automatically safter sending DROBOSE | X | | | |
| IFTSI FN 300 338-2 n 6 5 6] | | | | |
| The watchkeeping receiver should stop scapping | V | | | |
| The waterikeeping receiver should stop seamining | ^ | | | |
| You can speak to the EUT from the TE, | X | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the TE from the EUT, | X | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |

| | DSC-TEST | N 01.11 |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Send from TE to EUT Distress acknowledgement. Verify that:

| Distress alert acknowledgement | | | | |
|--|-----|--------|------|--|
| Item | | Result | | |
| | YES | NO | ment | |
| the EUT sounds the distress ACK alarm, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | | |
| the reason for and means to silence the alarm is displayed, | Х | | | |
| [ETSI EN 300 338-2, n.6.2.3] | | | | |
| the alarm can only be silenced manually, | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | | |
| Initiate their own automated procedures on hold | Х | | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | | |
| the operator is informed that the state of current active procedure is waiting | | | | |
| <u>acknowledgement,</u> | ~ | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | | |

Terminate new procedure. Send from TE to EUT Distress Relay to All ships acknowledgement. Verify that:

| Distress relay to all ships acknowledgement | | | | |
|--|-----|--------|------|--|
| Item | | Result | | |
| | YES | NO | ment | |
| the EUT sounds the two tone alarm, | X | | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | | |
| the reason for and means to silence the alarm is displayed, | X | | | |
| [ETSI EN 300 338-2, n.6.2.3] | ~ | | | |
| the alarm can only be silenced manually, | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | | |
| Initiate their own automated procedures on hold | Х | | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | | |
| [ETSI EN 300 338-2, n.6.9.2,b] | | | | |
| the operator is informed that the state of current active procedure is waiting | Х | | | |
| <u>acknowledgement</u> , | ~ | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | | |

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| uinment Under Test: | SALLODG | 220 250W ME/HE DSC Class A | | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

Send from TE to EUT Individual Distress relay acknowledgement. Verify that:

| Relay distress alert acknowledgement to Individual station | | | | |
|---|-----|--------|------|--|
| Item | | Result | | |
| | YES | NO | ment | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | | |
| position, time of position, comms) is displayed, | Λ | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | X | | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | ~ | | | |
| the history of at least the received DSC messages reveals that the following | X | | | |
| have been received, | Λ | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | | |
| the operator is informed that the procedure is "acknowledged", | X | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | ~ | | | |
| the option to send a distress relay is available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | | |
| the option to send a distress alert acknowledgement is NOT available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | 23 | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to activate or place the procedure on hold is available, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | | |
| the option to terminate the procedure is available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | | |
| the valid operator options are visible at top level, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | | |
| You can speak to the EUT from the TE, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the TE from the EUT, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |

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b) Reset the EUT to standby. From the EUT send a distress relay on behalf of someone else addressed to Geographic area. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

| DROBOSE Destress Relay to Geographic area | | | | | |
|--|-----|----------|------|--|--|
| Item | Res | Com- | | | |
| | YES | NO | ment | | |
| the EUT does NOT sound any alarm, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | | | |
| the fact one is engaged in received a distress automated procedure is displayed; | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | | | |
| the elapsed time since the procedure started is displayed, | Χ | | | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | | | |
| indicate whether the procedure is on hold or is active is displayed, | Χ | | | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | | | |
| position, time of position, comms) is displayed and correct, | | | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | | |
| the position contains the enhanced resolution data | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | | |
| the operator is informed that the procedure is <u>waiting for an</u> | Х | | | | |
| acknowledgement, | | | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | | | |
| the option to send a distress relay is available, | Х | | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | | | |
| [E1S1 EN 300 338-2,n.6.5.9] | | | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, $[ETSUEN 200.228, 2, n, 6, 5, 2, \alpha(2)]$ | X | | | | |
| [E151 EN 300 338-2,n.o.5.2,g(3)] | | | | | |
| [E151 EN 300 558-2, fl. 0.5.9] | | | | | |
| the option to activate or place the procedure on hold is available, $[ETSI EN 200.228, 2, n \in 5, 2, n \in $ | X | | | | |
| $\begin{bmatrix} E151 EN 300 538-2, B.0.5.2, g(5) \end{bmatrix}$ | | | | | |
| The option to terminate the procedure is available, $[ETSI EN 200.228, 2, n, 6.5, 2, \alpha(6)]$ | X | | | | |
| [E151 EN 500 556-2,11.0.5.2,g(0)] | | | | | |
| IETSI EN 300 338 2 n 6 5 31 | X | | | | |
| [ETSTEN 500 556-2, II.0.5.5] | V | | | | |
| $[ETSI EN 300 338_2 n 6 5 3]$ | X | | | | |
| [LTSTEN 500 550-2, ii.0.5.5] | V | | | | |
| [FTSI FN 300 338-2 n 6 5 3] | Χ | | | | |
| [ETSI EN 300 338-2 n 6 5 3 i] | | | | | |
| The tuning to the subsequent communication frequencies shall occur | V | <u> </u> | | | |
| automatically upon sending of a distress DSC message. | ~ | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | | |
| You can speak to the EUT from the TE, | Y | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | | | |
| You can speak to the TE from the EUT, | Y | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | | | |

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Send from TE to EUT Distress Relay to All ships acknowledgement. Verify that:

| Distress relay to all ships acknowledgement | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the distress ACK alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.2.3] | 23 | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 23 | | |
| the operator is informed that the state of current active procedure is | Χ | | |
| acknowledged, | 23 | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |

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c) Reset the EUT to standby. From the EUT send a distress relay on behalf of someone else addressed to Geographic area. Provide parameters for all five components of the distress information (Distress relay RT - undesignated). Verify that:

| DROBOSE Destress Relay to Geographic are | a | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT does <u>NOT</u> sound any alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in received a distress automated procedure is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| indicate whether the procedure is on hold or is active is displayed, | Х | | |
| [EISIEN 300 338-2, n.o.5.3,d] | | | |
| the fatest distress information (MINISI of vessel in distress, nature of distress, | Х | | |
| IETSI EN 200 228 2 n 6 5 3 al | | | |
| the position contains the enhanced resolution data | v | | |
| IFTSI FN 300 338-2 n 6 5 3 el | Χ | | |
| the operator is informed that the procedure is waiting for an | v | | |
| acknowledgement. | ^ | | |
| [ETSI EN 300 338-2, n.6.5.3.1(3)] | | | |
| the option to send a distress relay is available. | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | - | |
| the elapsed time are visible at top level, $[ETSUEN 200.228, 2, n \in 5, 2]$ | Х | | |
| [ETSTEN 500 556-2, II.0.5.5] | V | | |
| [ETSI EN 300 338-2 n 6 5 3] | X | | |
| the valid operator options are visible at top level | v | | |
| [ETSI EN 300 338-2, n.6.5.3] | ^ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| The tuning to the subsequent communication frequencies shall occur | Y | | |
| automatically upon sending of a distress DSC message. | Λ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | - • | | |

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Send from TE to EUT Distress alert acknowledgement. Verify that:

| Distress alert acknowledgement | | | | |
|---|-----|------|------|--|
| Item | ult | Com- | | |
| | YES | NO | ment | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | | |
| position, time of position, comms) is displayed, | ~ | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | X | | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | ~ | | | |
| the history of at least the received DSC messages reveals that the following | X | | | |
| have been received, | ~ | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | | |
| the operator is informed that the procedure is "acknowledged", | X | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | Λ | | | |
| the option to send a distress relay is available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | | |
| the option to send a distress alert acknowledgement is NOT available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to activate or place the procedure on hold is available, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | | |
| the option to terminate the procedure is available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | | |
| the valid operator options are visible at top level, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.3] | 21 | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | | |
| You can speak to the EUT from the TE, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the TE from the EUT, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| The equipment meets the requirements (yes / no /ma) | ycs |

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6.16. Handling received DSC messages pertinent to the automatic procedure initiated by distress call after acknowledgement

[ETSI EN 300 338-2, n.6.5.4] [ETSI EN 300 338-2, n.6.5.5]

DSC messages pertinent to the station but not the procedure shall be allocated to the appropriate automated procedure or initiate their own automated procedure on hold.

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time). However, individually addressed DSC messages shall initiate their own automated procedures on hold if engaged in a received distress procedure handling multi-station (for example, all ships, area) addressed DSC messages or vice versa.

[ETSI EN 300 338-2, n.6.5.4]

In a given procedure, only the reception of the initial DSC message and the DSC message that <u>first acknowledges</u> the procedure shall sound an alarm unique to the DSC message type (with the two-tone sound reserved for the distress alert or relay if it initiates the procedure) which shall be manually silenced.

All subsequent examples of the DSC messages shall only sound <u>the self terminating alarm</u>. [ETSI EN 300 338-2, n.6.5.5]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0057 | TestH_0N0E |

TestV12H_0057 00:00 Distress call from station MMSI 273000010 03:00 Distress ACK for MMSI 273000010

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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a) Reset tht EUT into Standby. From TE send Distress call. Verify that the automated procedure is initiated. Silence the alarm manually.

TestV12H_0057 00:00

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| The frequency of subsequent communication is displayed (HF only) | Х | | |
| [ETSI EN 300 338-2, h] | | | |
| The frequencies on witch the DSC messages have been received (HF only) | Х | | |
| [ETSI EN 300 338-2, 1] | | | |
| The tuning to the subsequent communication frequencies shall occur | | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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Send from TE the distress acknowledgement. Silence the alarm manually. Verify that:

TestV12H_0057 03:00

| Distress alert acknowledgement | | | |
|---|----------|--|------|
| (Delduit KT) | Pos | | Com- |
| Rem | VES | | ment |
| the FUT sounds the distress alert acknowledgement alarm (distress ack) | <u>v</u> | | ment |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the reason for and means to silence the alarm is displayed. | Y | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the type (alert, relay, alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| have been received, | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | |
| the operator is informed that the procedure is " <u>acknowledged</u> ", | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [E1S1EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, 17751 FN = 200, 229, 2 m (5, 2 m (5)) | Х | | |
| [E151 EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, $15751 \pm 1200 + 228 + 2 \pm 652 \pm 7601$ | Х | | |
| [E151 EN 300 558-2,fl.o.5.2,g(0)] | V | | |
| the valid operator options are visible at top level, (ETSI EN 200.228.2 m 6.5.2) | Х | | |
| [E131 EN 300 338 2, n.65 3] | | | |
| [ETSTEN 500 556-2, II.0.5.5,]] The tuning to the subsequent communication frequencies shall occur | V | | |
| automatically upon reception of a distress DSC message | X | | |
| [ETSI EN 300 338-2, n 6 5 6] | | | |
| You can speak to the EUT from the TE | V | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT. | Y | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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b) Change the position information (position and UTC time). From TE send the same distress event Distress call. Verify that:

TestV12H_0057.scn 05:00

| Item | Res | ult | Com- |
|--|-----|-----|------|
| Distress call (new distress coordinates and time) | YES | NO | ment |
| The alarm self terminates, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, relay, alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [E1S1 EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [E1S1EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, $[ETSLEN 200.228.2 m \in 5.2 m (1)]$ | Х | | |
| [E151 EN 500 536-2, II.0.3.2, g(1)] The option to cond a distance short colonomial deemont is quailable | V | | |
| The option to send a distress alert acknowledgement is available, [ETSI EN 200.228.2 m 6.5.2 c(2)] | X | | |
| [ETSI EN 300 338 2 n 6 5 0] | | | |
| the option to send a distress relay acknowledgement is NOT available | v | | |
| [FTSI FN 300 338-2 n 6 5 2 σ (3)] | X | | |
| [ETSI EN 300 338-2 n 6 5 9] | | | |
| the option to activate or place the procedure on hold is available | V | | |
| [ETSI EN 300 338-2, n.6.5.2.g(5)] | Λ | | |
| the option to terminate the procedure is available. | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | Λ | | |
| the elapsed time are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| the stage are visible at top level (" <u>acknowledged</u> "), | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | ~ | | |
| the valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | 23 | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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c) Change the position information (position and UTC time). From TE send the same distress event Distress call Acknowledgement. Verify that:

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| Item | Res | ult | Com- |
|--|-----|-----|------|
| Distress call Acknowledgement | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [E1S1 EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, $(5.2 - (1))$ | Х | | |
| [E1S1 EN 300 338-2, n.6.5.2, g(1)] | | | |
| The option to send a distress alert acknowledgement is available, (5.2 - (2)) | Х | | |
| [E151 EN 300 338-2, n.0.3, 2, g(2)] | | | |
| [E151 EN 500 536-2, II.0.3.9] The option to cond a distance relax columny independent is NOT excitable | | | |
| The option to send a distress relay acknowledgement is <u>NOT</u> available, [ETSLEN 200.228.2 m 6.5.2 c(2)] | X | | |
| [E151 EN 300 356-2, II.0.3.2, g(5)] $[ETSI EN 300 328 2 n 6 5 0]$ | | | |
| The option to activate or place the procedure on hold is available | v | | |
| [FTSI FN 300 338-2 n 6.5.2 $g(5)$] | Χ | | |
| The option to terminate the procedure is available | v | | |
| [ETSI EN 300 338-2 n 6 5 2 $\sigma(6)$] | ^ | | |
| The elapsed time are visible at top level | V | | |
| [ETSI EN 300 338-2, n.6.5.3] | ^ | | |
| The stage are visible at top level (" acknowledged "). | Y | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| The valid operator options are visible at top level, | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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d) Change the position information (position and UTC time). From TE send the same distress relay to All ships. Verify that:

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011:00

| Item | Res | ult | Com- |
|--|-----|-----|------|
| Distress Relay to All Ships | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| The changed position is displayed in the distress information on the EUT. | X | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | ~ | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 23 | | |
| The type (alert, relay, alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Χ | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (<u>acknowledged</u>), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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e) Change the position information (position and UTC time). From TE send the same distress event Distress call Relay to All ships Acknowledgement. Verify that:

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| 15.00 | Res | ult | Com- |
|---|-----|-----|------|
| Distress Relay to ton All shins ACK | YES | NO | ment |
| (new distress coordinates and time) | 120 | no | |
| The alarm self terminates, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, relay, alert acknowledgement, <u>relay acknowledgement</u>), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [E1S1EN 300 338-2, n.o.5.3,I] | | | |
| The ability to display information about the history of at least the received DSC | X | | |
| IETSI EN 200 228 2 n 6 5 2 h | | | |
| [ETSTEN 500 550-2, II. 0.5.5, II] The option to send a distress relay is available | V | | |
| [FTSI FN 300 338-2 n 6 5 2 $\sigma(1)$] | X | | |
| The option to send a distress alert acknowledgement is available | V | | |
| [ETSI EN 300 338-2.n.6.5.2.g(2)] | ^ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (<u>acknowledged</u>), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [E1S1 EN 300 338-2, n.6.5.3] | | | |
| [E1SI EN 300 338-2, n.6.5.3,J] | | | |

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f) Change the position information (position and UTC time). From TE send the same distress relay to Geographic area. Verify that:

TestV12H_0057.scn 018:00

| Item | Res | ult | Com- |
|--|-----|-----|------|
| Distress Relay to Geographic area | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. [ETSI EN 300 338-2, n.6.5.3.e] | Χ | | |
| Elapsed time sinc acknowledgement should not be changed. | Y | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | Λ | | |
| The type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), sender, and intended destination (individual, <u>area</u> , all ships) of the latest received DSC message is displayed; [ETSI EN 300 338-2, n.6.5.3,f] | X | | |
| The ability to display information about the history of at least the received DSC | Y | | |
| messages pertinent to the procedure; | Λ | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| The option to send a distress alert acknowledgement is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (<u>acknowledged</u>), | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [ETSI EN 300 338-2, n.6.5.3,J] | | | |

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f) Change the position information (position and UTC time). From TE send the same distress event Distress call Relay to All ships Acknowledgement. Verify that:

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21:00

| Item | | Result | |
|--|-----|--------|------|
| Distress Relay to All ships ACK | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, relay, alert acknowledgement, <u>relay acknowledgement</u>), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| The option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| The option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| The option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The elapsed time are visible at top level, | Х | | |
| [E151 EN 500 358-2, n.o.5.3] | | | |
| I he stage are visible at top level (<u>acknowledged</u>), | Х | | |
| [E151 EN 500 558-2, n.6.5.3] | | | |
| I ne valid operator options are visible at top level, | Х | | |
| [E1S1 EN 300 338-2, n.6.5.3] | | | |
| [E1SI EN 300 338-2, n.6.5.3,] | | | |

| The equipment meets the requirements (yes / no /n.a) yes |
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6.17. Handling received DSC messages pertinent to the automatic procedure initiated by distress relay after acknowledgement

[ETSI EN 300 338-2, n.6.5.4] [ETSI EN 300 338-2, n.6.5.5]

DSC messages pertinent to the station but not the procedure shall be allocated to the appropriate automated procedure or initiate their own automated procedure on hold.

