

EU - EEA Member States – SAFEMED V - BCSEA Tabletop Exercise on the EU Operational Guidelines - Places of Refuge

MV "BALTIC UMBRELLA"

**EMSA, Lisbon
12-14 July 2022**



EXERCISE REPORT **(July 2022)**

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ABBREVIATIONS USED

| | |
|---------|---|
| CA | Competent Authority |
| CMS | Co-ordinating Member State |
| DPG | Dangerous and Polluting Goods |
| EC | European Commission |
| EU | European Union |
| EMSA | European Maritime Safety Agency |
| ER | Engine Room |
| ERS | Emergency Response Services |
| FP | Fore Perpendicular |
| HAZMAT | Hazardous Materials |
| HNS | Hazardous Noxious Substances |
| IMDG | International Maritime Dangerous Goods |
| IR | Incident Report |
| LOU | Letter of undertaking |
| MAR-CIS | Marine Chemical Information Sheets |
| MAR-ICE | Marine Chemical Emergency Information Service |
| MAS | Maritime Assistance Service |
| MRCC | Maritime Rescue Coordination Centre |
| MS | Member State |
| OG | Operational Guidelines |
| PoR | Places of Refuge |
| SCCA | Swedish Civil Contingencies Agency (Swedish: MSB) |
| SCG | Swedish Coast Guard |
| SEG | SafeSeaNet Ecosystem Graphical User Interface |
| SITREP | Situation Report |
| SMS | Supporting Member State |
| SMA | Swedish Maritime Administration |
| SSN | SafeSeaNet |
| STA | Swedish Transport Agency |
| TDM | Traffic Density Maps |
| TTX | Tabletop Exercise |
| TTW | Territorial Waters |

1. EXECUTIVE SUMMARY

The 5th Tabletop Exercise (TTX) MV ‘BALTIC UMBRELLA’ on Places of Refuge (PoR), led by Denmark and organised with a volunteering joint planning team of authorities and industry as well as EMSA, took place in the EMSA premises in Lisbon, Portugal, on 12-14 July 2022. The starting day, 12 July, was dedicated to training in EU systems relevant for the exercise, whereas on 13-14 July the TTX with its various breakout discussions took place. The exercise was attended by 61 participants from MSs, SAFEMED countries, Black and Caspian Sea (BCSEA) countries, industry, and stakeholders.

The established PoR Tabletop Exercises take place every second year in a different Member State since the MSC FLAMINIA incident in 2012 demonstrated the need for an improvement in the coordinated response between EU/EEA Member States (MS) to incidents involving vessels requesting a PoR. This led to setting up a dedicated EU PoR experts’ sub-group in accordance with Article 20(3) of Directive 2002/59/EC (as amended, hereafter the VTMIS Directive), under the HLSG DMSS¹.

The TTXs aim at testing features of the EU Operational Guidelines (OG) on PoR and at advancing the established cooperation between MS and with industry, giving impulse to operations coordination. The TTXs also serve to gain experience in the use of the Guidelines and to contribute to their further refinement. The Operational Guidelines once again demonstrated their applicability as tool for handling PoR situations.

The 5th PoR TTX was tailored to provide food for thought among the participants to various aspects of PoR situations, such as whether national PoR plans needed re-consideration to meet the challenges of larger ships, considering increasing numbers and amounts of dangerous cargoes, populations living in the proximity of a PoR etc.

¹ [High level Steering Group for the Governance of the Digital Maritime System and Services \(now Commission Decision \(EU\) 2016/566\)](#)

2. PREPARATION AND LOGISTICS

2.1 LOCATION AND LOGISTICS

The ‘BALTIC UMBRELLA’ exercise was held as a paper-based exercise at the premises of the European Maritime Safety Agency (EMSA) between 12 and 14 July 2022.

The Plenary sessions were held at the EMSA Conference Centre and the breakout groups (syndicates) in dedicated EMSA meeting rooms. EMSA facilities were excellent and ideal for the purposes of the event.

An **awareness training session on Places of Refuge** as well as an introduction to **EMSA services** relevant for the exercise (SSN, SEG, MAR-ICE), as a build-up to the TTX, was held 12 July 2022, the day before the TTX.

2.2 PLANNING TEAM

The scenario was worked out by a joint planning team consisting of volunteering Member States, industry, the European Commission and EMSA in a series of virtual and physical meetings during 2021-2022. The specific combination of actors offering various angles was considered a particularly strong asset. The list of members of the planning team is provided in Appendix A.

2.3 CONTRIBUTION BY THE INDUSTRY

Just as previous TTXs, the 5th TTX had the participation of a broad variety of stakeholders within the maritime industry. The industry’s participation added significant value.

Class, Salvage and P&I specialists already contributed throughout the planning of the TTX. Class and Salvage attended the TTX and provided insight on their roles in relation to maritime casualties with scenario-focused briefings and participation in the discussions.

As a new element, a commercial shipping company, DFDS contributed to the planning and the conduct of TTX. DFDS participation was a key factor for providing realism to the scenario. A real DFDS-operated ship – although renamed – that operates in the

Sound region was used as the casualty ship and DFDS provided the ship documentation for Class and Salvage to produce a Salvage Plan and stability calculations. DFDS also attended the TTX discussions and presented the perspectives on a casualty situation as it is seen from the shipping company and the captain’s perspective.

3. OBJECTIVES

The key aim of the scenario was to provide the basis for discussions about the handling of the PoR case at hand, as well as the applicability and ensuring optimal use of the EU Operational Guidelines on PoR. This was covered as follows:

- The Guidelines were used during the exercise as the operational reference for handling the situation. All the practical issues related to handling a PoR situation were discussed with reference to the Guidelines. The Guidelines provided valuable guidance for structuring the processes around a PoR situation.
- Appendixes with information sharing templates were demonstrated to be of best use and as the way of necessary information-sharing between MS.

As a result of the exercise, the Operational Guidelines and Appendixes were recommended as a supporting tool for the MS experiencing a PoR case. The appendixes list the complete package of information that is potentially relevant for information-sharing and provide judicial references of relevance.

4. SETTING OF THE SCENARIO

The TTX planning team had chosen to take a scenario focused on a Ro-Ro ship approaching the Sound area between Denmark and Sweden. Close to the narrow waters of the Sound, the scenario outlined that the Ro-Ro vessel had been involved in a collision and requested a Place of Refuge in order to gain clarity about the damages.

