BT N 11653

Draft BT C117/2019

TECHNICAL BOARD

CEN/BT by correspondence

For vote

Issue date: 2019-06-26

Deadline: 2019-08-06

SUBJECT

Proposed CEN Workshop on 'Specification for bunkering of methanol'

BACKGROUND

As more of the Arctic waters become navigable due to global warming, ship traffic in the Arctic regions is increasing. The consortium SEDNA 'Safe maritime operations under extreme conditions: the Arctic case' has been set up to develop an innovative and integrated risk-based approach to ensure safe Arctic navigation, ship design and operation.

One of the main challenges with the increase in vessel operations in the Artic will be the corresponding increase in accidents. In such a fragile environment, there is a risk that the resultant marine pollution from the oil fuel on-board could lead to a severe environmental implication. Methanol is a low flash point fuel and is considerably cleaner than oil. The objective is to achieve a CEN Workshop Agreement (CWA) on a process to systematically address safety during bunkering of methanol as a marine fuel. SEDNA will put forward for validation technical provisions and assessment of relative safety risks along with safety zone guidance for three bunkering concepts: Truck to Ship, Shore to Ship and Ship to Ship.

The proposed draft Project Plan of the CEN Workshop is included in Annex 1.

Original proposers of the Workshop:

- BMT is a leading international design, engineering, science and risk management consultancy. BMT is one of the partners of the SEDNA consortium, which includes technical partners and end users with a wide range of expertise, from ship bridge design and human factors to data science and weather forecasting.
- STENA Rederi AB's international shipping business has world-leading expertise in all maritime sectors; from shipbuilding and crewing to technical service, chartering, commercial operation, financing and marketing. STENA Rederi AB is one of the partners of the SEDNA project.

CEN national member holding the Workshop secretariat:

Swedish Institute for Standards (SIS), with Mrs Linnéa Casselbrant as the Secretary.

Assessment

The proposed Workshop was evaluated by CCMC with regard to the four conditions under which there is a need for the agreement of BT members before proceeding with the process to launch a Workshop:

- **The proposed Workshop intends to define requirements related to safety matters**
- The proposed Workshop does not fall within the scope of an existing CEN/TC

- **The proposed Workshop intends to define requirements related to management system aspects**
- The proposed CWA does not intend to define requirements related to conformity assessment aspects.

Considering the above evaluation, together with the self-assessment (Annex 2), **CEN/BT is invited to decide on the launching of the proposed Workshop**.

PROPOSAL(S)

BT,

- noting
  - the SIS proposal for launching a CEN Workshop on 'Specification for bunkering of methanol' and the related project plan (available in Annex 1 of BT N 11653),
  - that the proposed Workshop intends to define requirements relating to safety matters and management system aspects (as indicated in Annex 2 to BT N 11653), therefore requiring BT agreement before proceeding with the launching process;
- agrees with the launch of the CEN Workshop on 'Specification for bunkering of methanol' and asks CCMC to announce it publicly on the CEN website.

2019-06-24 – NP

[1]2019-06-24

DRAFT

Project Plan for the CEN Workshop on Specification for bunkering of methanol

Workshop
(to be approved during the Kick-off meeting on 2019-09-10)

1. Status of the Project Plan

Draft Project Plan to be approved at the Kick-off meeting of the Workshop.

2. Background to the Workshop[2]

Motivation for the creation of this Workshop

SEDNA ("Safe maritime operations under extreme conditions: the Arctic case") is a research project that is developing an innovative and integrated risk-based approach to safe Arctic navigation, ship design and operation. SEDNA has a global consortium, with 13 partners from 6 different countries, including China, and will run for three years from June 2017.

With the expected increase in vessel operations in the Arctic, available trend data indicates there will also be a corresponding increase in accidents. In such a fragile environment, there is a risk that the resultant marine pollution from the oil fuel on-board could lead to a severe environmental implication. Methanol is a low flash point fuel and is a considerably cleaner than oil". The objective is to achieve a CEN Workshop Agreement (CWA) on a process to systematically address safety during bunkering of methanol as a marine fuel. SEDNA will put forward for validation technical provisions and assessment of relative safety risks along with safety zone guidance for three bunkering concepts: Truck to Ship, Shore to Ship and Ship to Ship.