DSC messages that are pertinent to the procedure are all DSC messages concerning the same distress event. If the MMSI is unknown, DSC messages that are pertinent to the procedure are all DSC messages that have the same distress information (nature of distress and subsequent communication - allow updated position and time). However, individually addressed DSC messages shall initiate their own automated procedures on hold if engaged in a received distress procedure handling multi-station (for example, all ships, area) addressed DSC messages or vice versa.

[ETSI EN 300 338-2, n.6.5.4]

In a given procedure, only the reception of the initial DSC message and the DSC message that <u>first acknowledges</u> the procedure shall sound an alarm unique to the DSC message type (with the two-tone sound reserved for the distress alert or relay if it initiates the procedure) which shall be manually silenced.

All subsequent examples of the DSC messages shall only sound <u>the self terminating alarm</u>. [ETSI EN 300 338-2, n.6.5.5]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0058 | TestH_0N0E |

TestV12H_0058

00:00 Distress relay to Geographic area from station MMSI 273000010 03:00 Distress relay ACK for MMSI 273000010

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a) Reset tht EUT into Standby. From TE send Distress relay to Geographic area. Verify that the automated procedure is initiated. Silence the alarm manually.

TestV12H_0058 00:00

| Item | | Result | |
|--|---|--------|------|
| (Initiate Destress relay to Geographic area) | | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | 7 | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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Send from TE the distress relay to All Ships acknowledgement. Silence the alarm manually. Verify that:

TestV12V_0058

03:00

| Distress relay to All ships acknowledgement | | | |
|--|------------|------|------|
| Item | | sult | Com- |
| | YES | | ment |
| the EUT sounds the distress alert acknowledgement alarm (distress ack). | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the reason for and means to silence the alarm is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.2.3] | Λ | | |
| the alarm can only be silenced manually, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 21 | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | - |
| the type (alert, relay, alert acknowledgement, <u>relay acknowledgement</u>), | | X | (17) |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,t] | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | X | | |
| [E1S1 EN 300 338-2, n.6.5.3,c] | | | |
| the history of at least the received DSC messages reveals that the following | Х | | |
| nave been received, [ETSLEN 200 228 2 = 65 21c] | | | |
| [E151 EN 300 558-2, II.0.5.5,K] | V | | |
| IETSI EN 200 228 2 n 6.5.2 1(5)] | X | | |
| [ETSTERV 500 550-2, ii.0.5.5,i(5)] the option to send a distress relay is available | V | | |
| [FTSI FN 300 338-2 n 6 5 2 $\sigma(1)$] | Χ | | |
| the option to send a distress alert acknowledgement is NOT available | v | | |
| [ETSI EN 300 338-2 n 6 5 2 σ (2)] | ~ | | |
| [ETSI EN 300 338-2.n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is NOT available. | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | Λ | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | ~ | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | 2 - | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | - | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | . - | | |
| You can speak to the TE from the EUT, | Х | | |
| [E1SI EN 300 338-2, n.6.5.6] | | | |

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b) Change the position information (position and UTC time). From TE send the same distress event Distress call. Verify that:

TestV12H_0058.scn 05:00

| Item | Res | ult | Com- |
|---|-----|-----|------|
| Distress call (new distress coordinates and time) | | NO | ment |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. [ETSI EN 300 338-2, n.6.5.3,e] | Χ | | |
| Elapsed time sinc acknowledgement should not be changed, | X | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | ~ | | |
| The type (<u>alert</u> , relay, alert acknowledgement, relay acknowledgement), sender, and intended destination (individual, area, <u>all ships</u>) of the latest received DSC message is displayed; [ETSI EN 300 338-2, n.6.5.3,f] | Х | | |
| The ability to display information about the history of at least the received DSC messages pertinent to the procedure; [ETSI EN 300 338-2, n, 6.5.3, h] | Х | | |
| The option to send a distress relay is available, [ETSI EN 300 338-2.n.6.5.2.g(1)] | Х | | |
| The option to send a distress alert acknowledgement is <u>AVAILABLE</u> , [ETSI EN 300 338-2,n.6.5.2,g(2)] [ETSI EN 300 338-2 n 6 5 9] | Х | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, [ETSI EN 300 338-2,n.6.5.2,g(3)] [ETSI EN 300 338-2,n.6.5.9] | X | | |
| the option to activate or place the procedure on hold is available, [ETSI EN 300 338-2, n.6.5.2,g(5)] | X | | |
| the option to terminate the procedure is available, [ETSI EN 300 338-2,n.6.5.2,g(6)] | Х | | |
| the elapsed time are visible at top level, [ETSI EN 300 338-2, n.6.5.3] | Х | | |
| the stage are visible at top level (acknowledged), | X | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | - • | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, [ETSI EN 300 338-2, n.6.5.6] | X | | |

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c) Change the position information (position and UTC time). From TE send the same distress event Distress call Acknowlwdgement. Verify that:

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| Item | | Result | |
|--|-----|--------|------|
| Distress call Acknowledgement | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, relay, <u>alert acknowledgement</u> , relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Х | | |
| [E1S1EN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available, | Х | | |
| [E151 EN 300 358-2, n.0.5, 2, g(2)] | | | |
| [EISIEN 500 538-2, fl. 0. 3.9] The option to cond a distance value columnial desmont is NOT quailable | V | | |
| The option to send a distress relay acknowledgement is <u>NOT</u> available, [ETSLEN 200.228.2 m 6.5.2 m (2)] | Х | | |
| [E 151 EN 500 536-2, II.0.3.2, g(5)] | | | |
| [ETSTEN 500 550-2, ii. 0. 5.7] The option to activate or place the precedure on hold is available | V | | |
| [ETSI EN 300 338.2 $p \in 5.2 q(5)$] | Χ | | |
| The option to terminate the procedure is available | v | | |
| [FTSI FN 300 338-2 n 6 5 2 $\sigma(6)$] | Χ | | |
| The elansed time are visible at ton level | V | | |
| [ETSI EN 300 338-2, n.6.5.3] | ^ | | |
| The stage are visible at top level (acknowledged). | Y | | |
| [ETSI EN 300 338-2, n.6.5.3] | ~ | | |
| The valid operator options are visible at top level, | Y | | |
| [ETSI EN 300 338-2, n.6.5.3] | Λ | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | |

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d) Change the position information (position and UTC time). From TE send the same distress event Distress Relay to All Ships. Verify that:

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11:00

| ltem | | Result | |
|--|-----|--------|------|
| Distress Relay to All Ships | YES | NO | ment |
| (new distress coordinates and time) | | | |
| The alarm self terminates, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | 7 | | |
| The reason for and means to silence the self-terminating alarm displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| The changed position is displayed in the distress information on the EUT. | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,e] | | | |
| Elapsed time sinc acknowledgement should not be changed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| The type (alert, <u>relay</u> , alert acknowledgement, relay acknowledgement), | Х | | |
| sender, and intended destination (individual, area, <u>all ships</u>) of the latest | | | |
| received DSC message is displayed; | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | |
| The ability to display information about the history of at least the received DSC | Х | | |
| messages pertinent to the procedure; | | | |
| [ETSI EN 300 338-2, n. 6.5.3, h] | | | |
| The option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| The option to send a distress alert acknowledgement is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| the elapsed time are visible at top level, | Х | | |
| [E1S1 EN 300 338-2, n.6.5.3] | | | |
| the stage are visible at top level (<u>acknowledged</u>), | Х | | |
| [E1S1 EN 300 338-2, n.6.5.3] | | | |
| the valid operator options are visible at top level, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | |
| [E1SI EN 300 338-2, n.6.5.3,] | | | |

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e) Change the position information (position and UTC time). From TE send the same distress event Distress Relay to All Ships acknowledgement. Verify that:

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| Distress relay to All ships acknowledgement | | | | |
|--|-----|--------|------|--|
| ltem | | Result | | |
| | YES | NO | ment | |
| The alarm self terminates | V | | | |
| [ETSI EN 300 338-2, n 6 5 5] | Λ | | | |
| the reason for and means to silence the alarm is displayed | V | | | |
| [ETSI EN 300 338-2, n.6.2.3] | ^ | | | |
| the latest distress information (MMSI of vessel in distress nature of distress | V | | | |
| position time of position comms) is displayed | ~ | | | |
| [ETSI EN 300 338-2.n.6.5.3.e] | | | | |
| the type (alert, relay, alert, acknowledgement, relay acknowledgement). | Y | | | |
| sender, and intended destination (individual, area, all ships) of the latest | ^ | | | |
| received DSC message is displayed: | | | | |
| [ETSI EN 300 338-2, n.6.5.3,f] | | | | |
| the elapsed time since acknowledgement (after acknowledgment) is displayed, | Y | | | |
| [ETSI EN 300 338-2, n.6.5.3,c] | Λ | | | |
| the history of at least the received DSC messages reveals that the following | Y | | | |
| have been received. | Λ | | | |
| [ETSI EN 300 338-2, n.6.5.3,k] | | | | |
| the operator is informed that the procedure is " acknowledged ", | Y | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(5)] | Λ | | | |
| the option to send a distress relay is available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to send a distress relay acknowledgement is NOT available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | | |
| the option to activate or place the procedure on hold is available, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | | |
| the option to terminate the procedure is available, | Х | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | | |
| the valid operator options are visible at top level, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.3] | | | | |
| [ETSI EN 300 338-2, n.6.5.3,j] | | | | |
| The tuning to the subsequent communication frequencies shall occur | Χ | | | |
| automatically upon reception of a distress DSC message. | - | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the EUT from the TE, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the TE from the EUT, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |

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(17) (E1037)

TE sent a distress relay to Geographic area. EUT initiated receiving distress automated procedure. Next, TE sent the distress relay to all ships acknowledgement for the same distress event. EUT displayed in the INFO window the latest distress information: Intended destination: "TO: AREA".

While the intended destination for the distress alert acknowledgement shall be "All ships".

[ETSI EN 300 338-2, n.6.5.3,e,f]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
| | |

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6.18. Sending a distress alert acknowledgement test

[ETSI EN 300 338-2, n.6.5.9]

The operator shall not have the option to send a distress relay acknowledgment until an individual distress relay request has been received.

The operator shall not have the option to send a distress alert acknowledgment until a distress alert has been received. Once the option to send any of the distress DSC messages (distress relay, distress alert acknowledgement, distress relay acknowledgement) referenced above becomes available, the options shall remain available until the procedure is terminated.

The procedure shall automatically compose the distress DSC messages referenced above except:

a) the distress relay where the operator shall have the option to select the addressing mode and address where the default shall be individual and on MF/HF the communications mode; and

b) in a procedure handling an individually addressed relay or relay acknowledgement, the operator shall have the option to send an all ships relay acknowledgement in addition to the default individual relay acknowledgement even though this DSC message is typically forbidden to be sent by ship stations. (Note that it is only possible to send an individually addressed distress relay acknowledgement upon reception of an individually addressed relay).

[ETSI EN 300 338-2, n.6.5.9]

| Scenario | Legend |
|-----------------|------------|
| TestV12H_0052-1 | TestH_0N0E |
| TestV12H_0052-2 | TestH_0N0E |

TestV12H 0052-1 00:00 Distress alert from station MMSI 273000010 Channel 1: 2187.5 kHz

TestV12H 0052-2 00:00 Distress alert from station MMSI 273000010 Channel 1: 4207.5 kHz

Definition

This test checks that the automated procedure composes the distress alert acknowledgement correctly and when the operator chooses to send a distress alert acknowledgment the only selection option available is the MF band of the acknowledgment.

Method of measurement and required results

Reset the EUT to standby. From the TE send the default distress alert attempt. Silence the alarms on the EUT and wait until all the alerts of the distress alert attempt are sent. On the EUT select the option to send a distress alert acknowledgment. Verify that:
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a) Reset the EUT to standby. From the TE send a distress alert on the 2MHz. Silence alarm manually.

TestV12H_0052-1

00:00

| Item | | Result | |
|--|---|--------|------|
| (Initiate Destress RT alert) | | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress alert acknowledgement is \underline{NOT} available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [E1S1EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [E1S1 EN 300 338-2,n.o.5.2,g(6)] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | | | |
| IETCLEN 200 228 2 m 6 5 6 | | | |
| [E1SI EN 300 338-2, n.0.5.6] | | | |
| You can speak to the EUT from the TE on the 2182 kHz, | | | |
| Vou can speak to the TE from the EUT on the 2192 kHz | v | | |
| For can speak to the LE from the EU from the 2102 kHz, $[\text{ETSI EN } 300, 338, 2, n, 6, 5, 6]$ | X | | |
| [E131 E1 300 330-2, 11.0.3.0] | | 1 | |

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b) Select options to send "Distrerss alert acknowledgement". Verify that:

| Item Send a Distress alert Acknowledgement | | Result | |
|---|---|--------|------|
| | | NO | ment |
| the option to send distress alert acknowledgement is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.8] | Λ | | |
| Upon selection of the option to send a distress alert acknowledgement a warning is provided: "send a distress alert acknowledgement (requires coast station permission)", | X | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.3] | | | |
| The procedure shall automatically compose the distress alert acknowledgement [ETSI EN 300 338-2,n.6.5.9] | Χ | | |
| the operator is informed that the procedure is waiting for an | X | | |
| acknowledgement, [ETSI EN 300 338-2, n.6.5.3,l(3)] | Λ | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available on the 2MHz only, | Χ | | |
| [ETSTEN 500 556-2, II. 0. 5. 2, g(2)] the ention to cond a distance relay colonomial desmont is NOT evolution | V | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | X | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, ETSLEN 200 238.2 m 6.5 2 m (6) | Х | | |
| [ETSTEN 500 556-2,ii.0.5.2,g(0)] | V | | |
| [ETSI EN 300 338-2, n.6.5.6] | X | | |
| You can speak to the TE from the EUT on the 2182 kHz, [ETSI EN 300 338-2, n.6.5.6] | Х | | |

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c) Reset the EUT to standby. From the TE send a distress alert on the 4MHz. Silence alarm manually.

TestV12H_0052-2

00:00

| Item | | Result | |
|--|-----|--------|------|
| (Initiate Destress RT alert) | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | 23 | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available (HF), | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [E1S1EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [E151 EN 300 338-2,n.o.5.2,g(0)] | | | |
| I he tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 4125 kHz automatically upon reception of a distress DSC message. | | | |
| [E131 EIN 300 330-2, II.0.3.0] | V | | |
| 1 ou can speak to the EO I from the TE on the 4 whiz, [ETSI EN 200.238.2, n 6.5.6] | X | | |
| [ETSTER 500 550-2, II.0.5.0] | V | | |
| For call speak to the LE from the EO for the 4 Minz, $[ETSI EN 300, 338, 2, n, 6, 5, 6]$ | X | | |
| [E151 EN 500 556-2, II.0.5.0] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | , |

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6.19. Sending a distress relay test

[ETSI EN 300 338-2, n.6.5.9]

The operator shall not have the option to send a distress relay acknowledgment until an individual distress relay request has been received.

The operator shall not have the option to send a distress alert acknowledgment until a distress alert has been received. Once the option to send any of the distress DSC messages (distress relay, distress alert acknowledgement, distress relay acknowledgement) referenced above becomes available, the options shall remain available until the procedure is terminated.

The procedure shall automatically compose the distress DSC messages referenced above except:

a) the distress relay where the operator shall have the option to select the addressing mode and address where the default shall be individual and on MF/HF the communications mode; and

b) in a procedure handling an individually addressed relay or relay acknowledgement, the operator shall have the option to send an all ships relay acknowledgement in addition to the default individual relay acknowledgement even though this DSC message is typically forbidden to be sent by ship stations. (Note that it is only possible to send an individually addressed distress relay acknowledgement upon reception of an individually addressed relay).

[ETSI EN 300 338-2, n.6.5.9]

| Scenario | Legend |
|-----------------|-----------------|
| TestV12H-0052-1 | Is not required |

TestV12H_0052-1

00:00 Distress alert from station MMSI 273000010

Definition

This test checks that the automated procedure composes the distress relay correctly and presents the correct information and selection options when the operator chooses to send a relay.