The scenario version provided in Appendix C was distributed to the participants in advance of the exercise in order to prepare the participants for the discussions. Only the planning team was in possession of an extended full version of the scenario.

Prior to the exercise, the participants received information about the characteristics of the geographical area, infrastructure, navigational considerations etc.

On the day prior to the exercise, EMSA provided a training on the use of EMSA-hosted systems for PoR situations.

At the initial plenary session on day 1 of the TTX, the participants received the latest information about the scenario situation and some dilemmas were introduced. From there on the participants were divided into three small groups (“syndicates”) to allow open discussion and more time for each participant to elaborate about the dilemmas faced and their views. The list of participants per group is provided in Appendix B.

For each dilemma, the facilitators were in possession of and used a list of inherent questions that could ensure holistic discussions in the syndicates.

The intention of the scenario was to provide the foundation for fruitful discussions. It introduced a number of dilemmas for the participants. The dilemmas were tailored to facilitate general discussions about aspects of a PoR situation. The facilitators aimed at ensuring that no very detailed knowledge about the geographical area and Swedish/Danish specific context would be required. The 3 dilemmas introduced were:

- As the Swedish watch-keeper, do you need more time to handle the PoR request?
- As the Swedish watch-keeper, would you grant a PoR?
- As the Danish watch-keeper, would you grant a PoR?

5. EXERCISE SCENARIO

The exercise scenario covered a number of issues likely to be encountered in a PoR situation.

5.1 UNCERTAINTY

Investigations from real accidents in the last decade indicate a considerable number of mis-declarations of goods in packaged form, which is relevant in situations including containerhips and Ro-Ro vessels. In the given scenario, the Ro-Ro vessel had reported 11 trailers with dangerous goods. Although already the known dangerous goods were significant, participants were reminded that there may be even more undeclared dangerous goods on trailers and with substances that would bring new dangers into

the situation². Hence, the scenario facilitated discussions about uncertainty and precaution in this regard.

5.2 INITIATIVE

The scenario was tailored to introduce a dilemma to the participants:

- On the one hand, the ship had clearly suffered a casualty and requested a PoR as the situation on board was unclear.
- On the other hand, the master of the ship indicated in his initial report that he was determined to proceed through confined waters with numerous navigational challenges towards his scheduled Next Port of Call (NPOC).

The participants were “put in the shoes of the Swedish watch-keeper” and were to consider the available information and make the decision whether to intervene in the master’s intention to proceed and to divert the ship, or not.

The discussions developed as intended, citing both pros and cons. Most participants concluded that the ship should be diverted and stay outside the constrained waters of the Sound until a PoR plan was available and approved.

5.3 DECISION POWER

The need to make a fast decision on whether to allow the ship to continue its voyage, or to divert her, led to discussions about decision power (authority), in particular of the organisation and officer responding to the PoR request. PoR situations may bear major consequences not only for the ship concerned, but also for other ships in the vicinity, population and economic activities close by, as well as maritime safety and the marine environment at large. PoR situations potentially occur without warning and the power to make decisions and act on the situation should be available throughout. Hence, the organisation must be prepared 24/7/365 and not depend on the availability of certain staff members/persons.

² The problem seems to be only one-way: Goods that are in fact dangerous goods but not declared as such while the opposite, goods that are declared dangerous goods but in fact are not, is not experienced.

5.4 INFORMATION AVAILABILITY

Deliberately, the scenario did not introduce a large package of information. In real life scenarios, decision-makers have to act on limited information.

The decision-maker has to assess which information is crucial for the decision and request that specific information before making the decision. EMSA-hosted systems as well as industry can provide support to compile this information. In some situations, it is however envisaged that decisions have to be made in due time although the decision-maker is aware of the shortfall of relevant information.

The scenario opened for discussions about what was actually needed to know and what was rather nice to know – and the potential urgency and need to make decisions without all the “need to know” information.

5.5 INFORMATION SHARING

Information sharing between different States is important since with the ship, the location of the potential threat moves. Sharing of information may be very complex if more than one State is involved as national legislation has to be taken into consideration and this is even more relevant if one of the States is a Third country. In the EU, the templates included in the EU Operational Guidelines on PoR aim to support this information sharing.

In the exercise, the master of the casualty ship shared his initial appraisal of the situation after the collision. He asked for a PoR in a format that was somewhat logical to describe the situation on board. The information was aligned with the general instructions of IMO Resolution A.9493.

The format differed significantly from the format of the SITREP in SafeSeaNet, thereby allowing discussions about (advantages of different means of) information sharing. The master shares information in the format he finds most relevant and depending on his available resources. Member States share information via SafeSeaNet fixed message formats, and it is the coastal State’s obligation to distribute the information. As the scenario developed, the participants received both the master’s message as well

³ Currently under revision in IMO.

as the SafeSeaNet generated report⁴ with the same information in a different format. The participants noted the value of structured reports.

5.6 NEIGHBOURING STATES PoR

The dangers linked to potential deterioration of the situation on board, the casualty vessel and the given meteorological conditions led to thorough discussions about the required characteristics of a suitable PoR, and whether Sweden could offer a suitable PoR meeting the identified requirements at all. Both the pre-designated PoRs with established plans for each area, as well as the option of establishing an ad-hoc PoR area that could meet the requirements, were discussed.

The discussions encouraged the participants to be aware about possible PoR in neighbouring States, as guided in the EU Operational Guidelines. It was also discussed whether awareness or reference to neighbouring States’ PoRs should be included in the own (communication of) decision when potentially rejecting a PoR request from a master or salvor.

5.7 ROLES OF THE COORDINATING MEMBER STATE AND SUPPORTING MEMBER STATE

In the scenario, Sweden automatically became the Coordinating Member State (CMS), due to the location of the ship. As the ship was in Swedish Territorial Waters (TTW), the PoR request went to the Swedish Maritime Assistance Service (MAS).

Later in the scenario, a transfer of responsibility was decided, from CMS Sweden to Denmark. The scenario opened for discussions about when exactly a MS becomes CMS in a transfer of responsibility at an advanced stage of the PoR situation, and the relation to Territorial Waters which the casualty ship is located in. The participants discussed this situation where one MS (Denmark) was asked to become CMS and take over the situation, but the casualty ship in the beginning of its voyage to a PoR was still in Swedish TTW and under Swedish authority.

