Terms of Reference

Specialist Task Force (STF)

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| --- |
| ToR STF 591 (TC ERM/TGMARINE) |
| Version: 1.1 |
| Author: Andrea Lorelli – Date:24 07 2020 |
| Last updated by: ETSI Secretariat on 15 October 2020 |
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Terms of Reference –Specialist Task Force Proposal

STF 591 (TC ERM/TGMARINE)

**“Development of a European Norm for the definition of a control interface for Digital Selective Calling automated procedures and alarms”**

Summary information

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| --- | --- | --- | --- |
| Approval status | Approved by TC ERM (doc ref: ERM(19)68b017) on - June 2nd 2020 | | **YES** |
| Approved by Board#128 (24-25 June 2020) | | **YES** |
| Reference Body | Ref. Body TC ERM TGMARINE | | |
| ETSI Funding | **Maximum budget : 16 200 EUR** | | |
| Minimum of 4 ETSI Members Support | **YES** | | |
| Time scale | **From** | 2020-10-01 | |
| **To** | 2021-11-30 | |
| Work Items | DEN/ERM-TGMAR-087-7, created 2016-06-10 | | |
| Board priority | [ETSI STF funding criteria](https://portal.etsi.org/STF/STFs/Funding/ETSIbudget.aspx)   |  |  | | --- | --- | | **Priority Criteria** |  | | Maintenance of standards in mature domains |  | | Innovation in mature domains | x | | Emerging domains for ETSI |  | | Horizontal activities (quality, security, etc.) |  | | Societal good / environmental |  | | | |

Part I – STF Technical Proposal

# Rationale & Objectives

## Rationale

The Global Marine Distress and Safety System (GMDSS), which was made a part of the Safety of Life At Sea (SOLAS) Treaty, addressed the shortcomings of the present distress signalling system by introducing a new international standard, Digital Selective Calling (DSC), for all distress messages.

TC ERM has developed, through its TGMARINE working group, a multipart standard for different classes of DSC marine radio (EN 300 338, parts 1 to 5). In 2017 this set of DSC specifications has been extended with the introduction of EN 300 338-6 related to the new class “M” of DSC devices as introduced in ITU-R M.493-14 for Man Overboard (MOB) and two additional parts for Bridge Alert Management systems (BAM) and remote control are currently under development (EN 300 338-7 and EN 300 338-8). For the first time we have international and European standards that detail the full functionality and user interface for maritime DSC systems.

Whilst TGMARINE is currently finalizing EN 300 338 part 1 to 6 in order to align them with ITU-R M.493-15, and the work on EN 300 338-8 is progressing, the group is experiencing difficulties in proceeding with EN 300 338-7 (Interfacing DSC radio equipment to Bridge Alert Management systems) for lack of expertise in this topic.

Since this specification is essential in order to have a consistent sent of DSC standards globally usable, it is felt that external experts are needed in order to complete the work in the most efficient way.

The work needs to be completed as soon as possible so as to have a consistent set of standards for class A products without any further delay.

## Objectives of the work to be executed

The purpose of the work is to develop a European Norm related to the Interfacing of DSC radio equipment to Bridge Alert Management systems.

## 

## Previous funded activities in the same domain

None.

## Market impact

The availability of new and updated test specifications should positively affect the arrival of products in the market place and their level of protocol conformance and interoperability. Standardisation in this field reduces the required training of operators. Lack of standards results in proprietary solutions which is bad for competition.

## Consequences if not agreed

The production of new specification DSC remote control is necessary in order to have a consistent set of DSC standards globally. The non-availability of such standard is likely to cause problems of interoperability and therefore safety at sea is likely to be undermined.

# Relation with ETSI strategy and priorities

This STF will address a new topic (control interface for DSC automated procedures and alarms) and it is related to an established technology (DSC) and its evolution (DSC remote control).