Method of measurement and required results

Reset the EUT to standby. From the TE send the default distress alert attempt. Silence the alarms on the EUT and wait until all the alerts of the distress alert attempt are sent. On the EUT select the option to send a relay distress alert acknowledgment. Verify that:

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a) Reset the EUT to standby. From the TE send a distress alert. Silence alarm manually.

TestV12H-0052-1

00:00

| Item | | Result | |
|--|---|--------|------|
| (Initiate Destress RT alert) | | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF only), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The tuning to the subsequent communication frequencies shall occur | Х | | |
| automatically upon reception of a distress DSC message. | | | |
| [E151 EN 500 558-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | | | |
| [E151 EN 300 358-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [E1SI EN 300 338-2, n.6.5.6] | | | |

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Select options to send "Relay Distrerss alert" to Geographic area. Verify that:

| Item | Res | ult | Com- |
|---|-----|-----|------|
| Send a Relay Distress alert to Geographic area | YES | NO | ment |
| the option to send distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the default shall be a individual distress relay | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | 23 | | |
| Upon selection of the option to send a distress relay a warning that "sending a | Х | | |
| relay before three minutes have elapsed since the automated procedure started" | | | |
| is provided, | | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.1] | | | |
| Upon selection of the option to send a distress relay to Geographic area a | Х | | |
| warning send a non-individually addressed relay " is provided:, | | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.2] | | | |
| The procedure shall automatically compose the relay distress alert | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,1(3)] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF only), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| On HF the operator shall have the option to override the default band of the | Χ | | |
| DSC message and send the distress DSC messages | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| You can speak to the EUT from the TE, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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b) Reset the EUT to standby. From the TE send a distress alert. Silence alarm manually.

TestV12H-0052-1

00:00

| ltem | | ult | Com- |
|--|---|-----|------|
| (Initiate Destress RT alert) | | NO | ment |
| the EUT sounds the two tone alarm, | Х | | |
| [ETSI EN 300 338-2, n.6.5.5] | | | |
| the fact one is engaged in receiving a distress is displayed; | Х | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | | | |
| the elapsed time since the procedure started is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,b] | | | |
| Active state of procedure is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.5.3,d] | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| the option to send a distress relay is available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | | |
| The tuning to the subsequent communication frequencies shall occur | | | |
| automatically upon reception of a distress DSC message. | | | |
| [E1S1EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE, | | | |
| [E1S1EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | | | |
| [E151 EN 300 338-2, n.0.3.0] | | | |

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| Date: | September 2010 – January 2011 | | |

Select options to send "Individual Relay Distrerss alert". Verify that:

| Item | | ult | Com- |
|---|-----|-----|--------|
| Send a Individual Relay Distress alert | YES | NO | ment |
| the option to send distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | 23 | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the default shall be a individual distress relay | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | 2.2 | | |
| The procedure shall automatically compose the relay distress alert | Х | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the distress relay where the operator shall have the option to select the | Х | | |
| addressing mode and address | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| Upon selection of the option to send a distress relay a warning that "sending a | Х | | |
| relay before three minutes have elapsed since the automated procedure started" | | | |
| is provided, | | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.1] | | | |
| Initiate their own automated procedures | Х | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.2.3.5.1] | | | |
| the operator is informed that the procedure is waiting for an | Х | | |
| <u>acknowledgement</u> , | | | |
| [ETSI EN 300 338-2, n.6.5.3,l(3)] | | | |
| The watchkeeping receiver should stop scanning | Х | | NOTE 1 |
| | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| the option to activate or place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.5.2,g(5)] | | | |
| the option to terminate the procedure is available, 15751 FN = 200, 229, 2 m/s = 6.5, 2 m/s = 1000 m/s | Х | | |
| [E151 EN 300 358-2,n.0.5.2,g(6)] | | | |
| Y OU CAN Speak to the EU I from the IE, | Х | | |
| [E151 EN 300 358-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT, | Х | | |
| [E1SI EN 300 338-2, n.6.5.6] | | | |

NOTE 1

EUT displays DSC warning: "Watch receiver disabled for up to 5 minutes while waiting for acknowledgement!".

| The equipment meets the requirements (yes / no /n.a) | |
|--|--|
|--|--|

yes

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6.20. Termination of the automatic procedure before acknowledgement. Manually termination of automated procedure test

[ETSI EN 300 338-2, n.6.5.10] [ETSI EN 300 338-2, n.6.3]

The procedure can be terminated manually or by the automated timeout. At least ten seconds prior to automated termination, a visual and discrete aural warning shall be displayed with the option to stop the automatic termination.

If the procedure is terminated manually by the user then integrated equipment may revert to the channel or frequency that was previously selected before the DSC procedure.

[ETSI EN 300 338-2, n.6.5.10]

The following setup options shall be available with the following factory defaults:

j) the option to set the no activity timeout of received distress DSC automated procedures to some value that includes no timeout: set to no timeout;

[ETSI EN 300 338-2, n.6.3]

| Automated timeout | | | | |
|---|----------------|--------|----|-----------|
| ltem | Value | Result | | Com- |
| | | YES | NO | ment |
| There are facilites of timeout | YES | X | | optional |
| Possibility of change value of timeout | YES | X | | |
| Limits of timeout | 2 min – 30 min | X | | |
| Default value of timeout | OFF | X | | |
| Facilites to set Active / No active timeout | YES | X | | |
| Default setting | OFF | X | | No active |

a) Check setup options. Verify that:

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| Scenario | Legend |
|---------------|-----------------|
| TestV12H_0059 | Is not required |
| TestV12H_0060 | TestV12D_0064 |
| TestV12H_0063 | Is not required |
| TestV12H_0064 | TestV12D_0064 |

00:00 Starting automated procedure call 03:00 Additional call

b) Reset EUT into Standby. From TE send serially the calls listed in the table. After sending of each call to send in addition one or more DSC a sequence pertinent to station, but not for the currently active automated procedure. To be convinced, that calls are received. Verify that:

| Ν | 01 | .1 | 1 |
|---|----|----|---|
| | | | |

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| Starting automated procedure call | There is option Termination | Possibly manually termination procedure | There is warning that terminating the procedure | Comments |
|--|-----------------------------------|--|---|----------|
| Distress alert (RT) TestV12H 0059.scn | Yes | Yes | Yes | |
| Distress alert (FEC) TestV12H_0060.scn | Yes | Yes | Yes | |
| Distress relay RT Individual TestV12H_0063.scn | Yes | Yes | Yes | |
| Distress relay RT Geographic area TestV12H_0064.scn | Yes | Yes | Yes | |

| Item | Res | ult | Com- |
|---|-----|-----|----------|
| Manually termination of automated procedure | YES | NO | ment |
| (before acknowledgement) | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | Λ | | |
| Upon selection of the option to terminate the procedure a warning is provided | X | | |
| that one is terminating the procedure (terminate the automated procedure before | Λ | | |
| the objective has been reached), | | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.8] | | | |
| The operator should have the option to go back to the stage of the automated | X | | |
| procedure where the action was taken that caused the warning. | Λ | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.6] | | | |
| If the procedure is terminated manually by the user then integrated equipment | X | | Stand-by |
| may revert to the channel or frequency that was previously selected before the | Λ | | |
| DSC procedure. | | | |
| [ETSI EN 300 338-2, n.6.5.10] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | - |

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|-----------------------|------------------------------------|--|
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6.21. Termination of the automatic procedure after acknowledgement. Manually termination of automated procedure test

[ETSI EN 300 338-2, n.6.5.10] [ETSI EN 300 338-2, n.6.3]

The procedure can be terminated manually or by the automated timeout. At least ten seconds prior to automated termination, a visual and discrete aural warning shall be displayed with the option to stop the automatic termination.

If the procedure is terminated manually by the user then integrated equipment may revert to the channel or frequency that was previously selected before the DSC procedure.

[ETSI EN 300 338-2, n.6.5.10]

The following setup options shall be available with the following factory defaults: j) the option to set the no activity timeout of received distress DSC automated procedures to some value that includes no timeout: set to no timeout;

[ETSI EN 300 338-2, n.6.3]

| Scenario | Legend |
|---------------|---------------|
| TestV12H_0059 | TestV12D_0064 |
| TestV12H_0060 | TestV12D_0064 |
| TestV12H_0061 | TestV12D_0064 |
| TestV12H_0062 | TestV12D_0064 |
| TestV12H_0063 | TestV12D_0064 |
| TestV12H_0064 | TestV12D_0064 |
| TestV12H_0065 | TestV12D_0064 |

00:00 Starting automated procedure call 03:00 Additional call

| | 1 | DSC-TEST | N | 01.11 |
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| | | RES Laboratory StPetersburg, Russia | 04 | 4.02.2011 |
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| t I lucian Teets | CAT OD (| | | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

a) Reset EUT into Standby. From TE send serially the calls listed in the table. After sending of each call to send in addition one or more DSC a sequence pertinent to station, but not for the currently active automated procedure. To be convinced, that calls are received. If need, send acknowledgement. Verify that:

| Starting automated procedure call | There is option Termination | Possibly manually termination procedure | There is warning that terminating the procedure | Comments |
|-----------------------------------|-----------------------------------|--|---|----------|
| Distress alert (RT) | Yes | Yes | No | |
| TestV12H_0059.scn | | | | |
| Distress alert (FEC) | Yes | Yes | No | |
| TestV12H_0060.scn | | | | |
| Distress acknowledgement (RT) | Yes | Yes | No | |
| Distress acknowledgement (FEC) | Ves | Ves | No | |
| TestV12H_0062.scn | 105 | 105 | 110 | |
| Distress relay RT Individual | Yes | Yes | No | |
| TestV12H_0063.scn | | | | |
| Distress relay RT Geographic | Yes | Yes | No | |
| area | | | | |
| TestV12H_0064.scn | | | | |
| Distress relay RT All ships | Yes | Yes | No | |
| TestV12H_0065.scn | | | | |

| Ν | 01 | .11 | |
|---|----|-----|--|
|---|----|-----|--|

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| Item | | Result | |
|---|-----|--------|----------|
| Manually termination of automated procedure | YES | NO | ment |
| (after acknowledgement) | | | |
| the operator is informed that the procedure is acknowledged , | X | | |
| [ETSI EN 300 338-2, n.6.5.3,l(5)] | ~ | | |
| the option to terminate the procedure is available, | | X | (12) |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | | ~ | |
| Upon selection of the option to terminate the procedure a warning is NOT | X | | |
| provided that one is terminating the procedure, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.8] | | | |
| If the procedure is terminated manually by the user then integrated equipment | Y | | Stand-by |
| may revert to the channel or frequency that was previously selected before the | ~ | | _ |
| DSC procedure. | | | |
| [ETSI EN 300 338-2, n.6.5.10] | | | |

(E521) (E1039) (12)

For the case when equipment is engaged in the NBDP communications option "Terminate" is blocked. When choosing an operator option "Terminate" a warning appears : "Unable to comply. Please terminate telex connection".

That is, the operator shall terminate at the Message Terminal (separate unit SAILOR 6006) the telex session communication first. Only after that may terminate the DSC procedure from the control unit SAILOR 6301.

[ETSI EN 300 338-2, n.6.4.13]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
|--|----|

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6.22. Termination of automated procedure by automated timout

[ETSI EN 300 338-2, n.6.5.10]

| Scenario | Legend |
|---------------|---------------|
| TestV12H_0059 | TestV12D_0064 |
| TestV12H_0060 | TestV12D_0064 |
| TestV12H_0061 | TestV12D_0064 |
| TestV12H_0062 | TestV12D_0064 |
| TestV12H_0063 | TestV12D_0064 |
| TestV12H_0064 | TestV12D_0064 |
| TestV12H_0065 | TestV12D_0064 |

00:00 Starting automated procedure call 03:00 Additional call

a) Reset EUT into Standby. Set automated termination of procedure timeout.

From TE send serially the calls listed in the table. After sending of each call to send in addition one or more DSC a sequence pertinent to station, but not for the currently active automated procedure. To be convinced, that calls are received. Verify that:

| Kom | Value of | Warning prior automated termination | | | There is warning | | Comment | |
|-----------------------------------|--------------------------|-------------------------------------|--------|-------------------|------------------|---------------|---------|--|
| item | automated Termination | At least 10 seconds | visual | Discrete aural | Option to stop | the procedure | | |
| Distress alert (RT) | 2 min | Yes | Yes | Yes | Yes | Yes | | |
| TestV12H_0059.scn | | | | | | | | |
| Distress alert (FEC) | X | Х | Х | X | X | X | | |
| TestV12H_0060.scn | | | | | | | | |
| Distress acknowledgement (RT) | Х | Х | Х | Х | Х | X | | |
| TestV12H_0061.scn | | | | | | | | |
| Distress acknowledgement (FEC) | Х | Х | Х | Х | Х | X | | |
| TestV12H_0062.scn | | | | | | | | |
| Distress relay RT Individual | Х | Х | Х | Х | Х | X | | |
| TestV12H_0063.scn | | | | | | | | |
| Distress relay RT Geographic area | Х | Х | Х | Х | Х | X | | |
| TestV12H_0064.scn | | | | | | | | |
| Distress relay RT All ships | Х | Х | Х | Х | Х | X | | |
| TestV12H_0065.scn | | | | | | | | |

| Item | | Result | |
|--|-----|--------|------|
| Termination of automated procedure by automated timout | YES | NO | ment |
| | | | |
| the option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(6)] | Λ | | |
| At least ten seconds prior to automated termination, a visual and discrete aural | Y | | |
| warning shall be displayed with the option to stop the automatic termination. | ~ | | |
| [ETSI EN 300 338-2,n.6.5.10] | | | |
| The operator should have the option to go back to the stage of the automated | Y | | |
| procedure where the action was taken that caused the warning. | ~ | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.1.6] | | | |

(18) (E1040)

Automated timeout termination of the procedure does not meet requirements. If automatic termination occurs when the window is open "VIEW", then the procedure was terminated, but remains on the display screen "VIEW". While the "VIEW" is part of the procedure and also when terminating procedures should be removed from the display.

[ETSI EN 300 338-2,n.6.5.10; n.6.5.3,e]

(19) (E661)

Automated timeout termination of the procedure does not meet requirements. If automatic termination occurs when the window is open "HISTORY", then the procedure was terminated, but remains on the display screen "HISTORY". While the "HISTORY" is part of the procedure and also when terminating procedures should be removed from the display. [ETSI EN 300 338-2,n.6.5.10; n.6.5.3,k]

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6.23. Determining subsequent communications test

[ETSI EN 300 338-2, n.6.5.6] [ETSI EN 300 338-2, n.6.5.7]

On VHF it is always channel 16.

On MF it is either 2 182,0 kHz (voice) or 2 174,5 kHz (data).

On HF the frequency band is given by:

a) the frequency band of a single frequency distress alert attempt, relay, distress alert acknowledgement, and relay acknowledgment;

b) the 8 MHz band if a multi-frequency distress alert attempt is received. A distress alert attempt is considered to be multi-frequency if two consecutive distress alerts are received on two different frequencies within a period of one minute. This rule applies even if neither of the two distress alerts were received on the 8 MHz band;

c) the channel set is given by the mode of subsequent communication;

d) the band of subsequent communication given in (c) shall be used as the default DSC band for any subsequent distress DSC messages sent by the operator.

[ETSI EN 300 338-2, n.6.5.6]

On HF the operator shall always have the option to send a distress relay to a coast station. The operator shall not have the option to send a distress relay acknowledgment until an

individual distress relay request has been received.

The operator shall not have the option to send a distress alert acknowledgment until a distress alert has been received.

Once the option to send any of the distress DSC messages (distress relay, distress alert acknowledgement, distress relay acknowledgement) referenced above becomes available, the options shall remain available until the procedure is terminated.

The procedure shall automatically compose the distress DSC messages referenced above except:

a) the distress relay where the operator shall have the option to select the addressing mode and address where the default shall be individual and on MF/HF the communications mode; and

b) in a procedure handling an individually addressed relay or relay acknowledgement, the operator shall have the option to send an all ships relay acknowledgement in addition to the default individual relay acknowledgement even though this DSC message is typically forbidden to be sent by ship stations. (Note that it is only possible to send an individually addressed distress relay acknowledgement upon reception of an individually addressed relay).