After the transfer, the previous CMS, now becoming Supporting Member State (SMS), has to remain alert and closely follow since subsequent events may change appraisals

⁴ EMSA staff had transferred the Master’s information to SSN (Training mode).

at any time, and it cannot be excluded that a casualty ship may even have to be transferred back to the first State if circumstances so require.

5.8 PLACES OF REFUGE FOR VARIOUS PoR CASES IN EACH MS

In the scenario, it would imply danger to a significant number of people living/staying near a PoR accommodating the casualty ship if the situation on board escalated. This aspect was brought into the scenario to facilitate discussions about whether MS had (sufficient number and variants of) PoRs that could accommodate a vessel in any potential situation. Discussions at previous TTXs indicated the PoRs had often been assigned with lower consideration given to the ability of a site and its environments to handle such extraordinarily dangerous situations.

Participants were encouraged to anticipate and verify their respective MS ability to accommodate ships in any PoR situation, including those that would impose danger to any people near the ship. This could entail threats stemming from, for instance, toxic fumes, explosives, radiation, or diseases on-board the casualty ship.

The syndicates reconvened in plenary and exchanged the conclusions of their discussions via rapporteurs. Although small differences in the syndicates could be observed, the overall conclusion of all syndicates was to divert the ship in order to stay outside the narrow waters of the Sound, and after Swedish and subsequently Danish consideration to grant a PoR in Danish waters.

5.9 TRANSFER OF COORDINATION

To the question on whether to bring the vessel to a PoR in line with SITREP no 2, participants expressed their opinions as follows:

- a. Some were of the view that effective assistance could only be delivered in a port,
- b. The delay in assistance may cause an escalation of the situation,
- c. There was no risk to crew and passengers, so technical issues should be considered first,
- d. Possible degradation of communications, navigation equipment, anchoring and berthing were considered important. The ship seemed not safe anymore

On the question of transferring coordination from Sweden to Denmark, the participants identified the following reasons to support their respective views:

- e. Danger to population posed,
- f. Environmental hazard
- g. Better solution somewhere else,
- h. Lack of facilities,
- i. Lack of current information,
- j. Lack of objective assessment,
- k. Economic impact

5.10 CONCLUDING THE DECISION-MAKING PROCESS

Following discussion, most participants were prone to accept the transfer of coordination on a “*good neighbourliness*” basis. Dissenting opinions were raised that the risks would be the same no matter to which State, so a transfer would need reasonable grounds to be accepted and not only be based on avoiding a risk. However, as outlined in the EU Operational Guidelines, PoRs serve to ensure the safety of the vessel, its crew and cargo, thereby minimizing the risk to personnel, potential pollution damage to the environment or a hazard to navigation. A holistic assessment of these factors is necessary.

Transfer of coordination needs sound communication, flow of information, a detailed plan and the issuing of a Situation Report (SITREP). A prior effective assessment of the vessel’s condition, including evaluation by an expert team, before acceptance of transfer can provide certainty to the State asked to take over as a CMS.

Considering that the Danish vessel condition assessment did not differ from the reports of the master, the vessel was accepted to proceed to a PoR. Some aspects that arose in discussions were the following:

- a. Need of a passage plan in line with the vessel condition,
- b. Finding an appropriate pre-designated PoR,
- c. Which authorities to be informed,
- d. Extent of the powers of the Competent Authority,
- e. Evacuation of passengers,
- f. Unloading of hazmat (fuel and oxygen),
- g. Need to put the bow to the wind to avoid toxic fumes,
- h. Assessment of structural/ballast/loading condition,
- i. Request for resources from Sweden as the SMS,
- j. Tug support, and
- k. Need for specialized fire fighters and marine chemist.

The PoR selected by breakout groups was waters off Køge (Denmark), due to its facilities offered and its proximity to the vessel position. Other possible PoRs were considered but rejected on the basis of posing a danger to population or too long passage. The participants were asked if in their national plans they have pre-designated PoRs. Many States answered that they have designated PoRs, but they are open to establish an ad hoc PoR if circumstances demand it. Most States indicated that the geographical configuration of their coasts is the main factor when selecting pre-designated PoRs, as well as population in proximity and environmental risks.

6. LESSONS LEARNED

The TTX yielded valuable insights, the most significant of which are outlined here.

6.1 COORDINATION

- a. The decision time is critical – and short. This applies not only to the master of the ship, but also to the various actors during the entire process. A delay could represent a huge problem with tremendous consequences.
- b. The handover of coordination between authorities can be critical as authorities need to have a shared understanding about the situation and how to deal with the challenges.
- c. Any delay in assistance may cause an escalation of the situation.
- d. For the handover of CMS duty between MS, economy may be given an unintentional priority, if the decision is not taken by operational personnel and not on the foundation of operational and environmental aspects solely. It was recalled that in line with the OG, the State receiving a request to provide a PoR cannot refuse for commercial, financial or insurance reasons alone.

6.2 REQUESTING a PoR

- a. Information sharing between MS and between the neighbouring countries is important as the location of the threat is dynamic and could change. This aspect acquires even more attention when it involves a non-EU member State.

6.3 ASSESMENT and INSPECTION

- a. An on-site assessment of fire and smoke intensity would be crucial as the ship Closed-Circuit Television (CCTV) system may be inoperative.
- b. The operational status of the ship's communication equipment, navigation equipment, anchoring and berthing equipment as well as the seaworthiness and

vulnerability of the ship (based on class calculations) are fundamental to deciding how to handle the situation.

- c. To have information available and ready to be provided by the flag and/or by the RO to various actors intervening during the operation.

6.4 DECISION-MAKING PROCESS AND OUTCOMES

- a. Annexes of the EU Operational Guidelines are essential in supporting the entire process.
- b. SSN is a valuable and useful tool for information exchange in PoR cases.
- c. Administrations should have pre-determined groups of officers with different backgrounds/experience who could be responsible for handling these situations ("National Crisis Council").
- d. Administrations should create working groups that could provide advice, training to officials responsible in this area and develop skills and equipment based on lessons learned from real accidents.
- e. The importance of having the designated person who, at the Administration level, has the authority to make the decision. Temporary unavailability of decision power will impose danger to the handling of the situation, and hence back-up need to enjoy the same decision power and be available 24/7/365.
- f. The importance of having regular, up-to-date weather reports to help decision-makers adjust the measures to be taken at any given time.