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| --- | --- |
| **Priority Criteria** | **Rationale** |
| Maintenance of standards in mature domains |  |
| Innovation in mature domains | New Service: Interfacing of DSC radio equipment to Bridge Alert Management systems. |
| Emerging domains for ETSI |  |
| Horizontal activities (quality, security, etc.) |  |
| Societal good / environmental |  |

# ETSI Members Support

|  |  |  |
| --- | --- | --- |
| **#** | **ETSI Member** | **Supporting delegate** |
| 1 | ICOM | Pete Hizzey |
| 2 | Raymarine | Andy Little |
| 3 | Bliksrud Telecom | Bliksrud Eirik |
| 4 | Federal Ministry of Economic Affairs and Energy DE | Thomas Klavis |
| 5 | Yaesu | Paul Bigwood |

# Deliverables

## Base documents

|  |  |  |
| --- | --- | --- |
| **Document** | **Title** | **Status** |
| ETSI EN 300 338-1 V1.5.1 | Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service; Part 1: Common requirements | Published |
| ETSI EN 300 338-2 V1.5.1 | Technical characteristics and methods of measurement for equipment for generation, transmission and reception of Digital Selective Calling (DSC) in the maritime MF, MF/HF and/or VHF mobile service; Part 2: Class AA DSC | Published |
| ETSI EN 300 338-7 V0.0.17 | 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 7: Interfacing DSC radio equipment to Bridge Alert Management systems (BAM) | Early draft |
| ETSI EN 300 338-8 V0.0.14 | 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 8: Enabling DSC radio equipment with remote control capabilities | Stable Draft |
| ITU-R M.493-15 | Digital selective-calling system for use in the maritime mobile service | Published |
| IEC 62923 series | Maritime navigation and radiocommunication equipment and systems – Bridge  alert management | Published |

## New deliverables

|  |  |  |  |
| --- | --- | --- | --- |
| **Deliv.** | **Work Item code**  **Standard number** | **Working title**  **Scope** | **Expected date for publication** |
| D1 | DEN/ERM-TGMAR-087-7 V1.1.1 | Working title: BAM  Scope: to define a control interface for DSC automated procedures and alarms | 2021-11-30 |

## Deliverables schedule:

The STF will produce the deliverable according to the following time scale (all Work Items):

* Start of work 01-10-2020
* Stable draft 30-12-2020
* Final draft 30-03-2021
* WG approval 30-03-2021
* TB approval 30-04-2021
* Start of ENAP 28-05-2021
* End of ENAP 27-08-2021
* Start of Vote 17-09-2021\*
* End of Vote 16-11-2021\*
* Publication 30-11-2021\*

\* it is assumed that technical comments are receive during the ENAP. If this is not the case publication will take place by September 2021.

# Maximum budget

## Task summary/Manpower Budget

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| --- | --- |
| **Task short description** | Budget (EUR) |
|
| Project Management | 1 800 |
| Development of BAM Interface European Norm (EN 300 338-7) | 12 000 |
| **TOTAL** | **13 800** |

## Travel budget

Presentation of reports and results to TC ERM and/or ERM TGMARINE (3 travels) for a budget of 2 400 Euros.

Part II – Details on STF Technical Proposal

# Tasks, Technical Bodies and other stakeholders

## Organization of the work

The work consists in developing one single specification: EN 300 338-7. If no comments are received during the approval process, the deliverable will be published in September 2021 and therefore the STF can be closed accordingly. If comments are received, 2 additional months for NV are needed and thefore the deliverable will be published in November 2021. No steering group will be needed and most of the work is expected to be done remotely.

## Tasks for which the STF support is necessary

It is requested that the STF develops a European Norm (EN 300 338-7) for the definition of a control interface for DSC automated procedures and alarms. The development of this specification requires specialized skills not currently available in TG MARINE. Hence the involvement of external experts is needed in order to assure timely completion and high quality of the deliverable. The support of an STF is also required in order not to delay the deployment of DSC remote control solutions in the European market.

## Other interested ETSI Technical Bodies

N/A

## Other stakeholders

International Electrotechnical Commission (IEC), Radio Technical Commission for Maritime Services (RTCM), ITU-R, Comité International Radio-Maritime (CIRM), European Maritime Safety Agency (EMSA), National Marine Electronics Association (NMEA).