On HF the operator shall have the option to override the default band of the DSC message and send the distress DSC messages (distress relay, distress alert acknowledgement, distress relay acknowledgement) referenced above on any one of the six distress channels.

[ETSI EN 300 338-2, n.6.5.9]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0059 | TestH_0N0E |
| TestV12H_0060 | TestH_0N0E |

00:00 Starting automated procedure call

TestV12H_0059- Distress call (RT) TestV12H_0060 – Distress call (FEC)

| DSC-TEST |
|-----------------------|
| RES Laboratory |
| StPetersburg, Russia |

| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

a) Reset the EUT to standby. From the TE send a single frequency distress on the 2187.5 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn 00:00

| Distress alert (RT) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 2182 kHz is displayed | Y | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | Y | | |
| (2187.5 kHz) | ~ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Y | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is available (MF), | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Χ | | |
| On MF/HF the operator shall have the option to override the default band of the | X | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | | X | (20) |
| on the 2182 kHz automatically upon reception of a distress DSC message. | | ~ | (21) |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 2 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 2 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

| 1 | DSC-TEST | N 01.11 |
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| | RES Laboratory StPetersburg, Russia | 04.02.2011 |
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| Company: | Thrane&Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 4207.5 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn

00:00

| Distress alert (RT) | | | |
|---|--------|----|------|
| Item | Result | | Com- |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 4125 kHz is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Χ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (4207.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is NOT available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 2.2 | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 4125 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| 1 | DSC-TEST | N 01.11 |
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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 6312 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn 00:00

| Distress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Χ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Χ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 6215 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Χ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (6312 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | 23 | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 2 - | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 6215 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 6 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 6 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 8414.5 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn

00:00

| Distress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | Y | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (8414.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 23 | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 8291 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 8 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 12577 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn

00:00

| Distress alert (RT) | | | |
|--|--------|----|------|
| Item | Result | | Com- |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 12290 kHz is displayed | Y | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | Y | | |
| (12577 kHz) | ~ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available (MF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is NOT available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | | | |
| on the 12290 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 12 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 12 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| Company: | Thrane& Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 16804.5 kHz with subsequent communication RT and verify that:

TestV12H_0059.scn

00:00

| Distress alert (RT) | | | |
|---|----------|----|------|
| Item | Result (| | Com- |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | N | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 16420 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Χ | | |
| The frequenciy on witch the DSC messages have been received is displayed | Х | | |
| (16804.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| the option to send a distress relay acknowledgement is NOT available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 21 | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 16420 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 16 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 16 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

DSC-TEST RES Laboratory St.-Petersburg, Russia

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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

b) Reset the EUT to standby. From the TE send a single frequency distress on the 2187.5 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn 00:00

| Distress alert (FEC) | | | |
|---|--------------|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 2174.5 kHz is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,h] | ~ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (2187.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| On MF/HF the operator shall have the option to override the default band of the | X | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 2174.5 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 2 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | <i>·</i> · · | | |
| You can send telex to the TE from the EUT on the 2 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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| Company: | Thrane& Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 4207.5 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn

00:00

| Distress alert (FEC) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | ~ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | ~ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 4177.5 kHz is displayed | Y | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (4207.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available (HF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 23 | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 4177.5 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 4 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT on the 4 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| 1 | DSC-TEST | N 01.11 |
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| Company: | Thrane&Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 6312 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn _____

| Distress alert (FEC) | | | |
|--|--------|----|------|
| ltem | Result | | Com- |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 6268 kHz is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Χ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (6312 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is <u>NOT</u> available (HF), | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | ~ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | ~ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 2 - | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 6268 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT on the 6 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 6 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

| 1 | DSC-TEST | N 01.11 |
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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 8414.5 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn 00:00

| Distress alert (FEC) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8376.5 kHz is displayed | Y | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (8414.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Λ | | |
| the option to send a distress alert acknowledgement is NOT available (HF), | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 8376.5 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 8 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT on the 8 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Reset the EUT to standby. From the TE send a single frequency distress on the 12577 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn

00:00

| Distress alert (FEC) | | | |
|---|---|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Χ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 12520 kHz is displayed | Х | | |
| [ETSI EN 300 338-2, 6.5.3,h] | 20 | | |
| The frequenciy on witch the DSC messages have been received is displayed | Х | | |
| (12577 kHz) | 21 | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the | On HF the operator shall have the option to override the default band of the X | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 12520 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 12 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT on the 12 MHz, | Х | | |
| [E1S1 EN 300 338-2, n.6.5.6] | | | |

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Reset the EUT to standby. From the TE send a single frequency distress on the 16804.5 kHz with subsequent communication FEC and verify that:

TestV12H_0060.scn

<u>00:00</u>

| Distress alert (FEC) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | ~ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 16695 kHz is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,h] | Λ | | |
| The frequenciy on witch the DSC messages have been received is displayed | X | | |
| (16804.5 kHz) | ~ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is NOT available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the Y | | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | 23 | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 16695 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the EUT from the TE on the 16 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can send telex to the TE from the EUT on the 16 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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c) Reset the EUT to standby. From the TE send a multi-frequency distress on the 2187.5, 8414.5 and 12577 kHz with subsequent communication RT and verify that:

Channel 1: 2187.5 kHz Channel 2: 8414.5 kHz Channel 3: 12577 kHz

TestV12H_0066.scn 00:00

| Distress alert (RT) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,i] | Λ | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Χ | | |
| the option to send a distress alert acknowledgement is available (MF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | | |
| On HF the operator shall have the option to override the default band of the | | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 8291 kHz automatically upon reception of a distress DSC message. | ~ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 8 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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d) Reset the EUT to standby. From the TE send a multi-frequency distress on the 2187.5 and 6312 kHz with subsequent communication RT and verify that:

Channel 1: 2187.5 kHz Channel 2: 6312 kHz

TestV12H_0067.scn

00:00

| Distress alert (RT) | | | | |
|--|--------------|--------|------|--|
| Item | | Result | | |
| | YES | NO | ment | |
| the EUT sounds the two tone alarm, | Y | | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | | |
| position, time of position, comms) is displayed and correct, | Λ | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | |
| The frequency of subsequent communication 8291 kHz is displayed | Y | | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | | |
| The frequencies on witch the DSC messages have been received is displayed | Y | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | Λ | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | | |
| the option to send a distress relay is available, | | Y | (22) | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | ~ | | |
| the option to send a distress alert acknowledgement is available (MF), | Y | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | | |
| the option to send a distress relay acknowledgement is NOT available, | X | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Χ | | | |
| On HF the operator shall have the option to override the default band of the | X | | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | | |
| one of the six distress channels. | | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | | |
| on the 8291 kHz automatically upon reception of a distress DSC message. | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | X | | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | | |
| You can speak to the TE from the EUT on the 8 MHz, | Х | | | |
| [ETSI EN 300 338-2, n.6.5.6] | <i>·</i> · · | | | |

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e) Reset the EUT to standby. From the TE send a multi-frequency distress on the 4207.5 and 12577 kHz with subsequent communication RT and verify that:

Channel 1: 4217.5 kHz Channel 2: 12577 kHz

TestV12H_0067.scn

00:00

| Distress alert (RT) | | | |
|---|---|-----|------|
| Item | | ult | Com- |
| | | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,i] | Λ | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | | | |
| the option to send a distress alert acknowledgement is available (MF), | | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| On HF the operator shall have the option to override the default band of the | X | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | Λ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 8291 kHz automatically upon reception of a distress DSC message. | ~ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 8 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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f) Reset the EUT to standby. From the TE send a multi-frequency distress on the 12577 and 16804.5 kHz with subsequent communication RT and verify that:

Channel 1: 12577 kHz Channel 2: 16804.5 kHz

TestV12H_0067.scn

00:00

| Distress alert (RT) | | | |
|---|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | Y | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| [ETSI EN 300 338-2, 6.5.3,i] | Λ | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| the option to send a distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(1)] | Χ | | |
| the option to send a distress alert acknowledgement is available (MF), | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(2)] | Λ | | |
| the option to send a distress relay acknowledgement is <u>NOT</u> available, | Х | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| On HF the operator shall have the option to override the default band of the | Х | | |
| DSC message and send the distress DSC messages (distress relay, distress alert | ~ | | |
| acknowledgement, distress relay acknowledgement) referenced above on any | | | |
| one of the six distress channels. | | | |
| [ETSI EN 300 338-2, n.6.5.9] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 8291 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 8 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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g) Reset the EUT to standby. From the TE send a three single frequency distress on the 2187.5, 8414.5 and 12577 kHz with subsequent communication RT and verify that:

00:00 Channel 1: 2187.5 kHz 01:20 Channel 2: 8414.5 kHz 02:40 Channel 3: 12577 kHz

TestV12H_0068.scn 00:00 Channel 1: 2187.5 kHz

| Distress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the two tone alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 2182 kHz is displayed | | | |
| [ETSI EN 300 338-2,6.5.3,h] | | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| (2187.5 kHz) | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | X | | |
| on the 2182 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 2 Mhz, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 2 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

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TestV12H_0068.scn 01:20 Channel 2: 8414.5 kHz

| ltem | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the EUT sounds the self terminate alarm, | | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | | | |
| position, time of position, comms) is displayed and correct, | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | | X | (23) |
| [ETSI EN 300 338-2,6.5.3,h] | | | |
| The frequencies on witch the DSC messages have been received is displayed | | | |
| (8414.5 kHz) | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| on HF the operator shall have a 10 seconds warning prior any tuning if the new | | | |
| subsequent frequency is different from the current; | | | |
| [ETSI EN 300 338-2, n.6.5.7,a] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | | | |
| on the 8291 kHz automatically in the absence any operator action. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| [ETSI EN 300 338-2, n.6.5.7,c] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 8 MHz, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
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TestV12H_0068.scn 02:40 Channel 3: 12577 kHz

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the EUT sounds the self terminate alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Х | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 12290 kHz is displayed | | X | (23) |
| [ETSI EN 300 338-2,6.5.3,h] | | | |
| The frequencies on witch the DSC messages have been received is displayed | Х | | |
| (12577 kHz) | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| on HF the operator shall have a 10 seconds warning prior any tuning if the new | Х | | |
| subsequent frequency is different from the current; | | | |
| [ETSI EN 300 338-2, n.6.5.7,a] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Х | | |
| on the 12290 kHz automatically in the absence any operator action. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| [ETSI EN 300 338-2, n.6.5.7,c] | | | |
| You can speak to the EUT from the TE on the 12 Mhz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 12 MHz, | Х | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |

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(20) (E1315)

Broken the rules for handling receiving distress automated procedure. For receiving distress automated procedures the automated tuning to the communication frequency occurs after shutdown alarm by operator. While the automated tuning to the communication frequency shall occur upon the reception a call.

[ETSI EN 300 338-2, 6.5.7]

(21) (E1316)

Broken the rules for handling receiving distress automated procedure.

For receiving automated procedures the initiating of procedure occurs after shutdown alarm by operator. While the initiating of the procedure shall occur upon the reception a call.

Therefore, if the equipment after receiving a distress call with telex subcommunication, but before to shutdown the alarm by operator, receives a NBDP incomming call, start a new NBDP communications procedure. While the reception NBDP call shall be the part of current receiving distress automated proicrdure.

[ETSI EN 300 338-2, 6.5.1]

(22) (E1042)

Broken the procedure of distress relay composition.

TE sent multi-frequency distress alert attempt on the 2 and 6 MHz. EUT initiated receiving distress automated procedure. EUT set communication frequency 8 MHz. Operator try to send distress relay (no DROBOSE). EUT set default DSC and sub-communication frequencies from 2 MHz, while is required from 8 MHz.

[ETSI EN 300 338-2, 6.5.9]

(23) (E1318)

In the menu of the latest distress information (VIEW) is always displayed the frequency of subsequent communication for the primary DSC message (2182 kHz), which initiated the receiving distress automated procedure. While required to display the frequency of subsequent communication to the latest received DSC message.

[ETSI EN 300 338-2, 6.5.3,f]

| The ea | uinment | meets | the rec | nuirements | (ves l | / no /n a) | |
|--------|----------|-------|---------|------------|--------|------------|---|
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| ompany: | Thrane&Thre | ane | | | |
| guinment Under Test | SALLOP 632 | 0 250W ME/HE DSC Class A | | | |

Company:Thrane&ThraneEquipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

6.24. Automated tuning prior to acknowledgement test

[ETSI EN 300 338-2, n.6.5.7]

The tuning to the subsequent communication frequencies as determined in clause 6.5.6 shall occur automatically upon reception of a distress DSC message in the following manner:

a) on HF the operator shall have a 10 seconds warning prior any tuning if the new subsequent frequency is different from the current;

b) the operator shall be able to pause the tuning in case engaged in traffic or accept the tuning;

c) prior to acknowledgement, the tuning to the new frequency shall occur in the absence of any operator action;

d) after acknowledgment the tuning to the new frequency shall only occur if the operator requests it (note that the procedure is not yet acknowledged until after the first acknowledgement starts the alarm).

[ETSI EN 300 338-2, n.6.5.7]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0068 | TestH_0N0E |
| | |

00:00 Distress call RT Channel 1: 2187.5 kHz 01:20 Distress call RT Channel 2: 8414.5 kHz 02:40 Distress call RT Channel 3: 12577 kHz

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a) Reset the EUT to standby. From the TE send single frequency distress attempt on the 2187.5 kHz with subsequent communication RT and verify that:

TestV12H_0068.scn 00:00 Channel 1: 2187.5 kHz

| Destress alert (RT) | | | |
|--|---|-----|------|
| Item | | ult | Com- |
| | | NO | ment |
| The EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| The fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 2182 kHz is displayed | | | |
| [ETSI EN 300 338-2,6.5.3,h] | | | |
| The frequencies on witch the DSC messages have been received is displayed | | | |
| (2187.5 kHz) | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | Y | | |
| on the 2182 kHz automatically upon reception of a distress DSC message. | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 2 Mhz, | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the TE from the EUT on the 2 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

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From the TE send next single frequency distress attempt on the 8414.5 kHz with subsequent communication RT and verify that:

TestV12H_0068.scn 01:20 Channel 2: 8414.5 kHz

| Destress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the self terminate alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 8291 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | | X | (24) |
| (8414.5 kHz) | | ~ | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The operator shall have a 10 seconds warning prior any tuning if the new | X | | |
| subsequent frequency is different from the current; | Λ | | |
| [ETSI EN 300 338-2, n.6.5.7,a] | | | |
| the operator shall be able to pause the tuning in case engaged in traffic; | X | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | Λ | | |
| the operator shall be able to accept the tuning; | | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | | | |
| You can speak to the EUT from the TE on the 2 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT on the 2 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

Accept the tuning on the new frequency (in the absence any operator action).

| ltem | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| The tuning to the subsequent communication frequencies channel shall occur | X | | |
| on the 8291 kHz automatically in the absence any operator action. | Λ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| [ETSI EN 300 338-2, n.6.5.7,c] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT on the 8 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

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From the TE send next single frequency distress attempt on 12577 kHz with subsequent communication RT and verify that:

TestV12H_0068.scn 02:40 Channel 3: 12577 kHz

| Destress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| the EUT sounds the self terminate alarm, | Y | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 12290 kHz is displayed | Y | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| (12577 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The operator shall have a 10 seconds warning prior any tuning if the new | X | | |
| subsequent frequency is different from the current; | Λ | | |
| [ETSI EN 300 338-2, n.6.5.7,a] | | | |
| the operator shall be able to pause the tuning in case engaged in traffic; | X | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | Χ | | |
| the operator shall be able to accept the tuning; | X | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | Λ | | |
| You can speak to the EUT from the TE on the 8 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT on the 8 MHz, | x | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

Pause the tuning on the new frequency.

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| The tuning to the subsequent communication frequency on the 12290 kHz channel shall <u>NOT</u> occur. | X | | |
| [ETSI EN 300 338-2, n.6.5.6] [ETSI EN 300 338-2, n.6.5.7,b] | | | |
| You can speak to the EUT from the TE on the 8 Mhz, [ETSI EN 300 338-2, n.6.5.6] | X | | |
| You can speak to the TE from the EUT on the 8 MHz, [ETSI EN 300 338-2, n.6.5.6] | X | | |

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(24) (E1319)(E569)(E571)

The receiving distress automated procedure displays the frequency at which calls were received. In this case, there is no possibility to determine at what frequency was received the last call.