7. RECOMMENDATIONS

7.1 OPERATIONAL

The exercise demonstrated that it is vital to liaise with neighbouring States and ensure knowledge of neighbours' PoR and PoR plans. Only then can the most suitable PoR be identified, which may happen to be across a border. It was found that so far PoR plans are often in the national language (only). Hence language is a barrier that should be overcome, and key documents should be available in multiple languages.

7.2 ORGANISATIONAL

The Competent Authority should be sufficiently robust to handle the information exchange, and in particular the transfer of information from external sources into the format of EU systems. Authorities involved should request their staff to attend relevant training on PoR, possibly such as provided by EMSA on the EU OG at regular intervals.

7.3 ADMINISTRATIVE

Participants were advised to build a comprehensive operational diary containing all information exchanges, communications, elaboration, and decisions when handling a PoR as this will be of high importance, inter alia for the claims process and for lessons to be learnt.

7.4 FINDINGS AND AREAS FOR IMPROVEMENT

Many participants shared their views about the use of the EU OGs and the exercises, with a common stance that both are valuable tools to learn how to best deal with PoR incidents. Some remarks about areas to improve were also provided by the participants.

It was commented that a specific training on PoR OGs targeted to TTX participants should be carried out in the two months prior to the TTX days.

Participants underlined the good cooperation with salvors, and authorities involved and suggested the further recognition of the salvors' role.

The TTX scenario had drawn attention to the role of neighbouring States, and discussions in breakout groups had provided food for thought to further engage with PoRs and procedures in neighbouring countries. The exchange across borders, not only in a PoR situation, could be further strengthened, and also be more prominently anchored in the OGs. Cooperation with neighbouring States, including Third countries, was regarded as a key factor for successfully dealing with a PoR situation.

Some delegations were of the view that the established cooperation and trust meanwhile even allowed and called for a more harmonised approach to PoR situations in the future, going beyond the existing proposed templates in the OGs. The example of a common set of information to be requested from industry was raised.

A number of participants considered clear and updated information about pre-designated PoRs desirable, although many others assumed that PoR should be designated on a case-by-case basis instead a pre-designated approach. Participants were encouraged to keep updated their PoR information and communicate by appropriate means, e.g., via their websites, and sharing any updates with EMSA.

The idea was raised to develop a compilation of real cases and lessons learnt, possibly helping in clearer identification of cases to be treated as PoR, facilitating dealing with situations encountered previously by other MS PoR competent authorities, and inspiring thought processes for identification of case-by-case solutions. Once a sufficient experience base has been established, a new section providing guidance on particular types of PoR cases (high safety risk, environmental threat, radioactive issues, etc.) could potentially be derived jointly. Guidance providing directions on implementation at national level, maybe through a draft plan to be used as a model, or hands-on steps how to choose a PoR, could facilitate MS work on the ground, in the interest of concerted actions and saving valuable time in PoR situations.

8. CONCLUSIONS

The TTX demonstrated once again how important it is for States and industry to cooperate and have the means of communication available when it is necessary to accommodate ships in need of assistance – a situation that could occur at any time. It was recognised that one TTX every second year is not sufficient to maintain a high level of competence on PoR issues in each MS.

It was also emphasised the significance of neighbouring (Member) States to know or at least be aware of the existence of the procedures adopted in each neighbouring State at national level in the situation of a PoR request.

There was unanimity in recognising the great importance and high value of the EU OGs. Participants were reminded and invited to use the forms that are part of the EU OGs as a supporting tool that facilitates compiling the information necessary at different moments. In this way, the decision-maker or user of the forms will be able to ensure that they will not overlook any relevant and necessary information to transmit to other MS.

Several reflections and ideas on PoR were expressed by participants:

1. Further recognition of the salvors' role and cooperation with salvors and other authorities involved.

⁵ Art. 23(d) of Directive 2002/59/EC, as amended, provides that MS and the Commission shall cooperate in “drawing up, if appropriate, concerted plans to accommodate ships in distress”

2. Cooperation with neighbouring States and Third countries is key and all participants should be encouraged to engage.
3. Established cooperation and trust resulted in some participants to consider a more harmonised approach, with a possible common set of information to be requested from industry.
4. Desirability of clear and updated information of pre-designated PoRs.
5. Idea to develop a compilation of real cases and lessons learnt, possibly helping in clearer identification of cases to be treated as PoR, and a chance to derive a new section on particular types of PoR cases (high safety risk, environmental threat, radioactive issues, etc.).
6. Suggestion for more concerted action, e.g. to develop a simplified version on implementation of the guidelines (e.g., draft plan), reflecting common understanding, with a view to providing hands-on guidance on steps to choose a PoR.

In the decision process, it was concluded that it is essential for States to have appointed officials exercising delegated functions and holding all sufficient authority to allow them to take independent decisions on their own initiative whenever requested, in particular during the critical phase when the ship is requesting assistance. In case the main officer is not available, there should be a deputy officer with similar decision authority who can replace him/her to take over at any time.

The misreporting of Hazmat material continues to be recognised as a problem that is no longer new but can have serious implications for the entire decision-making process, in particular in PoR cases, and the unexpected very serious consequences that such lack of information thereof can cause. All were encouraged to intensify efforts to tackle this issue.

The group recognised the added value of closely involving a shipping company (for the first time in this type of event) in the planning and preparation of this type of exercise. This fact made it possible to achieve one of the objectives of the exercise, which was to bring the relevant role of the ship's master as close as possible to reality.

The weather conditions considered for the TTX, and in particular the wind direction, played an important role in the scenario. High quality meteorological information was hence considered essential, as demonstrated by the scenario decision of Sweden not to be able to take on the ship, and therefore requesting PoR support from Denmark.

The TTX was regarded as a key place for exchange on PoRs and a place to bring together the actors concerned and strengthened its role.

9. ACKNOWLEDGEMENTS

The organisers as well as all participants expressed their sincere gratitude to the Exercise Director from Denmark Mr Torben Iversen; to EMSA for its continuous support in preparing and conducting the exercise, and the generous provision of excellent premises and logistics. The help of DFDS, providing key insights about the vessel as well as procedures on board, also deserves particular recognition. The commitment and thrust of the whole planning team despite difficult conditions during the pandemic and external problems faced, over a long and extended process of preparation of exercise, was exceptional and highly appreciated.