Part III: Execution of Work

# Work plan, time scale and resources

## Task description

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| --- | --- |
| **Task # 0** | **Project Management** |
| **Objectives** | Coordination, communication, reporting and leading of activities. This task is under the responsibility of the STF leader. |
| **Input** | N/A |
| **Output** | N/A |
| **Interactions** | The STF leader will report back to ERM TGMARINE and TC ERM as appropriate. |
| **Resources required** | 1 800 EUR |

|  |  |
| --- | --- |
| **Task # 1** | **Development of BAM Interface European Norm (EN 300 338-7)** |
| **Objectives** | The goal of this task is to define a control interface for DSC automated procedures and alarms |
| **Input** | The following basic material will be used as baseline for the development of the deliverable:   * ETSI EN 300 338-1 V1.5.1 * ETSI EN 300 338-2 V1.5.1 * ETSI EN 300 338-7 V0.0.17 (early draft of the specification as drafted by TG MARINE stakeholders) * ETSI EN 300 338-8 (latest draft available) * ITU-R M.493-15 * IEC 62923 series of BAM standards. |
| **Output** | ETSI EN 300 338-7 V1.1.1 |
| **Interactions** | The STF team will interact with the ERM TGMARINE stakeholders as well as external relevant organisations such as NMEA and CIRM in order to make sure all the requirements are correctly addressed, and the standard is aligned with other relevant specifications. |
| **Resources required** | 12 000 EUR |

## Milestones

|  |  |  |
| --- | --- | --- |
| **Milestone** | **Description** | **Cut-Off Date** |
| **A** | ETSI EN 300 338-7 Stable Draft | 2020-12-30 |
| Reference Body Deliverable | Stable Draft of the deliverable available on docbox for ERM TG MARINE review. |
| ETSI Deliverable | Progress Report#1 is approved by TC ERM (December 2020). |

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| **Milestone** | **Description** | **Cut-Off Date** |
| **B** | ETSI EN 300 338-7 Final Draft & ERM approval | 2021-04-30 |
| Reference Body Deliverable | Final Draft of the deliverable reviewed and approved by ERM TG MARINE as well as by TC ERM for ENAP. |
| ETSI Deliverable | Progress Report#2 is approved by TC ERM (April 2021). |

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| **Milestone** | **Description** | **Cut-Off Date** |
| **C** | ETSI EN 300 338-7 ENAP comments resolution and approval for NV | 2021-09-30 |
| Reference Body Deliverable | Final Draft of the deliverable reviewed and approved by ERM TG MARINE and TC ERM for NV after the comment resolution meeting (if comments are received). |
| ETSI Deliverable | The STF final report is approved by TC ERM (September 2021). If no comments are received during the ENAP, the deliverable is published and the STF is closed. |

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| **Milestone** | **Description** | **Cut-Off Date** |
| **D** | EN 300 338-7 published and the STF closed | 2021-09-30  Or  2021-11-30 |
| Reference Body Deliverable | EN 300 338-7 published |
| ETSI Deliverable | If no comments are received during the ENAP, cut-off date set to 2021-09-30, else 2021-11-30 |

## Task summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Code** | **Task / Milestone** | Target Date | | Estimated Cost (EUR) |
| From | To |
|  | Start of work |  | 01-10-2020 |  |
| T0 | Project Management | 10-2020 | 11-2021 | 1 800 |
| Milestone A | Stable Draft available. Progress report#1 approved by ERM TGMARINE and reviewed by TC ERM |  | 2020-12-30 |  |
| T1 | Development of BAM Interface European Norm (EN 300 338-7). | 10-2020 | 2021-09-30 | 12 000 |
| Milestone  B | Final Draft & ERM approval. Progress report#2 approved by ERM TGMARINE and reviewed by TC ERM |  | 2021-04-30 |  |
| Milestone  C | ENAP comments resolution and approval of the deliverable by ERM for NV.  STF final report approved by ERM TGMARINE and TC ERM |  | 2021-09-30 |  |
| Milestone  D\* | If there are no technical comments, the deliverable is published and STF closed on 2021-09-30, else 2021-11-30. |  | 2021-09-30 or  2021-11-30 |  |
|  | | | | **13 800** |
| \* if no technical comments are received during the ENAP, the STF will be closed with Milestone C. | | | | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Task Milest.** | **Description** | **O** | **N** | **D** | **J** | **F** | **M** | **A** | **M** | **J** | **J** | **A** | **S** | **O** | **N** |
| M0 | *Start of work* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T0 | *Project Management* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M1 | *Stable draft available* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| T1 | *Development of EN 300 338-7* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M2 | *Final draft available & approved by ERM for ENAP* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M3 | *Final draft available & approved by ERM for NV* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| M4 | *Deliverable published, STF closed* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# Expertise required