The market environment

As more of the Arctic waters become navigable due to global warming, ship traffic in the Arctic regions is increasing.

Methanol as ship fuel is a reality. One of the world's largest Ro-Pax ship – the STENA GERMANICA – had her four main engines converted to methanol fuel with start 2015. Furthermore 7 x 50.000 chemical tankers operate with methanol as fuel since 2016. Another four sister vessels are under construction.

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[1] *Here the date of updating should go, updated by the last editor*
[2] *Use font Arial 12 bold for headers (header tab stop at number 1), Arial 11 for body text*

For ships trading in the Arctic Regions or other sensitive waters, methanol is especially suitable compared to oil. Since methanol is water soluble and readily biodegradable, the environmental impact would be negligible if an accidental outflow would occur. The harmful particles from burning methanol are very close to zero. The generated SO_x are next to zero and the NO_x are comparable to burning LNG. Furthermore, there are available technologies for manufacturing non-fossil methanol. In other words, methanol as a fuel for ships, helps the shipping industry to meet the increasingly strict emission regulations.

The legal environment (Directives and relevant national legislation)

The following IMO regulations and conventions are to be recognized as important for bunkering of methanol.

- Draft Interim Guidelines for the safety of ships using methyl/ethyl alcohol as fuel

  The IMO Sub-Committee on carriage of cargoes and containers 5th session CCC 5/WP.3 13 September 2018 finalised the Draft Interim Guidelines for the safety of ships using methyl/ethyl alcohol as fuel, it is expected to be approved as an IMO Circular by 1st July 2020.

- IMO International Code for the Construction and Equipment Carrying Dangerous Chemicals in Bulk provides an international standard for the safe carriage by sea of dangerous and noxious liquid chemicals in bulk.

Existing standards and standard related activities and documents

Until today, there is no existing standard for bunkering of methanol.

The Draft Interim Guidelines for the safety of ships using methyl/ethyl alcohol as fuel mention the need for bunkering procedures without being specific. This could be done in similarity with the existing standard ISO 20519:2017 Ships and marine technology -- Specification for bunkering of liquefied natural gas fuelled vessels.

Sustainable Development Goals, Resolution 70/1 of the United Nations General Assembly

The CWA “Specification for bunkering of methanol” will contribute to fulfil the following UN Sustainable Development Goals:

- 3 Good Health and Well-being
- 7 Affordable and Clean Energy
- 13 Climate Action
- 14 Life Below Water

3. Workshop proposers and Workshop participants

Original proposers of the Workshop

BMT is a leading international design, engineering, science and risk management consultancy. BMT is one of the partners of the SEDNA consortium, which includes technical partners and end users with a wide range of expertise, from ship bridge design and human factors to data science and weather forecasting.

STENA Rederi AB's international shipping business has world-leading expertise in all maritime sectors; from shipbuilding and crewing to technical service, chartering, commercial operation, financing and marketing. STENA Rederi AB is one of the partners of the SEDNA consortium.

CEN national member holding the Workshop secretariat

Swedish Standards Institute (SIS)

The Workshop participation will be open to all interested parties.

All registered participants at the Kick-off Meeting will be listed in an annex.

4. Workshop scope and objectives

This CEN Workshop Agreement sets requirements for transfering system and equipment used to bunker methanol fuelled vessels which are not covered by the IBC Code or the Interim Guidelines for the Safety of Ships using Methyl/Ethyl alcohol as fuel.

This CEN Workshop Agreement shall include the following five elements:

1. Hardware and transfer system
2. Operational procedures
3. Requirement for the methanol provider to provide a bunker delivery note
4. Training and qualification of personnel involved
5. Requirements for the methanol facilities to meet applicable ISO/EN Standards and local regulations

5. Workshop programme

The CWA shall be drafted and published in English.

The timeframe for the workshop is limited to the SEDNA project runtime. The planned timeframe for the CWA development is presented below.