We would also like to express our gratitude to all participants who with their interventions and contributions made the exercise so thought-provoking, interesting, and valuable.

The planning team collectively thanked all involved in contributing to another inspiring TTX. It had once again highlighted the value of the established spirit of cooperation between all stakeholders when faced with a cross-jurisdictional PoR situation.

The TTX placed a spotlight again how specific each PoR situation is, with no general solution when deciding to grant a place of refuge to a ship in the need of assistance, but that building on the OG can provide key guidance when facing the partially uncharted territory of a PoR situation.

Tabletop Exercise MV “BALTIC UMBRELLA”- 2022

Appendix A - Planning Team and Support Members

| | Names | Planning Team | Roles and responsibilities |
|----|-----------------------|----------------------|--|
| 1 | Torben Iversen | Denmark | Leading MS, Group 1, and Exercise Director |
| 2 | Christopher Perrocco | Class (ABS, Hamburg) | Facilitator Group 1 |
| 3 | Charo Coll | Salvage | Facilitator Group 1 – In support |
| 4 | Mikael Stig | DFDS | Facilitator Group 1 – In support |
| 5 | Ole Kristian Bjerkemo | Norway | Facilitator Group 2 |
| 6 | Leendert Muller | Salvage | Facilitator Group 2 |
| 7 | Ivo de Zeeuw | Salvage | Facilitator Group 2 – In support |
| 8 | Francisco Tovar | Class (ABS, Houston) | Facilitator Group 2 – In support |
| 9 | Jesper Bern | DFDS | Facilitator Group 2 – In support |
| 10 | Hernan del Frade | Spain | Facilitator Group 3 |
| 11 | Jakob Lynge | DFDS | Facilitator Group 3 |
| 12 | Morten Glamsø | Danish Shipping | Facilitator Group 3 – In support |
| 13 | Leonidas Noulas | Class (ABS, Greece) | Facilitator Group 3 – In support |
| 14 | Alexander Hoffmann | European Commission | Support |
| 15 | Jacob Terling | European Commission | Remote support |
| 16 | Ioannis Mispinas | EMSA | Support |
| 17 | Rui Silva Dias | EMSA | Support |
| 18 | Ana Sofia Catarino | EMSA | Support |
| 19 | Rute Fernandes | EMSA | Support |

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

Appendix B - List of Participants per Group

Group 1

| No. Participants | Member State/Organisation | First Name | Last Name |
|------------------|-----------------------------|-------------|-----------|
| 1 | Denmark - Exercise Director | Torben | Iversen |
| 2 | ABS Europe Ltd | Christopher | Perrocco |
| 3 | Boluda Corporacion Maritima | Charo | Coll |
| 4 | DFDS A/S | Michael | Stig |
| 5 | Transport Canada | Alexandre | Leduc |
| 6 | IMO | Osamu | Marumoto |
| 7 | Denmark | Monica Mark | Alsted |
| 8 | Germany | Jason | Mühlstein |
| 9 | Ireland | Conor | Kelly |
| 10 | Italy | Silvia | Brini |
| 11 | Malta | Mewic | Zammit |
| 12 | Netherlands | Sjaco | Pas |
| 13 | Romania | Irina | Casiade |
| 14 | Sweden | Dorit | Dalén |
| 15 | Jordan | Shadi | Abbad |
| 16 | Israel | Jonathan | Bhonkar |
| 17 | Libyan Arab Jamahiriya | Alaeddin | Essokni |
| 18 | Georgia | Avandil | Gegenava |
| 19 | Kazakhstan | | Kuzmin |
| 20 | Turkey | Emre | Danis |

Group 2

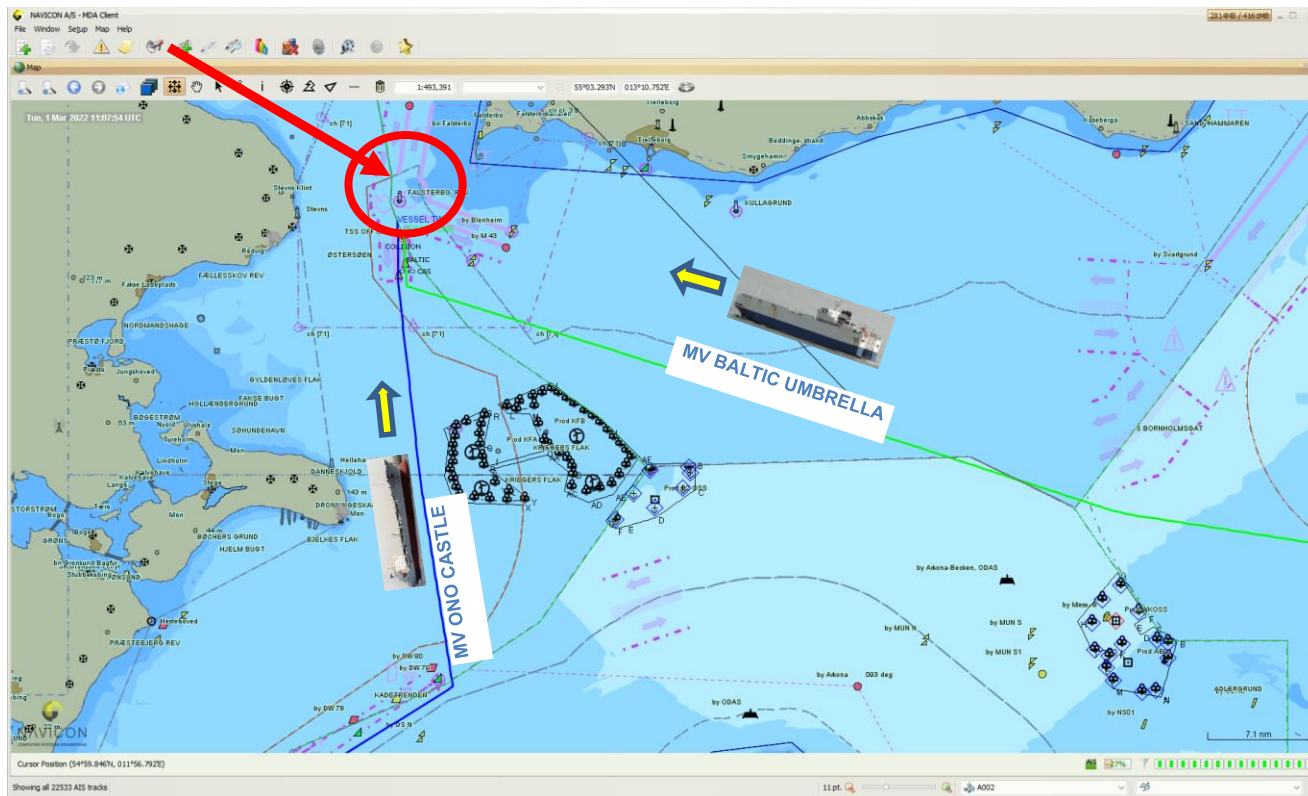
| No. Participants | Member State/Organisation | First Name | Last Name |
|------------------|---|--------------|--------------|
| 1 | Norway | Ole Kristian | Bjerkemo |
| 2 | MULTIRASHIP Towage & Salvage | Leendert | Muller |
| 3 | MULTIRASHIP Towage & Salvage | Ivo Rogier | de Zeeuw |
| 4 | ABS - RRDA | Francisco | Tovar |
| 5 | DFDS A/S | Jesper | Bern |
| 6 | International Chamber of Shipping (ICS) | Gregor | Stevens |
| 7 | Bulgaria | Georgi | Nikolov |
| 8 | Finland | Pekka | Parkkali |
| 9 | Iceland | Halldór | Zoëga |
| 10 | Italy | Vittorio | Vanacore |
| 11 | Latvia | Lolita | Koiron |
| 12 | Netherlands | Hans | Witte |
| 13 | Portugal | Ana | Faneca |
| 14 | Slovenia | Primož | Bajec |
| 15 | Sweden | Mattias | Heneborn |
| 16 | Lebanon | Ali | Haidar |
| 17 | Palestina | Ahmad | Amarna |
| 18 | Kazakhstan | | Nurmakhanova |
| 19 | Kazakhstan | | Parhomenko |
| 20 | Ukraine | Mykola | Melnyk |