## Team structure

Up to 2 participants to ensure the following mix of competences:

|  |  |
| --- | --- |
| **Priority** | **Qualifications and competences** |
| High | Knowledge of DSC radio equipment |
| High | Knowledge of DSC standards (e.g. EN 300 338 series and ITU-R M.493-xx) |
| High | Knowledge of Bridge Alert Management Systems (IEC 62923-1, -2) |
| High | Knowledge and experience in writing international standards |

Part IV: STF performance evaluation criteria

# Performance Indicators

During the activity, the STF Leader will collect the relevant information, as necessary to measure the performance indicators. The result will be presented in the final report.

**Contribution from ETSI Members to STF work**

* Delegates attending meetings/events related to STF (number of participants/duration)
* Direct contribution of delegates (e.g. number of documents/comments/e-mail)

**Contribution from STF experts to ETSI work**

* Contributions presented to ERM TG MARINE (number, type, comments received)

**Quality of deliverable**

* Approval of the deliverable according to schedule presented in the ToR and the corresponding WI schedule
* Respect of time scale, with reference to start/end dates in the approved ToR
* Quality review by ERM TG MARINE
* Quality review by the ETSI Secretariat.

|  |  |
| --- | --- |
| **Select relevant Performance indicators applicable for these ToR (X)** | |
| Contribution from ETSI Members to STF work | |
| Direct financial contribution (co-funding) |  |
| Support to the STF work (e.g., provision of test–beds, organization of workshops, events) |  |
| Steering Group meetings (number of meetings / participants / duration) |  |
| Number of delegates directly involved in the review of the deliverables | X |
| Contributions/comments received from the reference Reference Bodies | X |
| Contributions/comments received from other Reference Bodies |  |
|  |  |
| **Contribution from the STF to ETSI work** | |
| Contributions to Reference Body meetings (number of documents / meetings / participants) | X |
| Contributions to other Reference Bodies |  |
| Presentations in workshops, conferences, stakeholder meetings |  |
|  |  |
| **Liaison with other stakeholders** | |
| Stakeholder participation in the project (category, business area) |  |
| Cooperation with other standardization bodies | X |
| Potential interest of new members to join ETSI |  |
| Liaison to identify requirements and raise awareness on ETSI deliverables |  |
| Comments received on drafts (e.g. on WEB site, mailing lists, etc.) | X |
|  |  |
| **Quality of deliverables** | |
| Approval of deliverables according to schedule | X |
| Respect of time scale, with reference to start/end dates in the approved ToR | X |
| Comments from Quality review by Reference Body | X |
| Comments from Quality review by ETSI Secretariat | X |
|  |  |

Time recording

For reporting purposes, the STF experts shall fill in the time sheet provided by ETSI with the days spent for the performance of the services

During the activity, the STF Leader shall collect the relevant information, as necessary to measure the performance indicators. The result will be presented in the Final Report.

# Document history

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Date** | **Author** | **Status** | **Comments** |
| 0.1 | 18-07-2019 | Andrea Lorelli | First draft |  |
| 0.2 | 19-07-2019 | Pete Hizzey | Stable draft |  |
| 0.3 | 19-07-2019 | Andrea Lorelli | Final draft |  |
| 0.4 | 19-7-2019 | Pete Hizzey | Final |  |
| 0.5 | 06-08-2019 | Andrea Lorelli | Final | Comments raised by FPS addressed |
| 0.6 | 14-10-2019 | Youssouf Sakho | Board approved | Update before Collective Letter release |
| 0.7 | 15-11-2019 | Youssouf Sakho | Board approved | Update before the second Collective Letter release |
| 0.8 | 04-05-2020 | Andrea Lorelli | Final | Proposal with updated schedule |
| 0.9 | 02-06-2020 | ETSI Secretariat | Final | Update before Board Submission |
| 1.0 | 24-07-2020 | ETSI Secretariat | Board approved | Update before CL publication |
| 1.1 | 15-10-2020 | ETSI Secretariat | Board Approved | Update after STF Preparatory Meeting |