[ETSI EN 300 338-2, n.6.5.3,i]

| The equipment meets the requirements (yes / no /n.a) | no |
|--|----|
| | |

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6.25. Automated tuning after acknowledgement test

[ETSI EN 300 338-2, n.6.5.7]

The tuning to the subsequent communication frequencies as determined in clause 6.5.6 shall occur automatically upon reception of a distress DSC message in the following manner:

a) on HF the operator shall have a 10 seconds warning prior any tuning if the new subsequent frequency is different from the current;

b) the operator shall be able to pause the tuning in case engaged in traffic or accept the tuning;

c) prior to acknowledgement, the tuning to the new frequency shall occur in the absence of any operator action;

d) after acknowledgment the tuning to the new frequency shall only occur if the operator requests it (note that the procedure is not yet acknowledged until after the first acknowledgement starts the alarm).

[ETSI EN 300 338-2, n.6.5.7]

| Scenario | Legend |
|---------------|------------|
| TestV12H_0069 | TestH_0N0E |

00:00 Initiate Distress call RT Channel 1: 4207.5 kHz 01:20 Distress call RT acknowledgement Channel 1: 4207.5 kHz 02:40 Initiate Distress call RT Channel 2: 12577 kHz 04:00 Distress call RT acknowledgement Channel 12577 kHz

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a) Reset the EUT to standby. From the TE send single frequency distress attempt on the 4207.5 kHz with subsequent communication RT and verify that:

TestV12H_0069.scn 00:00 Channel 1: 4207.5 kHz

| Destress alert (RT) | | | |
|--|-----|--------|------|
| Item | | Result | |
| | YES | NO | ment |
| The EUT sounds the two tone alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| The fact one is engaged in receiving a distress is displayed; | X | | |
| [ETSI EN 300 338-2,n.6.5.3,a] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | Y | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 4125 kHz is displayed | Y | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | Y | | |
| (4207.5 kHz) | ~ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The tuning to the subsequent communication frequencies channel shall occur | X | | |
| on the 4125 kHz automatically upon reception of a distress DSC message. | Λ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

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From the TE send distress acknowledgement on the 4207.5 kHz with subsequent communication RT and verify that:

TestV12H_0069.scn 01:20 Channel 1: 4207.5 kHz

| Destress alert ACK (RT) | | | |
|--|--------|----|------|
| Item | Result | | Com- |
| | YES | NO | ment |
| the EUT sounds the distress ack alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 4125 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Χ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| (4207.5 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Χ | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |

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From the TE send next single frequency distress attempt on 12577 kHz with subsequent communication RT and verify that:

TestV12H_0069.scn 02:40 Channel 2: 12577 kHz

| Destress alert (RT) | | | |
|--|--------|----|------|
| Item | Result | | Com- |
| | YES | NO | ment |
| the EUT sounds the self terminate alarm, | X | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | |
| position, time of position, comms) is displayed and correct, | Λ | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | |
| The frequency of subsequent communication 12290 kHz is displayed | X | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | |
| (12577 kHz) | Λ | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | |
| The tuning to the new frequency shall not occur automatically. The tuning shall | X | | |
| only occur if the operator request it; | Λ | | |
| [ETSI EN 300 338-2, n.6.5.7,d] | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |
| You can speak to the TE from the EUT on the 4 MHz, | X | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | |

Operator does not do any action.

| Item | Result | | Res | Com- |
|---|--------|----|------|------|
| | YES | NO | ment | |
| The tuning to the subsequent communication frequency on the 12290 kHz | X | | | |
| channel shall <u>NOT</u> occur. | Λ | | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | X | | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Y | | | |
| [ETSI EN 300 338-2, n.6.5.6] | Λ | | | |

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From the TE send distress alert acknowledgement on 12577 kHz with subsequent communication RT and verify that:

TestV12H_0069.scn 04:00 Channel 2: 12577 kHz

| Destress alert ACK (RT) | | | | | |
|--|--------|----|--------|--|------|
| Item | Result | | Result | | Com- |
| | YES | NO | ment | | |
| the EUT sounds the self terminate alarm, | X | | | | |
| [ETSI EN 300 338-2, n.6.5.5] | Λ | | | | |
| the latest distress information (MMSI of vessel in distress, nature of distress, | X | | | | |
| position, time of position, comms) is displayed and correct, | Λ | | | | |
| [ETSI EN 300 338-2,n.6.5.3,e] | | | | | |
| The frequency of subsequent communication 12290 kHz is displayed | X | | | | |
| [ETSI EN 300 338-2,6.5.3,h] | Λ | | | | |
| The frequencies on witch the DSC messages have been received is displayed | X | | | | |
| (12577 kHz) | Λ | | | | |
| [ETSI EN 300 338-2, 6.5.3,i] | | | | | |
| [ETSI EN 300 338-2, 6.5.6,d] | | | | | |
| The tuning to the new frequency shall not occur automatically. The tuning shall | Х | | | | |
| only occur if the operator request it; | ~ | | | | |
| [ETSI EN 300 338-2, n.6.5.7,d] | | | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | 23 | | | | |
| You can speak to the TE from the EUT on the 4 MHz, | Х | | | | |
| [ETSI EN 300 338-2, n.6.5.6] | 23 | | | | |

Operator does not do any action.

| Item | Result | | Com- |
|---|--------|----|------|
| | YES | NO | ment |
| The tuning to the subsequent communication frequency on the 12290 kHz | X | | |
| channel shall <u>NOT</u> occur. | ~ | | |
| [ETSI EN 300 338-2, n.6.5.6] | | | |
| [ETSI EN 300 338-2, n.6.5.7,b] | | | |
| You can speak to the EUT from the TE on the 4 Mhz, | Y | | |
| [ETSI EN 300 338-2, n.6.5.6] | ~ | | |
| You can speak to the TE from the EUT on the 4 MHz, | Y | | |
| [ETSI EN 300 338-2, n.6.5.6] | ^ | | |

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On operator request tune to new frequency 12290 kHz.

| Item | Result | | Com- |
|---|--------|----|------|
| | YES | NO | ment |
| Operator shall have the option to change the default frequency of the subsequent communication; [ETSI EN 300 338-2, n.6.5.7,d] | Х | | |
| You can speak to the EUT from the TE on the 12 Mhz, [ETSI EN 300 338-2, n.6.5.6] | X | | |
| You can speak to the TE from the EUT on the 12 MHz, [ETSI EN 300 338-2, n.6.5.6] | X | | |

Terminate the current procedure.

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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6.26. Reception of Distress call with different position and nature of distress test

Distress call with position in the NW quadrant

[ITU-R M.493-13, Annex 1, Table 4.1]

Definition

This test checks the ability of the EUT to reception of the distress information correctly for different values of the nature of distress and from different positions on the globe.

Method of measurement and required results

Set the EUT and TE into standby. Select from the TE the option to send a distress. Configure the TE to be located in the NW Hemisphere and different nature of distress as listed in the tables.

| Scenario | Legend |
|---------------|-----------------|
| TestH_1-2-2-1 | Is not required |
| TestH_1-2-2-2 | Is not required |
| TestH_1-2-2-3 | Is not required |

TestH_1-2-2-1- All nature of distress, w/o expansion; *TestH_1-2-2-2-* All nature of distress, with expansion; *TestH_1-2-2-3-* All type of subsequent of communications;

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Results

TestH_1-2-2-1- All nature of distress, w/o expansion; *TestH_1-2-2-2-* All nature of distress, with expansion;

| N | N Nature of Distress | | Reception by EUT | | Comment | |
|----|---------------------------------|-----|---------------------|----|--------------------|--|
| | | | YES | NO | | |
| 1 | Fire, explosion | X | | | | |
| 2 | Flooding | | X | | | |
| 3 | Collision | | X | | | |
| 4 | Grounding | | X | | | |
| 5 | Listing, in danger of capsizing | | X | | | |
| 6 | Sinking | | X | | | |
| 7 | Disabled and adrift | | X | | | |
| 8 | Undesignated distress | | X | | | |
| 9 | Abandoning ship | | X | | | |
| 10 | Piracy/armed robbery attack | | X | | | |
| 11 | Man overboard | | X | | | |
| 12 | EPIRB emission | | | X | Should be rejected | |
| 13 | Unassigned symbol | 111 | | X | Should be rejected | |
| 14 | | 113 | | X | Should be rejected | |
| 15 | | 126 | | X | Should be rejected | |

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| Distress coordinates and Time | | | | | | |
|-------------------------------|-------------|------------|--------------|-----|------|---------|
| ltem | Received by | Send by TE | | Re | sult | Comment |
| | EUT | | | YES | NO | |
| Latitude | 1234N | Main | 12 34 N | X | | |
| | | Expansion | No expansion | X | | |
| Longitude | 12345W | Main | 123 45 W | X | | |
| | | Expansion | No expansion | X | | |
| UTC | 0955 | 09:55 | | X | | |

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(2) TestH_1-2-2-2- All nature of distress, with expansion;

| Distress coordinates and Time | | | | | | |
|-------------------------------|-------------|------------|----------|--------|----|---------|
| ltem | Received by | Send by TE | | Result | | Comment |
| | EUT | | | YES | NO | |
| Latitude | 8959 1234N | Main | 89 59 N | X | | |
| | | Expansion | 1234 | X | | |
| Longitude | 17959 9876W | Main | 179 59 W | X | | |
| | | Expansion | 9876 | X | | |
| UTC | 2359 | , | 23:59 | X | | |

TestH_1-2-2-3- All type of subsequent of communications;

| Subsequent communication | Reception by EUT | | Comment | |
|--------------------------|---------------------|----|--------------------|--|
| | YES | NO | | |
| F3E/G3E All modes TP | | Х | Should be rejected | |
| F3E/G3E duplex TP | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |
| J3E TP | X | | | |
| H3E TP | | Х | Should be rejected | |
| F1B/J2B TTY-FEC | X | | | |
| F1B/J2B TTY-ARQ | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |

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Distress call with position in the NE quadrant

[ITU-R M.493-13, Annex 1, Table 4.1]

Definition

This test checks the ability of the EUT to reception of the distress information correctly for different values of the nature of distress and from different positions on the globe.

Method of measurement and required results

Set the EUT and TE into standby. Select from the TE the option to send a distress. Configure the TE to be located in the NE Hemisphere and different nature of distress as listed in the tables.

| Scenario | Legend |
|---------------|-----------------|
| TestH_1-2-3-1 | Is not required |
| TestH_1-2-3-2 | Is not required |
| TestH_1-2-3-3 | Is not required |

TestH_1-2-3-1- All nature of distress, w/o expansion; *TestH_1-2-3-2-* All nature of distress, with expansion; *TestH_1-2-3-3-* All type of subsequent of communications;

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Results

TestH_1-2-3-1- All nature of distress, w/o expansion; *TestH_1-2-3-2-* All nature of distress, with expansion;

| N | Nature of Distress | Rece by E | otion EUT | Comment |
|----|---------------------------------|--------------|--------------|--------------------|
| | | YES | NO | |
| 1 | Fire, explosion | X | | |
| 2 | Flooding | X | | |
| 3 | Collision | X | | |
| 4 | Grounding | X | | |
| 5 | Listing, in danger of capsizing | X | | |
| 6 | Sinking | X | | |
| 7 | Disabled and adrift | X | | |
| 8 | Undesignated distress | X | | |
| 9 | Abandoning ship | X | | |
| 10 | Piracy/armed robbery attack | X | | |
| 11 | Man overboard | X | | |
| 12 | EPIRB emission | | X | Should be rejected |
| 13 | Unassigned symbol | | X | Should be rejected |
| 14 | | | X | Should be rejected |
| 15 | | | X | Should be rejected |

(1) TestH_1-2-3-1- All nature of distress, w/o expansion;

| Distress coordinates and Time | | | | | | | |
|-------------------------------|-------------|------------|--------------|-----|------|---------|--|
| ltem | Received by | Send by TE | | Re | sult | Comment | |
| | EUT | | | YES | NO | | |
| Latitude | 1234N | Main | 12 34 N | X | | | |
| | | Expansion | No expansion | X | | | |
| Longitude | 12345E | Main | 123 45 E | X | | | |
| | | Expansion | No expansion | X | | | |
| UTC | 0955 | | 09:55 | X | | | |

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(2) TestH_1-2-3-2- All nature of distress, with expansion;

| Distress coordinates and Time | | | | | | | |
|-------------------------------|-------------|------------|----------|-----|------|---------|--|
| ltem | Received by | Send by TE | | Re | sult | Comment | |
| | EUT | | | YES | NO | | |
| Latitude | 8959 1234N | Main | 89 59 N | X | | | |
| | | Expansion | 1234 | X | | | |
| Longitude | 17959 9876E | Main | 179 59 E | X | | | |
| | | Expansion | 9876 | X | | | |
| UTC | 2359 | 23:59 | | X | | | |

TestH_1-2-3-3- All type of subsequent of communications;

| Subsequent communication | Recept | tion by JT | Comment | |
|--------------------------|--------|---------------|--------------------|--|
| | YES | NO | | |
| F3E/G3E All modes TP | | Х | Should be rejected | |
| F3E/G3E duplex TP | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |
| J3E TP | X | | | |
| H3E TP | | Х | Should be rejected | |
| F1B/J2B TTY-FEC | X | | | |
| F1B/J2B TTY-ARQ | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |

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Distress call with position in the SW quadrant

[ITU-R M.493-13, Annex 1, Table 4.1]

Definition

This test checks the ability of the EUT to reception of the distress information correctly for different values of the nature of distress and from different positions on the globe.

Method of measurement and required results

Set the EUT and TE into standby. Select from the TE the option to send a distress. Configure the TE to be located in the SW Hemisphere and different nature of distress as listed in the tables.

| Scenario | Legend |
|---------------|-----------------|
| TestH_1-2-4-1 | Is not required |
| TestH_1-2-4-2 | Is not required |
| TestH_1-2-4-3 | Is not required |

TestH_1-2-4-1- All nature of distress, w/o expansion; *TestH_1-2-4-2-* All nature of distress, with expansion; *TestH_1-2-4-3-* All type of subsequent of communications;

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Results

TestH_1-2-4-1- All nature of distress, w/o expansion; *TestH_1-2-4-2-* All nature of distress, with expansion;

| N | Nature of Distress | | Recep by E | otion UT | Comment | |
|----|----------------------------|-------|---------------|-------------|--------------------|--|
| | | YES | NO | | | |
| 1 | Fire, explosion | | X | | | |
| 2 | Flooding | | X | | | |
| 3 | Collision | | X | | | |
| 4 | Grounding | | X | | | |
| 5 | Listing, in danger of caps | izing | X | | | |
| 6 | Sinking | | X | | | |
| 7 | Disabled and adrift | | X | | | |
| 8 | Undesignated distress | | X | | | |
| 9 | Abandoning ship | | X | | | |
| 10 | Piracy/armed robbery at | tack | X | | | |
| 11 | Man overboard | | X | | | |
| 12 | EPIRB emission | | | Х | Should be rejected | |
| 13 | Unassigned symbol | 111 | | Х | Should be rejected | |
| 14 | | 113 | | Х | Should be rejected | |
| 15 | | 126 | | X | Should be rejected | |

(1) *TestH_1-2-4-1-* All nature of distress, w/o expansion;

| Distress coordinates and Time | | | | | | | |
|-------------------------------|-------------|------------|--------------|-----|------|---------|--|
| ltem | Received by | Send by TE | | Re | sult | Comment | |
| | EUT | | | YES | NO | | |
| Latitude | 1234S | Main | 12 34 S | X | | | |
| | | Expansion | No expansion | X | | | |
| Longitude | 12345W | Main | 123 45 W | X | | | |
| | | Expansion | No expansion | X | | | |
| UTC | 0955 | 09:55 | | X | | | |

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(2) TestH_1-2-4-2- All nature of distress, with expansion;

| Distress coordinates and Time | | | | | | | |
|-------------------------------|-------------|------------|----------|-----|------|---------|--|
| ltem | Received by | Send by TE | | Re | sult | Comment | |
| | EUT | | | YES | NO | | |
| Latitude | 8959 1234S | Main | 89 59 S | X | | | |
| | | Expansion | 1234 | X | | | |
| Longitude | 17959 9876W | Main | 179 59 W | X | | | |
| | | Expansion | 9876 | X | | | |
| UTC | 2359 | 23:59 | | X | | | |

TestH_1-2-4-3- All type of subsequent of communications;

| Subsequent communication | Reception by EUT | | Comment | |
|--------------------------|---------------------|---|--------------------|--|
| | YES NO | | | |
| F3E/G3E All modes TP | | X | Should be rejected | |
| F3E/G3E duplex TP | | X | Should be rejected | |
| No information | | X | Should be rejected | |
| J3E TP | X | | | |
| H3E TP | | X | Should be rejected | |
| F1B/J2B TTY-FEC | X | | | |
| F1B/J2B TTY-ARQ | | X | Should be rejected | |
| No information | | X | Should be rejected | |

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Distress call with position in the SE quadrant

[ITU-R M.493-13, Annex 1, Table 4.1]

Definition

This test checks the ability of the EUT to reception of the distress information correctly for different values of the nature of distress and from different positions on the globe.