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

Group 3

| No. Participants | Member State/Organisation | First Name | Last Name |
|------------------|-----------------------------------|--------------|---------------|
| 1 | Spain | Hernán | Del Frade |
| 2 | DFDS A/S | Jakob | Lynge |
| 3 | American Bureau of Shipping (ABS) | Leonidas | Noulas |
| 4 | Danish Shipping | Morten | Glamsø |
| 5 | ABS Europe Ltd. | Lucia | Moledo |
| 6 | Belgium | Dries | Boodts |
| 7 | Croatia | Mirko | Rasic |
| 8 | Finland | Pertti | Normia |
| 9 | Ireland | Eoin | Callan |
| 10 | Italy | Tommaso | Pisino |
| 11 | Lithuania | Remigijus | Urbonas |
| 12 | Netherlands | Hans | Spiegelhaar |
| 13 | Norway | Even Widerøe | Kristoffersen |
| 14 | Poland | Andrzej | Kalata |
| 15 | Spain | Jose Luis | Rada Casas |
| 16 | United Kingdom | Stephan | Hennig |
| 17 | United Kingdom | James | Herbert |
| 18 | Lebanon | Ahmad | Tamer |
| 19 | Morocco | Moulay | Said Daoudi |
| 20 | Kazakhstan | | Baizhanova |
| 21 | Moldova, Republic of | Vadim | Pavalachi |

Appendix C - Exercise area and scenario



As M/V 'BALTIC UMBRELLA' approaches the southern entrance to the Sound from a southerly direction. The product tanker M/V 'ONO CASTLE', a Liberian flagged product tanker, approaches the Sound from south as well.

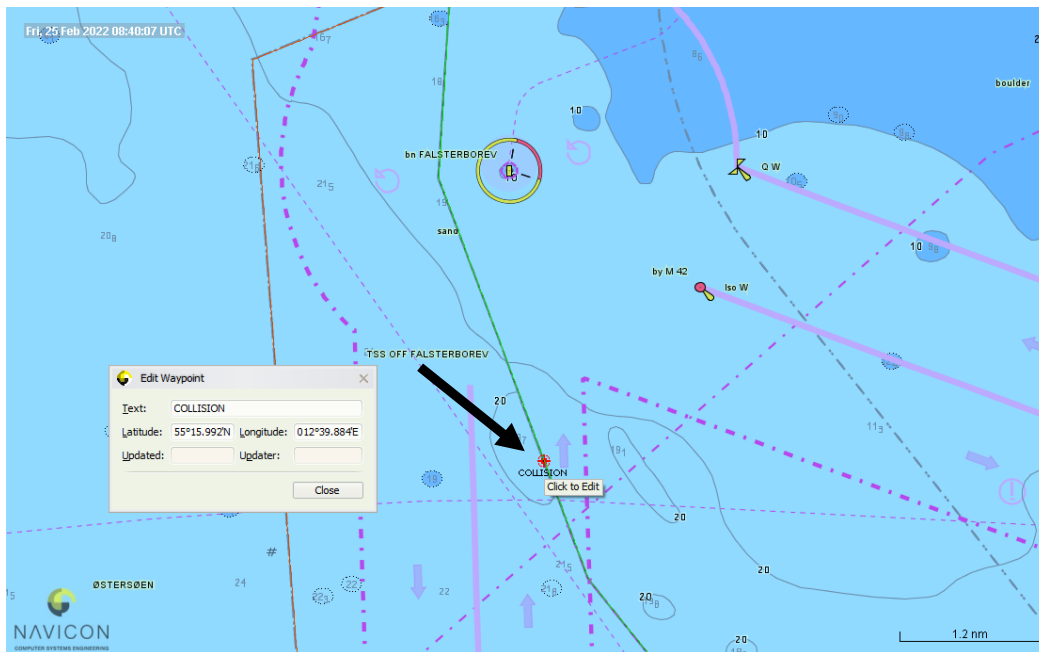
At the southern approach to the Sound, M/V 'BALTIC UMBRELLA' and M/V 'ONO CASTLE' collide due to a technical malfunction from MV BALTIC UMBRELLA.

The collision happens on 55°15,992 N, 12°39,884 E, which is right on the border between Sweden and Denmark close to Falsterbo lighthouse.

The division between Danish and Swedish territorial waters is marked in the figure below with a green line.