No	Activity	Date
1	Announcement of CEN/WS and invitation to kick-off	T0
2	Kick-off meeting, presentation 1st draft	T0 + 1 month
3	Opening of commenting phase, 1st draft	T0 + 1,5 month
4	Closing of commenting phase, 1st draft	T0 + 3,5 month

5	Circulation of Collated comments, 1st draft	T0 + 4,5 month
6	WS 1 – 1st meeting for registered participants, discussion of collated comments	T0 + 5 month
7	Circulation of 2nd draft	T0 + 6,5 month
8	WS 2 – 2nd meeting. Final version, approval for submission to CCMC	T0 + 7 month
9	Publication of CWA	T0 + 8 month
The time-plan is subjected to be modified in relation to the drafting process of the CWA and to the eventual decisions on the submission of the document to the 60 days commenting phase.		

The CWA deals with safety aspects, therefor an open commenting phase is planned. This also enhance the transparency of the Workshop process. Duration of the comment phase will be 60 days.

6. Workshop structure

The Workshop will operate under the CEN/CENELEC rules for the CEN/CENELEC Workshop Agreement.

Workshop Chairperson

The Workshop Chairperson will be appointed at the kick-off meeting and has the following responsibilities:

- Presides at Workshop meetings,
- Ensures Workshop delivers the agreement in line with this Project Plan,
- Manages the consensus building process,
- Decides when the Workshop participants have reached agreement on the final CWA, on the basis of the comments received.

Workshop Secretary

The Workshop Secretary has five main responsibilities.

- Formally register Workshop participants and maintain record of participating organisations and individuals,
- Offer infrastructure and manage documents and their distribution through the electronic platform,
- Prepare agenda and distribute information on meetings and meeting minutes/follow up actions,
- Initiate and manage CWA approval process upon decision by the Chairperson,
- Advise on CEN rules and bring any major problems encountered (if any) in the development of the CWA to the attention of CEN-CENELEC Management Centre (CCMC).

7. Resource requirements

All costs related to the participation of interested parties in the Workshop's activities have to be borne by themselves.

8. Related activities, liaisons, etc.

Technical committees that may be related:

- CEN/SS T01 - Shipbuilding and maritime structures
- ISO/TC 8 Shipping and Marine Technology

9. Contact points

Proposed Chairperson:
Mr. Gary Randall
BMT
1 Park Road
Teddington, TW11 0AP
United Kingdom

Tel.: +44 208 943 5544
Fax: +44 208 943 5347
e-mail: Gary.randall@bmtglobal.com
https://www.bmt.org/

Secretariat:
Mrs. Linnéa Casselbrant
SIS, Swedish Institute for Standards
Solnavägen 1 E/Torsplan
S-113 65 Stockholm,
Sweden

Tel.: +46 70 789 92 07
e-mail: Linnea.casselbrant@sis.se
https://www.sis.se/en/

CEN-CENELEC Management Centre
Mrs. Nathalie Paquay
Project Manager
Rue de la Science, 23
B-1040 Brussels
Belgium
Tel.: +32 2 550 0830
e-mail: npaquay@cencenelec.eu
www.cencenelec.eu

CWA
Template for the self-assessment

Title of the proposed CWA:

Specification for bunkering of methanol

1. Does the proposed CWA conflict with an EN or an HD for CENELEC?

☒ NO

☐ YES → **WARNING**: Work on the proposed CWA shall not be initiated.

2. Does the proposed CWA intend to define requirements related to safety matters?

☐ NO

☒ YES Is the proposed CWA within the scope of

☒ CEN? → The CWA proposal shall be submitted to CEN/BT for decision.

☐ CENELEC? → **WARNING**: Work on the proposed CWA shall not be initiated.

3. Is the scope of the proposed CWA within the scope of an existing CEN/CENELEC technical body?

☒ NO

☐ YES → The relevant CEN/CENELEC technical body shall be consulted on the CWA proposal:

- If this technical body responds positively and sees no harm in the CWA being developed, the CWA proposal may be processed.
- If the technical body is opposed to a CWA being launched, the CWA proposal shall be submitted to the CEN/CENELEC BT(s) for decision.

4. Does the proposed CWA intend to define requirements related to management system aspects?

☐ NO

☒ YES → The CWA proposal shall be submitted to the CEN/CENELEC BT(s) for decision.

5. Does the proposed CWA intend to define requirements related to conformity assessment aspects?

☒ NO

☐ YES → CEN/CENELEC Internal Regulations - Part 3, 6.7 applies.

If all these questions are answered NO, the CWA proposal may be processed.

If not, special conditions apply as given above.