Method of measurement and required results

Set the EUT and TE into standby. Select from the TE the option to send a distress. Configure the TE to be located in the SE Hemisphere and different nature of distress as listed in the tables.

| Scenario | Legend |
|---------------|-----------------|
| TestH_1-2-5-1 | Is not required |
| TestH_1-2-5-2 | Is not required |
| TestH_1-2-5-3 | Is not required |

TestH_1-2-5-1- All nature of distress, w/o expansion; *TestH_1-2-5-2-* All nature of distress, with expansion; *TestH_1-2-5-3-* All type of subsequent of communications;

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Results

TestH_1-2-5-1- All nature of distress, w/o expansion; *TestH_1-2-5-2-* All nature of distress, with expansion;

| N | N Nature of Distress | | Recep by E | otion UT | Comment | |
|----|---------------------------------|------|---------------|-------------|--------------------|--|
| | | YES | NO | | | |
| 1 | Fire, explosion | | | | | |
| 2 | Flooding | | X | | | |
| 3 | Collision | | X | | | |
| 4 | Grounding | | X | | | |
| 5 | Listing, in danger of capsizing | | X | | | |
| 6 | Sinking | | X | | | |
| 7 | Disabled and adrift | | X | | | |
| 8 | Undesignated distress | | X | | | |
| 9 | Abandoning ship | | X | | | |
| 10 | Piracy/armed robbery at | tack | X | | | |
| 11 | Man overboard | | X | | | |
| 12 | EPIRB emission | | | Х | Should be rejected | |
| 13 | Unassigned symbol | 111 | | Х | Should be rejected | |
| 14 | | 113 | | Х | Should be rejected | |
| 15 | | 126 | | X | Should be rejected | |

(1) TestH_1-2-5-1- All nature of distress, w/o expansion;

| Distress coordinates and Time | | | | | | |
|-------------------------------|-------------|------------|--------------|-----|------|---------|
| ltem | Received by | Send by TE | | Re | sult | Comment |
| | EUT | | | YES | NO | |
| Latitude | 12348 | Main | 12 34 S | X | | |
| | | Expansion | No expansion | X | | |
| Longitude | 12345E | Main | 123 45 E | X | | |
| | | Expansion | No expansion | X | | |
| UTC | 0955 | 09:55 | | X | | |

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(2) *TestH_1-2-5-2-* All nature of distress, with expansion;

| Distress coordinates and Time | | | | | | |
|-------------------------------|-------------|------------|----------|-----|------|---------|
| ltem | Received by | Send by TE | | Re | sult | Comment |
| | EUT | | | YES | NO | |
| Latitude | 8959 1234S | Main | 89 59 S | Х | | |
| | | Expansion | 1234 | X | | |
| Longitude | 17959 9876E | Main | 179 59 E | Х | | |
| | | Expansion | 9876 | Х | | |
| UTC | 2359 | 23:59 | | Х | | |

TestH_1-2-5-3- All type of subsequent of communications;

| Subsequent communication | Reception by EUT YES NO | | Comment | |
|--------------------------|-------------------------------|---|--------------------|--|
| | | | | |
| F3E/G3E All modes TP | | Х | Should be rejected | |
| F3E/G3E duplex TP | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |
| J3E TP | X | | | |
| H3E TP | | X | Should be rejected | |
| F1B/J2B TTY-FEC | X | | | |
| F1B/J2B TTY-ARQ | | Х | Should be rejected | |
| No information | | Х | Should be rejected | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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Company: Equipment September 2010 – January 2011 Date:

6.27. Verification of correct decoding of distress call acknowledgment

[ITU-R M.493-13, Annex 1, Table 4.2]

Method of measurement and required results

The EUT and TE are connected. The EUT is set to receive DSC calls. The TE generates, encodes and transmits to the EUT the following sequences:

Distress call acknowledgment.

The EUT receives, decodes and prints DSC calls. With decoder measurements using a printer or computer, agreement of printer output and display indication should be checked. Verify that:

| Scenario | Legend |
|-------------|-----------------|
| TestH_1-6-1 | Is not required |

Results:

TestH_1-6-1

| Ν | Item | Reception | | Result | | Comment |
|---|--|-----------|----|--------|----|-----------------------|
| | | YES | NO | ОК | NO | |
| 1 | Distress call acknowledgement (J3E TP) | X | | X | | |
| 2 | Distress call acknowledgement (FEC) | X | | X | | |
| 3 | Distress call acknowledgement with expansion sequence (J3E TP) | X | | X | | |
| 4 | Distress call acknowledgement with expansion sequence (FEC) | X | | X | | |
| 5 | Distress call acknowledgement (H3E TP) | | X | X | | Should be rejected |
| 6 | Distress call acknowledgement (ARQ) | | X | X | | Should be rejected |

| The equipment meets the requirements (yes / no /n.a) | У |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.28. Verification of correct decoding of distress relay call

[ITU-R M.493-13, Annex 1, Table 4.2, Table 4.3]

Method of testing.

The EUT and TE are connected. The EUT is set to receive DSC calls. The TE generates, encodes and transmits to the EUT the following sequences:

a) Distress relay call, to individual station;

b) Distress relay call, to a geographic area;

c) Distress relay call, to all ships;

d) Distress relay call to all ships where the identifier of the station in distress is unknown;

The EUT receives, decodes and prints DSC calls. With decoder measurements using a printer or computer, agreement of printer output and display indication should be checked.

Result required.

Transmitted and received sequences are compared in content. The EUT should receive and decode the sequences transmitted by the TE correctly.

| Scenario | Legend |
|-------------|-------------|
| TestH_1-7-1 | TestV_1_7_1 |
| TestH_1-7-2 | TestV_1_7_1 |

MMSI of EUT is **273000000**

Group EUT MMSI is **027300000**

Position of EUT is Latitude: 00°00' 0000N Longitude: 000°00' 0000E

TestH_1-7-1

| Type of distress relay call | Possibility of reception of distress relay | | Re | sult | Comment |
|-----------------------------|--|----|----|------|--------------------|
| | YES | NO | ОК | NO | |
| Individual | Х | | X | | |
| Geographic area | Х | | X | | |
| Group | | X | X | | Should be rejected |
| All ships | Х | | X | | |

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TestH_1-7-2

| Ν | Item | Results | | Comment |
|----|--|---------|----|---------|
| | | YES | NO | |
| 1 | Individual distress relay call (J3E TP) | X | | |
| 2 | Individual distress relay call (FEC) | Х | | |
| 3 | Geographic area distress relay call (J3E TP) | Х | | |
| 4 | Geographic area distress relay call (FEC) | X | | |
| 5 | Individual distress relay call with expansion sequence (J3E TP) | X | | |
| 6 | Individual distress relay call with expansion sequence (FEC) | X | | |
| 7 | Geographic area distress relay call with expansion sequence (J3E TP) | X | | |
| 8 | Geographic area distress relay call with expansion sequence (FEC) | X | | |
| 9 | All ships distress relay call with expansion sequence (J3E TP) | X | | |
| 10 | All ships distress relay call with expansion sequence (FEC) | X | | |
| 11 | Distress relay call where the identifier of the station in distress is unknown | X | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

| 1 | DSC-TEST RES Laboratory | NO |
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| Thrane&T | hrane | |

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6.29. Verification of decoding of distress relay acknowledgment

[ITU-R M.493-13, Annex 1, Table 4.4]

Method of measurement and required results

The EUT and TE are connected. The EUT is set to receive DSC calls. The TE generates, encodes and transmits to the TE a distress relay acknowledgement call to individual station and all ships with the end of sequence character BQ.

The EUT receives, decodes and prints DSC calls. When decoder measurements use a printer or computer, agreement of printer output and display indication should be checked. Verify that:

| Scenario | Legend |
|-------------|-------------|
| TestH_1-9-1 | TestV_1_9_1 |
| TestH_1-9-2 | TestV_1_9_1 |

MMSI of EUT is **273000000**

Group EUT MMSI is 027300000

Position of EUT is Latitude: 00°00' 0000N Longitude: 000°00' 0000E

| TestH | 1-9-1 |
|--------|-------|
| 100011 | 101 |

| Type of distress relay call acknowledgement | ype of distress relay call acknowledgement | | sult | Comment | |
|---|--|----|------|---------|------------------------|
| | YES | NO | YES | NO | |
| Individual | Х | | X | | |
| Geographic area | | X | X | | Should not be possible |
| Group | | X | X | | Should not be possible |
| All ships | Х | | X | | |

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TestH_1-9-2

| | Item | | ults | Comment | |
|---|--|-----|------|---------|--|
| | | YES | NO | | |
| 1 | Individual station distress relay acknowledgement (J3E TP) | X | | | |
| 2 | Individual station distress relay acknowledgement (FEC) | X | | | |
| 3 | All ships distress relay acknowledgement (J3E TP) | X | | | |
| 4 | All ships distress relay acknowledgement (FEC) | X | | | |
| 5 | Individual station distress relay acknowledgement with expansion sequence (J3E TP) | X | | | |
| 6 | Individual station distress relay acknowledgement with expansion sequence (FEC) | X | | | |
| 7 | All ships distress relay acknowledgement with expansion sequence (J3E TP) | X | | | |
| 8 | All ships distress relay acknowledgement with expansion sequence (FEC) | X | | | |
| 9 | Individual distress relay acknowledgement with expansion sequence (J3E TP) | X | | | |
| | MMSI Unknown | | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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| Company: | Thrane&T | <i>`hrane</i> | | |
| Equipment Under Test: | SAILOR 6 | 320 250W MF/HF DSC Class A | | |

6.30. Verification of correct generation, encoding and transmission of distress call acknowledgment

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[ITU-R M.493-13, Annex 1, Table 4.2]

Method of measurement and required results

The EUT and TE are connected. The TE generates, encodes and transmits the test signal in various Distress call sequences. The EUT receives DSC calls and sends acknowledgements.

Verification involves automatic generation by received distress call in DSC format: distress call acknowledgment.

| Scenario | Legend |
|-------------|-----------------|
| TestH_1-4-1 | Is not required |

Results

Date:

TestH_1-4-1

| | Item | Results | | Comment |
|---|---|---------|----|---------|
| | | YES | NO | |
| 1 | Distress call acknowledgement (J3E TP) | X | | |
| 2 | Distress call acknowledgement (FEC) | X | | |
| 3 | Distress call acknowledgement with expansion sequence (J3E TP) | X | | |
| 4 | Distress call acknowledgement with expansion sequence (FEC) | X | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

| Possibility of automatic composition of acknowledgement on the basis of the received distress call | | | | | |
|---|---|---------|----|---------|--|
| | Item | Results | | Comment | |
| | | ОК | NO | | |
| 1 | Distress call acknowledgement (J3E TP) | X | | | |
| 2 | Distress call acknowledgement (FEC) | X | | | |
| 3 | Distress call acknowledgement with expansion sequence (J3E TP) | X | | | |
| 4 | Distress call acknowledgement with expansion sequence (FEC) | X | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

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6.31. Verification of correct generation, encoding and transmission of distress relay call

[ITU-R M.493-13, Annex 1, Table 4.2, Table 4.3] [ITU-R M.541-9, Annex 3, n.1.4.1]

Method of measurement and required results

The EUT and TE are connected. The EUT is set to receive DSC calls. The TE generates, encodes and transmits the test signal in various distress call sequences.

Verification involves automatic generation by received distress call in DSC format: distress relay call. The following signals are alternately transmitted to the TE:

a) Individual distress relay call;

b) Distress relay call to all ships;

c) Distress relay call to all ships where the identity of the station in distress is unknown.

It should also be possible to generate distress relay calls in response to a distress situation observed or notified by non-DSC means.

| Scenario | Legend |
|-------------|-----------------|
| TestH_1-5-1 | Is not required |

Results:

TestH_1-5-1

| Type of distress relay call | of distress relay call Possibility of sending of distress relay Result | | sult | Comment | |
|-----------------------------|---|----|------|---------|---------------------------|
| | YES | NO | YES | NO | |
| Individual | Х | | X | | |
| Geographic area | | X | X | | Should not be possibility |
| Group | | X | X | | Should not be possibility |
| All ships | X | | X | | |

| | DSC-TEST | Ν | 01.11 |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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| | | |

TestH_1-5-1

| Ро | ssibility of automatic composition of relay received distress call | call on | the ba | sis of the |
|----|---|---------|--------|------------|
| | Item | | ults | Comment |
| | | YES | NO | |
| 1 | Individual distress relay call (J3E TP) | X | | |
| 2 | Individual distress relay call (FEC) | X | | |
| 3 | All ships distress relay call (J3E TP) | X | | |
| 4 | All ships distress relay call (FEC) | X | | |
| 5 | Individual distress relay call with expansion sequence (J3E TP) | X | | |
| 6 | Individual distress relay call with expansion sequence (FEC) | X | | |
| 7 | All ships distress relay call with expansion sequence (J3E TP) | X | | |
| 8 | All ships distress relay call with expansion sequence (FEC) | X | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
| | - |

| | Л р | SC-TEST | NO | 01.11 |
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| Company: | Thrane&Thrane | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

6.32. Verification of generation, encoding and transmission of distress relay acknowledgment

[ITU-R M.493-13, Annex 1, Table 4.4]

Method of measurement and required results

The EUT and TE are connected. The EUT is set to receive DSC calls. The TE generates, encodes and transmits to the EUT a distress relay call to individual station with the end of sequence character RQ.

Generation by the EUT and transmission to the TE of distress relay acknowledgment is verified. The TE will receive, decode and print the call. Sequence generation is analyzed for correctness.

| Scenario | Legend |
|-------------|-------------|
| TestH_1-8-1 | TestV_1_8_1 |
| TestH_1-8-2 | TestV_1_8_1 |

MMSI of EUT is **273000000**

Group EUT MMSI is **027300000**

Position of EUT is Latitude: 00°00' 0000N Longitude: 000°00' 0000E

Results

TestH_1-8-1

| Type of distress relay call acknowledgement | Possibility of sending of distress relay acknowledgement | | Result | | Comment |
|---|---|----|--------|----|-----------------------------------|
| | YES | NO | YES | NO | |
| Individual | Х | | X | | |
| Geographic area | | X | X | | Should not be possibility |
| Group | | Х | Х | | Should not be possibility |
| All ships | Х | | X | | [ETSI EN 300 338-2, n.6.5.9,b] |

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TestH_1-8-2

| Ν | Item | Results | | Comment |
|----|--|---------|----|---------|
| | | YES | NO | |
| 1 | Individual station distress relay acknowledgement | X | | |
| | (J3E TP) | | | |
| 2 | Individual station distress relay acknowledgement | X | | |
| | (FEC) | | | |
| 3 | Individual station distress relay acknowledgement with expansion sequence | X | | |
| | (J3E TP) | | | |
| 4 | Individual station distress relay acknowledgement with expansion sequence | X | | |
| | (FEC) | | | |
| 5 | Individual station distress relay acknowledgement with expansion sequence | X | | |
| | (J3E TP) | | | |
| | MMSI Unknown | | | |
| 6 | All ships distress relay acknowledgement | X | | |
| | (J3E TP) | | | |
| 7 | All ships distress relay acknowledgement | X | | |
| | (FEC) | | | |
| 8 | All ships distress relay acknowledgement with expansion sequence | X | | |
| | (J3E TP) | | | |
| 9 | All ships distress relay acknowledgement with expansion sequence | X | | |
| | (FEC) | | | |
| 10 | All ships distress relay acknowledgement with expansion sequence | X | | |
| | (J3E TP) | | | |
| | MMSI Unknown | | | |

| I he equipment meets the requirements (yes / no /n.a) | yes |
|---|-----|
|---|-----|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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6.33. Verification of generation, encoding and transmission of distress relay on behalf of someone else (DROBOSE)

[ITU-R M.493-13, Annex 1, Table 4.4] [ETSI EN 300 338-2, Ann.A, A.2]