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

The collision point is indicated by the thick arrow:



Introduction to the scenario context

1. Location

The Sound area between Sweden and Denmark is a densely trafficked shipping route. All parts of the Sound and its approaches are inside either Swedish or Danish Territorial Waters (TTW), but the strait as a whole is an international strait.

There is a significant amount of crossing ferries in the northern part, and of pleasure craft in general, in the Sound. In 2018, 31 000 vessels passed through the Sound (source: Swedish Civil Contingency Agency - SCCA).

In addition, there are several obstacles to take into consideration when transiting through the Sound:

- There are large areas with shallow waters.
- The navigation is restricted by numerous windfarms.
- There is a highway across the Sound between Copenhagen and Malmö. In the western part it is a submerged tunnel under a narrow channel (width 300 metres and max draught 9 meters). In the eastern part, a bridge (max. clearance 57m) has to be passed.

Denmark and Sweden operate a joint Vessel Traffic Service (VTS) center that covers the Sound and its approaches. Swedish and Danish operators sit next to each other and have common procedures but act in accordance with their national legislation.

Approximately 2½ million people are living within 15 kilometres of the coastline of the Sound and its approaches with Copenhagen, Malmö, Helsingborg, and Elsinore (Helsingør) as the major cities. The area hosts large company headquarters, industry and the largest airport in Scandinavia.

The Scanian/Oresund coast also has a rich wildlife, not least birdlife and rare amphibians. The Skanor-Falsterbo area is a nature reserve where many birds land over while they move north (source: SCCA).

2. Sweden

Swedish legislation regarding Places of Refuge is Ship Safety Act (2003:364), Act (1980:424) on Measures against Pollution from Vessels and Act (2003:778) on Protection against Accidents.

The Swedish Transport Agency (STA) is the primary norm giving authority in Sweden and has a general obligation in accordance with its mandate to issue regulations and perform control and supervision functions in the maritime safety, environmental protection field, in particular regarding ship safety, crews and other maritime traffic related issues.

The Swedish Maritime Administration (SMA) is the authority with the main responsibility to provide the infrastructure required by the Directive 2002/59/EC (e.g., AIS-installations, national SSN system (SafeSeaNet Sweden) but also to provide operational surveillance (VTS, SRS and TSS).

The Swedish Coast Guard (SCG) has a general instruction/mandate to perform sea surveillance in the Swedish Territorial Waters and the EEZ and has the operational responsibility regarding pollution response at sea and performs certain tasks regarding criminal investigation.

The cooperation between SMA, STA and SCG is based on a formal agreement regarding handling of accidents and incidents at sea.

The following apply as regards Place of refuge and MAS in Sweden:

- the STA is the responsible authority,
- JRCC (SMA) is the point of contact for MAS, located in Gothenburg, and provides the facilities during MAS operations.
- the SCG has the responsibility of pollution response.

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Sweden has 35 pre-designated PoR areas. The list of Swedish pre-defined PoR is non-exhaustive and other locations might be considered if so, required by ad-hoc circumstances.

In southern Sweden the locations are as follows:



3. Denmark

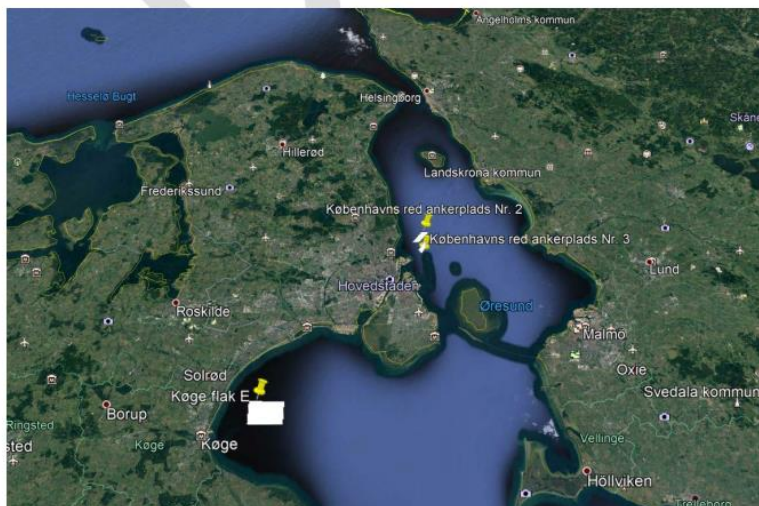
Danish legislation regarding Places of Refuge is Executive Order number 875 dated 27 June 2016.

The Danish Environmental Protection Agency is the Regulatory Authority.

The Maritime Assistance Service (MAS), an integrated part of Navy Command, is the National Competent operational Authority and allocates a PoR to a ship's Master.

Denmark has 20 pre-designated PoR areas. Two of those areas are the anchorage areas on the approaches to Copenhagen and a third one is near Køge, south of the Sound. In addition, the Danish MAS is authorised to assign temporary PoR on an ad hoc basis, if deemed relevant.

The Permanent PoR are indicated in this picture:



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Both Swedish and Danish legislations are based on Directive 2002/59/EC, IMO and Places of Refuge EU Operational Guidelines.