Method of measurement and required results

a) The EUT and TE are connected. The EUT is set to receive DSC calls. The TE Reset the EUT to standby. Send a distress relay on behalf of someone else from the EUT using the default values. The TE will receive, decode and print the call. Verify that:.

| Item | Result | | Com- |
|--|--------|----|------|
| Default DROBOSE Distress relay | YES | NO | ment |
| The following functions and or information shall be visible to the operator at | Y | | |
| top level while in standby: | ~ | | |
| g) a clearly labelled means to compose/send a DROBOSE. | | | |
| [ETSI EN 300 338-2,n.6.3,g] | | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the default shall be a individual distress relay | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | Λ | | |
| [ETSI EN 300 338-2, A.2] | | | |
| The default destination MMSI shall be some invalid indicator | X | | |
| [ETSI EN 300 338-2, A.2] | Χ | | |
| the default vessel in distress MMSI shall be Unknown | X | | |
| [ETSI EN 300 338-2, A.2] | X | | |
| the default Nature shall be a Undesignated | X | | |
| [ETSI EN 300 338-2, A.2] | Λ | | |
| the default Distress Communication shall be a Phone | X | | |
| [ETSI EN 300 338-2, A.2] | Χ | | |
| the default Position and UTC shall be Unknown | X | | |
| [ETSI EN 300 338-2, A.2] | N | | |
| on MF/HF the default band of the DSC transmission should be on the 2 MHz | X | | |
| band, | Λ | | |
| [ETSI EN 300 338-2, A.1] | | | |
| [Rec. ITU-R M.493-13, Ann.3, n.5.3] | | | |
| The MMSI of the vessel in distress, format, nature and position shall be reset | X | | |
| when the operator selects the option to compose the DROBOSE at some later | | | |
| time. | | | |
| [ETSI EN 300 338-2, A.2] | | | |

| 1 | DSC-TEST | N 01.11 | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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b) The EUT and TE are connected. The EUT is set to receive DSC calls. The TE Reset the EUT to standby. Send a distress relay on behalf of someone else from the EUT using the different values of Natures. The TE will receive, decode and print the call. Verify that:.

| | Individual DROBOSE | Possil of sen | oility ding | Result | | ity Result Co ng | | Comment |
|----|---------------------------------|------------------|----------------|--------|----|--|--|---------|
| | | YES | NO | YES | NO | | | |
| 1 | Fire, explosion | X | | Х | | | | |
| 2 | Flooding | X | | X | | | | |
| 3 | Collision | Х | | Х | | | | |
| 4 | Grounding | X | | Х | | | | |
| 5 | Listing, in danger of capsizing | X | | X | | | | |
| 6 | Sinking | X | | X | | | | |
| 7 | Disabled and adrift | X | | X | | | | |
| 8 | Undesignated distress | X | | X | | | | |
| 9 | Abandoning ship | X | | X | | | | |
| 10 | Piracy/armed robbery attack | X | | X | | | | |
| 11 | Man overboard | X | | X | | | | |
| 12 | EPIRB emission | | X | X | | Should not be possible of sending of DROBOSE | | |
| 13 | Other | | Х | X | | Should not be possible of sending of DROBOSE | | |

| 1 | DSC-TEST | N 01.11 | |
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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c) The EUT and TE are connected. The EUT is set to receive DSC calls. The TE Reset the EUT to standby. Send a distress relay on behalf of someone else from the EUT using the different values of Distress coordinates. The TE will receive, decode and print the call. Verify that:.

Manual entry NE

| Distress coordinates and Time | | | | | | | | |
|-------------------------------|----------------|----------------|--------|----------------|----|----|------|---------|
| ltem | EUT | Received by TE | | Received by TE | | Re | sult | Comment |
| | | | | YES | NO | | | |
| Latitude | 00°12' 3456 N | Main | 0012N | X | | | | |
| | | Expansion | 3456 | X | | | | |
| Longitude | 000°12' 6543 E | Main | 00012E | X | | | | |
| | | Expansion | 6543 | X | | | | |
| UTC | 08:18 | (| 08:18 | X | | | | |

Manual entry NW

| Distress coordinates and Time | | | | | | | | |
|-------------------------------|----------------|----------------|--------|----------------|----|----|------|---------|
| ltem | EUT | Received by TE | | Received by TE | | Re | sult | Comment |
| | | | | YES | NO | - | | |
| Latitude | 10°52' 0456 N | Main | 1052N | X | | | | |
| | | Expansion | 0456 | X | | | | |
| Longitude | 020°16' 6543 W | Main | 02016W | X | | | | |
| | | Expansion | 6543 | X | | | | |
| UTC | 12:34 | | 12:34 | X | | | | |

Manual entry SW

| Distress coordinates and Time | | | | | | | | |
|-------------------------------|----------------|----------------|--------|----------------|----|----|------|---------|
| ltem | EUT | Received by TE | | Received by TE | | Re | sult | Comment |
| | | | | YES | NO | | | |
| Latitude | 15°42' 3456 S | Main | 15428 | X | | | | |
| | | Expansion | 3456 | X | | | | |
| Longitude | 123°12' 6543 W | Main | 12312W | X | | | | |
| | | Expansion | 6543 | X | | | | |
| UTC | 23:59 | | 23:59 | Х | | | | |

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Manual entry SE

| | | Distress coo | rdinates and Ti | me | | |
|-----------|----------------|----------------|-----------------|-----|------|---------|
| ltem | EUT | Received by TE | | Re | sult | Comment |
| | | | | YES | NO | |
| Latitude | 89°12' 3456 S | Main | 8912S | X | | |
| | | Expansion | 3456 | X | | |
| Longitude | 179°12' 6543 E | Main | 17912E | X | | |
| | | Expansion | 6543 | X | | |
| UTC | 00:00 | | 00:00 | X | | |

| Item | Position a | Ind UTC can not | Result | | Comment |
|-----------|--------------|------------------------|--------|----|--|
| | be | incuded | YES | NO | |
| Latitude | Main | Can not be included | Х | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] |
| | | | | | See NOTE |
| Longitude | Main | Can not be included | Х | | The EUT should transmit "distress coordinates" as the digit 9 repeated 10 times. |
| | Expansion | No data available | X | | EUT should transmit expansion sequence with command character 126 [ITU-R M.821, Table 3] See NOTE |
| UTC | Cannot be in | ncluded | X | | The EUT should transmit "UTC time" as the digit 8 repeated 4 times. |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

d) The EUT and TE are connected. The EUT is set to receive DSC calls. The TE Reset the EUT to standby. Send a distress relay on behalf of someone else from the EUT using the different values of MMSI ship in distress. The TE will receive, decode and print the call. Verify that:.

| Item | | Result | |
|---|-----|--------|------|
| DROBOSE Distress relay | YES | NO | ment |
| the default shall be a individual distress relay | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | Λ | | |
| [ETSI EN 300 338-2, A.2] | | | |
| A destination MMSI that does not have at least 9 digits entered is invalid. | | X | (26) |
| [ETSI EN 300 338-2,n.6.2.1] | | ~ | |
| the default MMSI should be some internal indicator that the MMSI is invalid | | X | (25) |
| and needs to be entered before transmission can occur, | | | |
| [Rec. ITU-R M.493-13, Ann. 3, n.5.3] | | | |
| The MMSI "unknown" indicator shall only be able to be used for the MMSI of | Y | | |
| the vessel in distress when composing a DROBOSE | Λ | | |
| [ETSI EN 300 338-2,n.6.2.1] | | | |
| Should be possible to set vessel in distress MMSI as Unknown | Y | | |
| [ETSI EN 300 338-2, A.2] | Λ | | |

| | Λ | DSC-TEST | N 01.11 |
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| Fauinment Under Test | SAILOR 6 | 320 250W ME/HE DSC Class A | |

Equipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

f) The EUT and TE are connected. The EUT is set to receive DSC calls. The TE Reset the EUT to standby. Send a distress relay on behalf of someone else from the EUT using the All ships format. The TE will receive, decode and print the call. Verify that:.

| Item | | ult | Com- |
|--|-----|-----|------|
| Geographic Area DROBOSE Distress relay | YES | NO | ment |
| the option to send a individual distress relay is available, | X | | |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | Λ | | |
| [ETSI EN 300 338-2,n.6.5.9] | | | |
| the option to send a Geographic area distress relay available, | | X | (27) |
| [ETSI EN 300 338-2,n.6.5.2,g(3)] | | ~ | |
| [ETSI EN 300 338-2,n.6.5.9,b] | | | |
| the default shall be a individual distress relay | X | | |
| [ETSI EN 300 338-2,n.6.5.9] | Λ | | |
| [ETSI EN 300 338-2, A.2] | | | |
| Upon selection of the option to send a non-individually addressed relay a | X | | |
| warning is provided, | Λ | | |
| [ETSI EN 300 338-2, n.6.5.11] | | | |
| [Rec. ITU-R M.493-13, Ann.4, n.3.4.2] | | | |
| if the format (destination address) is an area (102), the default area should be a | X | | |
| circle of radius 500 nautical miles centred on the ship, | Λ | | |
| [ETSI EN 300 338-2, A.1] | | | |
| [Rec. ITU-R M.493-13, Ann.3, n.5.3] | | | |
| The MMSI of the vessel in distress, format, nature and position shall be reset | Х | | |
| when the operator selects the option to compose the DROBOSE at some later | ~ | | |
| time. | | | |
| [ETSI EN 300 338-2, A.2] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

(25) (E1049)(E575)

When a DROBOSE composition equipment allows to enter MMSI ship in distress - MMSI coast station, which contradicts the requirements of ITU and IMO.

[ETSI EN 300 338-2, n.6.2.1]

[Rec. ITU-R M.493-13, Ann.4, n.3.1.6]

(26) (E1050)(E166)

The equipment allows to make Individual DROBOSE only address coast station. Equipment can not make Individual DROBOSE in the address to ship station, which is not prohibited by the requirements of the ITU and IMO.

[COMSAR Circ.25, n.A.2.1]

(27) (E1320)

Broken the procedure of radius-centre point conversion and rounding algorithm. If the final latitudinal dimension exceeds 99 deg, EUT truncates the dimension to 98 deg. While the standard requires to truncate to 99 deg.

[ETSI EN 300 338-2, n.B.2]

| The equipment meets the requirements (ves / no /n.a) | nc |
|--|----|
| | - |

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| | DSC-TEST | N 01.11 |
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| Company: | Thrane&Thrane | |
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

7. Sending non distress automated procedure

[ETSI EN 300 338-2 (2010-02), n.6.6]

04.02.2011

| Company: | Thrane&Thrane | |
|-----------------------|------------------------------------|--|
| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |
| | | |

DSC-TEST

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7.1. Sending non distress procedure sequence with "able to comply" test

[ETSI EN 300 338-2 (2010-02), n.6.6.2] [ETSI EN 300 338-2 (2010-02), n.6.6.3] [ETSI EN 300 338-2 (2010-02), n.6.6.5] [ETSI EN 300 338-2 (2010-02), n.6.6.6]

Definition

This test checks the typical cycle of sending a DSC message, waiting for the acknowledgment, receiving an "able to comply" acknowledgement, and establishing the communication link.

Method of measurement and required results

a) Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to have time to inspect the EUT. Configure the TE with a ship station MMSI. From the EUT send a DSC message of priority **safety** requesting radiotelephone addressed to the TE. On HF send the DSC message on 16 804.5 kHz using RT distress and safety channel 16 420.0 kHz. Verify that:

| | DSC-TEST | N 01.11 | | | |
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| Date: | September 2010 – January 2011 | | | | |

DSC-TEST

| ltem | Res | ult | Com- |
|---|----------|-----|------|
| (RT –distress, urgency, safety frequecies) | YES | NO | ment |
| The EUT indicates that it is transmitting, | Y | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | ~ | | |
| The information content of the initial DSC message is displayed or available on | Y | | |
| the EUT, | ~ | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| Upon completion of the transmission the EUT states that it is waiting for an | X | | |
| acknowledgement, | Λ | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Y | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | Λ | | |
| The time since sending the initial DSC message is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | Λ | | |
| The option to resend the initial DSC message is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | Λ | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| The option to activate/place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | Λ | | |
| The option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | ~ | | |
| The information content of the initial DSC message is displayed or available on | | x | (28) |
| the EUT which is: | | ~ | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any; | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| The elapsed time, stage, and operator options are visible at top level on the | Х | | |
| EUT, | <i>.</i> | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

| | Λ | DSC-TEST | N | 01.11 |
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| Equipment Under Test | SAILOR 6 | 320 250W ME/HE DSC Class A | | |

Equipment Under Test:SAILOR 6320 250W MF/HF DSC Class ADate:September 2010 – January 2011

Acknowledge the DSC message from the TE with "able to comply". Verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| the routine acknowledgement alarm sounds on the EUT (routine ack alarm), [ETSI EN 300 338-2, n.6.6.5] | | X | (31) |
| the reason for and means to silence the alarm is displayed on the EUT, [ETSI EN 300 338-2, n.6.6.5] | X | | |
| The fact one is engaged in sending a non distress DSC message is displayed, [ETSI EN 300 338-2, n.6.6.3,a] | X | | |
| the time since being acknowledged is displayed, [ETSI EN 300 338-2, n.6.6.3,c] | X | | |
| the information content of the acknowledgement is displayed or available on the EUT which is: | X | | |
| 1) the means of subsequent communication or the requested information; | | | |
| 2) if appropriate the mode/frequency change or unable to comply and reason; | | | |
| 3) the frequencies of subsequent communication if any; | | | |
| 4) on HF the frequency of the acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| the EUT indicates that it has been acknowledged or that communications are ready | X | | |
| the option to resend the initial DSC message is no longer available on the EUT, [ETSI EN 300 338-2, n.6.6.2,b(4),i] | Х | | |
| [Rec.ITU-R M.493-13,Ann.4, n.3.2.2.2.2] | | | |
| the option to activate/place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.2,b(4),ii] | Λ | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,b(4),iii] | Χ | | |
| the time since acknowledgement, stage, and operator options are visible at top | X | | |
| level | Χ | | |
| you can speak to the TE from the EUT (16 420 kHz), | Χ | | |
| you can speak to the EUT from the TE (16 420 kHz). | Х | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | | | |

b) Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to have time to inspect the EUT. Configure the TE with a coast station MMSI. From the EUT send a DSC message of priority **routine** requesting radiotelephone addressed to the TE(**simplex** channel 8719/8415.0 kHz will be sent by TE). On HF send the DSC message on 8415.0 kHz. Verify that:

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| Item | | Result | |
|---|-----|--------|------|
| (RT simplex) | YES | NO | ment |
| The EUT indicates that it is transmitting, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | Λ | | |
| The information content of the initial DSC message is displayed or available on | Х | | |
| the EUT, | Λ | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| Upon completion of the transmission the EUT states that it is waiting for an | Х | | |
| acknowledgement, | ~ | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | ~ | | |
| The time since sending the initial DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | Λ | | |
| The option to resend the initial DSC message is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | Λ | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| The option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | ~ | | |
| The option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | 21 | | |
| on HF EUT shall tune the general receiver to the frequency of the DSC | Х | | |
| acknowledgement (8436.5 kHz); | 2. | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3)i] | | | |
| The information content of the initial DSC message is displayed or available on | Х | | |
| the EUT which is: | 23 | | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any; | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| The elapsed time, stage, and operator options are visible at top level on the | Х | | |
| | | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

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| Date: | September 2010 – January 2011 | |

Acknowledge on the frequency 8436.5 kHz the DSC message from the TE with "able to comply" using RT simplex channel 8294.0 kHz. Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the routine acknowledgement alarm sounds on the EUT (routine ack alarm), [ETSI EN 300 338-2, n.6.6.5] | Χ | | |
| the reason for and means to silence the alarm is displayed on the EUT, [ETSI EN 300 338-2, n.6.6.5] | Χ | | |
| The fact one is engaged in sending a non distress DSC message is displayed, [ETSI EN 300 338-2, n.6.6.3,a] | Х | | |
| the time since being acknowledged is displayed, [ETSI EN 300 338-2, n.6.6.3,c] | Х | | |
| the information content of the acknowledgement is displayed or available on the EUT which is: | | X | (29) |
| the means of subsequent communication or the requested information; if appropriate the mode/frequency change or unable to comply and reason; the frequencies of subsequent communication if any; | | | |
| 4) on HF the frequency of the acknowledgement; [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| the EUT indicates that it has been acknowledged or that communications are ready | Х | | |
| the option to resend the initial DSC message is no longer available on the EUT, [ETSI EN 300 338-2, n.6.6.2,b(4),i] [Rec.ITU-R M.493-13,Ann.4, n.3.2.2.2.2] | X | | |
| the option to activate/place the procedure on hold is available, [ETSI EN 300 338-2, n.6.6.2,b(4),ii] | X | | |
| the option to terminate the procedure is available, [ETSI EN 300 338-2, n.6.6.2,b(4),iii] | Х | | |
| the time since acknowledgement, stage, and operator options are visible at top level | Х | | |
| you can speak to the TE from the EUT (8294.0 kHz), | X | | |
| you can speak to the EUT from the TE (8294.0 kHz). | X | | |

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| Date: | September 2010 – January 2011 | |

c) Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to have time to inspect the EUT. Configure the TE with a coast station MMSI. From the EUT send a DSC message of priority **routine** requesting radiotelephone addressed to the TE. On HF send the DSC message on 8415.0 kHz using RT (**duplex** channel 8719/8195 kHz will be sent by TE). Verify that:

| Item Result | | Com- | |
|---|-----|------|------|
| (RT duplex) | YES | NO | ment |
| The EUT indicates that it is transmitting, | Y | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | Λ | | |
| The information content of the initial DSC message is displayed or available on | Y | | |
| the EUT, | ~ | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| Upon completion of the transmission the EUT states that it is waiting for an | X | | |
| acknowledgement, | Λ | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | Λ | | |
| The time since sending the initial DSC message is displayed, | X | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | Λ | | |
| The option to resend the initial DSC message is available, | Y | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | Λ | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| The option to activate/place the procedure on hold is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | Λ | | |
| The option to terminate the procedure is available, | X | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | Λ | | |
| on HF EUT shall tune the general receiver to the frequency of the DSC | Х | | |
| acknowledgement (8436.5 kHz); | | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3)i] | | | |
| The information content of the initial DSC message is displayed or available on | | Х | (30) |
| the EUT which is: | | ~ | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the POSITION information if any; | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| The elapsed time, stage, and operator options are visible at top level on the | Х | | |
| EUT, | | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

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Acknowledge the DSC message from the TE with "able to comply" (<u>duplex</u> channel 8719/8195 kHz). Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the routine acknowledgement alarm sounds on the EUT (routine ack alarm), [ETSI EN 300 338-2, n.6.6.5] | Х | | |
| the reason for and means to silence the alarm is displayed on the EUT, [ETSI EN 300 338-2, n.6.6.5] | Х | | |
| The fact one is engaged in sending a non distress DSC message is displayed, [ETSI EN 300 338-2, n.6.6.3,a] | Х | | |
| the time since being acknowledged is displayed, [ETSI EN 300 338-2, n.6.6.3,c] | Х | | |
| the information content of the acknowledgement is displayed or available on the EUT which is: | Х | | |
| the means of subsequent communication or the requested information; if appropriate the mode/frequency change or unable to comply and reason; the frequencies of subsequent communication if any: | | | |
| 4) on HF the frequency of the acknowledgement; [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| the EUT indicates that it has been acknowledged or that communications are ready | Х | | |
| the option to resend the initial DSC message is no longer available on the EUT, [ETSI EN 300 338-2, n.6.6.2,b(4),i] [Rec.ITU-R M.493-13.Ann.4, n.3.2.2.2.2] | Х | | |
| the option to activate/place the procedure on hold is available, [ETSI EN 300 338-2, n.6.6.2,b(4),ii] | Х | | |
| the option to terminate the procedure is available, [ETSI EN 300 338-2, n.6.6.2,b(4),iii] | Х | | |
| the time since acknowledgement, stage, and operator options are visible at top level | Х | | |
| you can speak to the TE from the EUT (8195.0 kHz), | Х | | |
| you can speak to the EUT from the TE (8719.0 kHz). | Χ | | |

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(28) (E1324)

DSC safety and urgency messages addressed to a coast station destinations is transmitted with "no information characters" (126) in the frequency parameters of the DSC message. While standards require to send the ship position information.

[ETSI EN 300 338-2,C.2,e] [ETSI EN 300 338-2, A.3, Note 5]

(29) (E1053)

Incorrectly indicates the frequency of the DSC acknowledgement.

EUT is set for DSC communication: (DSC Tx frequency 8415.0 kHz, DSC Rx frequency 8436.5 kHz). From the EUT is transmitted a DSC message of priority routine requesting radiotelephone addressed to the TE (coast station). On HF send the DSC message on 8415.0 kHz. Acknowledge the DSC message from the TE with "able to comply" is transmitted on the 8436.5 kHz.

However, the EUT indicates that the DSC acknowledgement was received on the 8415.0 kHz. [ETSI EN 300 338-2, n.6.6.3,e]

(30) (E1330)

DSC routine messages addressed to a coast station destinations is tramsmitted with position in the frequency parameters of the DSC message, as required standards.

However, in the window VIEW of the information content of the initial DSC message erroneously decoded and displayed no position, and frequency.

[ETSI EN 300 338-2, n.6.6.3,d]

(31) (E1063)

Broken radio control procedure for the case when equipment is received acknowledgement, but the operator has not shutdown the alarm.

The operator has access to change the current working frequency, but the information of the new frequency is not visible up to shutdown alarm.

[ETSI EN 300 338-1, n.4.6.1]

| The equipment me | eets the r | requirements | (yes / | no / | n.a) |
|------------------|------------|--------------|--------|------|------|
|------------------|------------|--------------|--------|------|------|

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
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7.2. Sending non distress procedure sequence with "comply with frequency change" (able to comply) test

[ETSI EN 300 338-2 (2010-02), n.6.6.2] [ETSI EN 300 338-2 (2010-02), n.6.6.3] [ETSI EN 300 338-2 (2010-02), n.6.6.5] [ETSI EN 300 338-2 (2010-02), n.6.6.6]

Definition

This test checks the ability of the EUT procedure to handle an acknowledgement requesting a frequency change.

Method of measurement and required results

Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to be able to change the frequency of subsequent communications. Configure the TE with a ship station MMSI. From the EUT send a DSC message on the 12 577 kHz with priority safety requesting radio telephone on the 12 353.0 kHz addressed to the TE. Silence the alarm on the TE. When it is time to send the acknowledgment from the TE select the option to comply with a mode and/or frequency change. Compose the change as follows: On HF change it to channel 12 356.0 kHz. Verify that:

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the EUT indicates that it is transmitting, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT, | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| upon completion of the transmission the EUT states that it is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since sending the initial DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | | | |
| the option to resend the initial DSC message is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any (12 353.0 kHz); | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| EUT shall not tune to the frequency of the 12 353.0 kHz; | X | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3)i] | | | |
| the elapsed time, stage, and operator options are visible at top level on the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

Acknowledge on the 12 MHz band the DSC message from the TE with "able to comply" specified above (change channel to 12 356.0 kHz). Verify that:

| Item Result | | ult | Com- |
|--|-----|-----|------|
| | YES | NO | ment |
| the elapsed time, stage, and operator options are visible at top level on the EUT, [ETSI EN 300 338-2,n.6.6.3] | X | | |
| the routine acknowledgement alarm sounds on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.5] | | | |
| the reason for and means to silence the alarm is displayed on the EUT, [ETSI EN 300 338-2,n.6.6.5] | X | | |
| the information content of the acknowledgement is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the means of subsequent communication or the requested information; | | | |
| 2) if appropriate the mode/frequency change or unable to comply and reason; | | | |
| 3) the frequencies of subsequent communication if any; | | | |
| [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| the EUT indicates that it has been acknowledged or that communications are | Х | | |
| <u>ready</u> , | | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since being acknowledged is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,c] | | | |
| the option to resend the initial DSC message is no longer available on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),i] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),ii] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),iii] | | | |
| you can speak to the TE from the EUT on 12 356.0 kHz, | Х | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |
| you can speak to the EUT from the TE on 12 356.0 kHz. | X | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |

| I he equipment meets the requirements (yes / no /n.a) yes | The equipment meets the requirements (yes / no /n.a) | yes |
|---|--|-----|
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| Equipment Under Test: | SAILOR 6320 250W MF/HF DSC Class A | |
| Date: | September 2010 – January 2011 | |

7.3. Sending non distress procedure sequence with "comply with frequency change" (new channel is not available) test

[ETSI EN 300 338-2 (2010-02), n.6.6.2] [ETSI EN 300 338-2 (2010-02), n.6.6.3] [ETSI EN 300 338-2 (2010-02), n.6.6.5] [ETSI EN 300 338-2 (2010-02), n.6.6.6]

Definition

This test checks the ability of the EUT procedure to handle an acknowledgement requesting a frequency change.

Method of measurement and required results

Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to be able to change the frequency of subsequent communications. Configure the TE with a ship station MMSI. From the EUT send a DSC message on the 12 577 kHz with priority safety requesting radio telephone on the 12 353.0 kHz addressed to the TE. Silence the alarm on the TE. When it is time to send the acknowledgment from the TE select the option to comply with a mode and/or frequency change. Compose the change as follows: On HF change the frequency to simplex nonexisten channel 12 000 kHz. Verify that:

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| Item | Res | ult | Com- |
|--|-----|-----|------|
| | YES | NO | ment |
| the EUT indicates that it is transmitting, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT, | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| upon completion of the transmission the EUT states that it is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since sending the initial DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | | | |
| the option to resend the initial DSC message is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any (12 353.0 kHz); | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| the elapsed time, stage, and operator options are visible at top level on the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

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Acknowledge the DSC message from the TE with "able to comply" specified above (change channal to 12 000 kHz). Verify that:

| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the elapsed time, stage, and operator options are visible at top level on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.3] | | | |
| the EUT indicates that procedure has been acknowledged, | Х | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |
| the routine acknowledgement alarm sounds on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.5] | | | |
| the reason for and means to silence the alarm is displayed on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.5] | | | |
| the information content of the acknowledgement is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the means of subsequent communication or the requested information; | | | |
| 2) if appropriate the mode/frequency change or unable to comply and reason; | | | |
| 3) the frequencies of subsequent communication if any; | | | |
| [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since being acknowledged is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,c] | | | |
| The operator is informed that he has to make a new call | Х | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |
| the option to resend the initial DSC message is no longer available on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),i] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),ii] | | | |
| The option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),iii] | | | |
| EUT no tune to the proposed channel (12 000 kHz), | Х | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |

| The equipment meets the requirements (yes / no /n.a) | yes |
|--|-----|
|--|-----|

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7.4. Sending non distress procedure sequence with "unable to comply" test

[ETSI EN 300 338-2 (2010-02), n.6.6.2] [ETSI EN 300 338-2 (2010-02), n.6.6.3] [ETSI EN 300 338-2 (2010-02), n.6.6.5] [ETSI EN 300 338-2 (2010-02), n.6.6.6]

Definition

This test checks the ability of the EUT procedure to handle an 'unable to comply' acknowledgement.

Method of measurement and required results

Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off in order to allow the 'unable to comply' acknowledgment option. Configure the TE with a ship station MMSI. From the EUT send a DSC message on the 12 577 kHz with priority urgency requesting radio telephone on the 12 353.0 kHz addressed to the TE.

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| Item | | Result | |
|--|-----|--------|------|
| | YES | NO | ment |
| the EUT indicates that it is transmitting, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT, | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| upon completion of the transmission the EUT states that it is waiting for an | Х | | |
| acknowledgement, | | | |
| [ETSI EN 300 338-2, n.6.6.3,g(3)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since sending the initial DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,b] | | | |
| the option to resend the initial DSC message is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,f] | | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,a(3),iv] | | | |
| the information content of the initial DSC message is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any (12 353.0 kHz); | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| the elapsed time, stage, and operator options are visible at top level on the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.6.3] | | | |

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Acknowledge the DSC message from the TE with unable to comply with reason "busy". Verify that:

| Item | | Result | |
|---|-----|--------|------|
| | YES | NO | ment |
| The elapsed time, stage, and operator options are visible at top level on the | Х | | |
| EUT, | | | |
| [ETSI EN 300 338-2,n.6.6.3] | | | |
| The EUT indicates that procedure has been acknowledged, | Х | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |
| The urgency acknowledgement alarm sounds on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.5] | | | |
| The reason for and means to silence the alarm is displayed on the EUT, | Х | | |
| [ETSI EN 300 338-2,n.6.6.5] | | | |
| the information content of the acknowledgement is displayed or available on | Х | | |
| the EUT which is: | | | |
| 1) the means of subsequent communication or the requested information; | | | |
| 2) if appropriate the mode/frequency change or unable to comply and reason; | | | |
| 3) the frequencies of subsequent communication if any; | | | |
| [ETSI EN 300 338-2, n.6.6.3,e] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | |
| the time since being acknowledged is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,c] | | | |
| The option to resend the initial DSC message is no longer available on the | Х | | |
| EUT, | | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),i] | | | |
| The option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),ii] | | | |
| The option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2,n.6.6.2,b(4),iii] | | | |
| EUT no tune to the proposed channel (12 533 kHz), | X | | |
| [ETSI EN 300 338-2,n.6.6.6] | | | |

| The equipment meets the requirements (ves / no /n.a) | |
|--|--|
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yes

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7.5. Sending non distress procedure sequence with no acknowledgement required test

[ETSI EN 300 338-2 (2010-02), n.6.6.2] [ETSI EN 300 338-2 (2010-02), n.6.6.6]

b) upon reception of the acknowledgement or being set to acknowledged:

1) tuning the general receiver and transmitter to the frequency of subsequent communication or displaying the requested information;

2) ignoring any received DSC message pertinent to the procedure since it is a duplicate;

3) allocating any received DSC message not pertinent to the procedure to the appropriate procedure or initiating their own procedure on hold; and

4) providing the valid operator options which are:

i) resend the initial DSC message if it requires no acknowledgement;

ii) activate or place the procedure on hold;

iii) terminate the procedure.

[ETSI EN 300 338-2, n.6.6.2,b]

If no acknowledgement is required the transmitter shall be tuned to the frequency of subsequent communications given by the initial DSC message.

[ETSI EN 300 338-2, n.6.6.6]

a) Set the EUT and TE in standby and be sure that the automatic acknowledgement feature of the TE is turned off. From the EUT send a Geographic area DSC message on the frequency 4207.5 kHz with priority urgency requesting radio telephone. On HF select channel 4125.0 kHz. Verify that:

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| Item | Result | | Com- |
|--|--------|----|------|
| Geographic area call | YES | NO | ment |
| the EUT indicates that it is transmitting, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,g(2)] | | | |
| the information content of the initial DSC message is displayed or available on | | X | (32) |
| the EUT which is: | | | |
| 1) the type of DSC message (description); | | | |
| 2) the priority of the DSC message; | | | |
| 3) the destination; | | | |
| 4) the means of subsequent communication or purpose; | | | |
| 5) the frequencies of subsequent communication if any (4125.0 kHz); | | | |
| 6) on HF the frequency of the sent DSC message; | | | |
| 7) whether or not the DSC message requires an acknowledgement; | | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| upon completion of the transmission the EUT states that it is 'lincked for | Х | | |
| communication', | | | |
| [ETSI EN 300 338-2, n.6.6.3,g(5)] | | | |
| The fact one is engaged in sending a non distress DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,a] | | | - |
| the time since sending the initial DSC message is displayed, | Х | | |
| [ETSI EN 300 338-2, n.6.6.3,c] | | | - |
| the option to resend the initial DSC message is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,b(4),i] | | | |
| [Rec.ITU-R M.493-13,Ann.4, n.3.2.2.2.1] | | | |
| the option to activate/place the procedure on hold is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,b(4),11] | | | |
| the option to terminate the procedure is available, | Х | | |
| [ETSI EN 300 338-2, n.6.6.2,b(4),iii] | | | |
| the received non distress DSC procedure is started on the TE, | X | | |
| the information content displayed on the TE corresponds to that displayed on | X | | |
| the EUT, | ~ | | |
| [ETSI EN 300 338-2, n.6.6.3,d] | | | |
| the elapsed time, stage, and operator options are visible at top level on the EUT, | X | | |
| [ETSI EN 300 338-2, n.6.6.3] | Λ | | |
| Transmitter is tuned to the frequency 4125.0 kHz | Х | | |
| [ETSI EN 300 338-2, n.6.6.6] | | | |
| you can speak to the TE from the EUT on 4125.0 kHz, | Х | | |
| [ETSI EN 300 338-2, n.6.6.6] | | | |