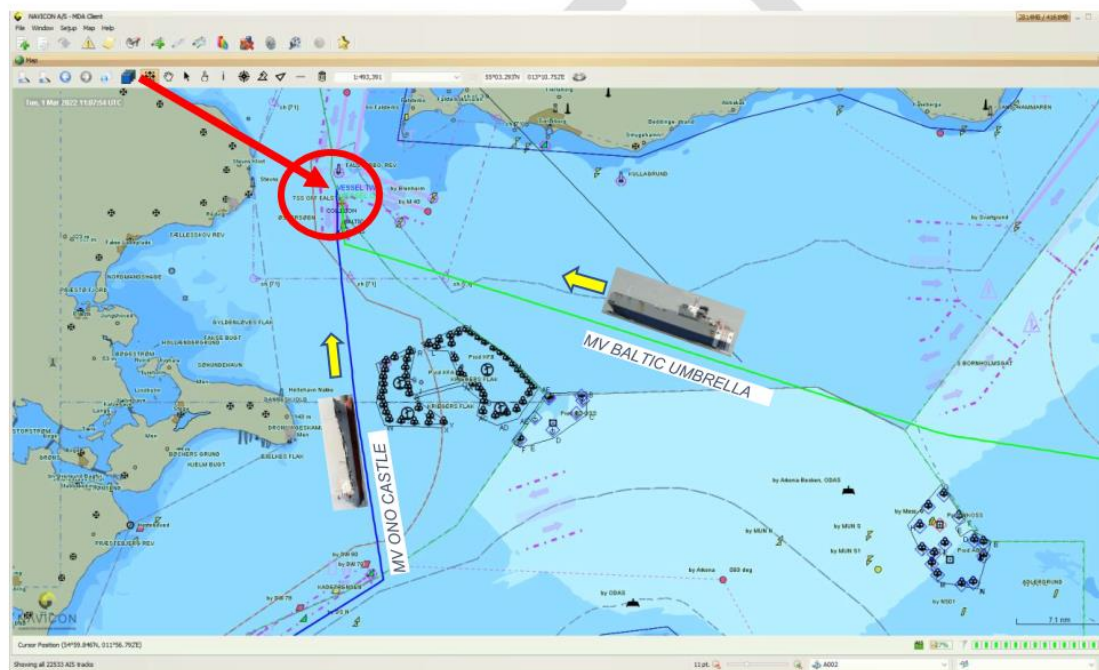
4. SCENARIO

The Lithuanian flagged Ro-Ro ship M/V 'BALTIC UMBRELLA' is in the morning of 11 July on a journey from Lithuania to Malmo and approaches the Sound from the south. M/V 'BALTIC UMBRELLA' is laden with trailers, trucks and cars (Details below).

At the same time Liberian flagged M/V ONO CASTLE is underway on a journey from Rotterdam to Proevesten oil terminal near Copenhagen.

[See map with past and intended track. M/V 'ONO CASTLE' intended navtrack is marked with blue, M/V 'BALTIC UMBRELLA' intended navtrack marked with light green]

M/V 'ONO CASTLE' is laden with Diesel fuel UN code 1202.



The weather this morning is southwesterly wind 8 m/s, light sea, partly clouded, 15° Celsius, 994hPa.

As M/V 'BALTIC UMBRELLA' approaches the southern entrance to the Sound from a southerly direction. The product tanker M/V 'ONO CASTLE', a Liberian flagged product tanker, approaches the Sound from south as well.

At the southern approach to the Sound, M/V 'BALTIC UMBRELLA' and M/V 'ONO CASTLE' collide due to a technical malfunction from MV BALTIC UMBRELLA.

The collision happens on 55°15,992 N, 12°39,884 E, which is right on the border between Sweden and Denmark close to Falsterbo lighthouse.

The division between Danish and Swedish territorial waters is marked in the figure below with a green line

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

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The collision point is indicated by the thick arrow:



There is no immediate pollution reported, but both vessels suffer from the kinetic energy of the collision.

On board M/V ONO CASTLE, the Captain assesses damage only in the ship's bow. He considers it will be safe to pass the navigationally difficult approach to his destination and berthing at Proevstenen oil terminal near Copenhagen and this is approved by the Danish MAS¹. Hence the focus for the TTX will be solely on M/V BALTIC UMBRELLA.

Ro-Ro MV BALTIC UMBRELLA

M/V 'BALTIC UMBRELLA' was hit on the port side approximately 53 meters from the Forward Perpendicular (FP), just aft of the Engine Room (ER) bulkhead. The cargo is in significant disorder. Smoke is visible coming out from the damaged part of the ship.

M/V 'BALTIC UMBRELLA' is loaded with trailers and trucks. She has a 19 seamen crew and 12 truck drivers as passengers:

- 190 truck trailers (172 solo trailers and 18 with truck).
- 11 of the trailers are declared to carry dangerous goods.
- 12 of the trailers are refrigerated trailers with fuel for refrigeration. The trailers are presently powered by cabled electricity.

The refrigerated trailers are located inside the ship and within 50m of the collision point.

The following goods inside the ship and within 50m of the collision point on Deck No.2:

¹ By formal agreement Danish MAS can – and is expected to – make such decision on behalf of Danish Maritime Authority.

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

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- A. 2 trailers with UN 3077 Class 9 ENVIRONMENTALLY HAZARDOUS SUBSTANCE SOLID N.O.S. (Azo Dye / complex)
- B. 1 trailer with container containing UN2990 Class 9 LIFE-SAVING APPLIANCES SELF INFLATING.
- C. Refrigerated trailers

In addition, M/V BALTIC UMBRELLA carries the following goods **on open deck within 50m** of the collision point on Deck No.3:

- 1 trailer with container containing UN3090 Class 9 LITHIUM METAL BATTERIES
- 1 trailer with tank containing UN1950 Class 2.1 AEROSOLS
- 1 trailer with tank containing UN2211 POLYMERIC BEADS EXPANDABLE

And the following on the **open deck more than 50m** from the collision point on Deck No.3:

- 1 trailer with container containing UN1072 Class 2.2 OXYGEN COMPRESSED
- 1 trailer with tank containing UN1133 Class 3 Adhesives, flammable liquid
- 2 trailers with tanks containing UN1863 Class 3 Aviation Fuel (Flash point 55°C)
- 1 trailer with tank containing UN1104 Pentyl Acetate located on open deck starboard aft (at the far corner from collision point)

The vessel also carries on board 22 electric cars and 10 hybrids (inside the ship, but starboard aft, at the far corner from the collision).

As a consequence of the collision smoke spreads from Deck 2. The integrity of Deck No. 2 and Deck No.3 no longer exists due to a large hole in the M/V BALTIC UMBRELLA's side. The "Initial collision damage" points should be kept until the TTX joint session.

The full list of damages as described in IR#1 and IR#2 will be provided in the break-out groups

The TTX will only consider the issues relating to handling and finding a PoR for the Ro-Ro ship.

You as a participant will be put in the shoes of the watchkeepers in Sweden and Denmark and engage in discussions about the operational use of EU PoR Operational Guidelines.

The discussions will take place in three (3) breakout groups and moderated by members of the exercise planning team.

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

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MV 'BALTIC UMBRELLA'

Ship Type: Ro-Ro

LOA: 183.10mts

Length B.P.: 173.60mts.

Moulded Breadth: 25.20mts

Weather Deck Height: 15.30mts

Main Deck Height: 9.30mts

Displacement: 22700 t

Deadweight: 13000 t

Max speed: 18kn

Flag: Lithuania

Full ship particulars are included in Annex I.

Insurance

The vessel has P&I cover:

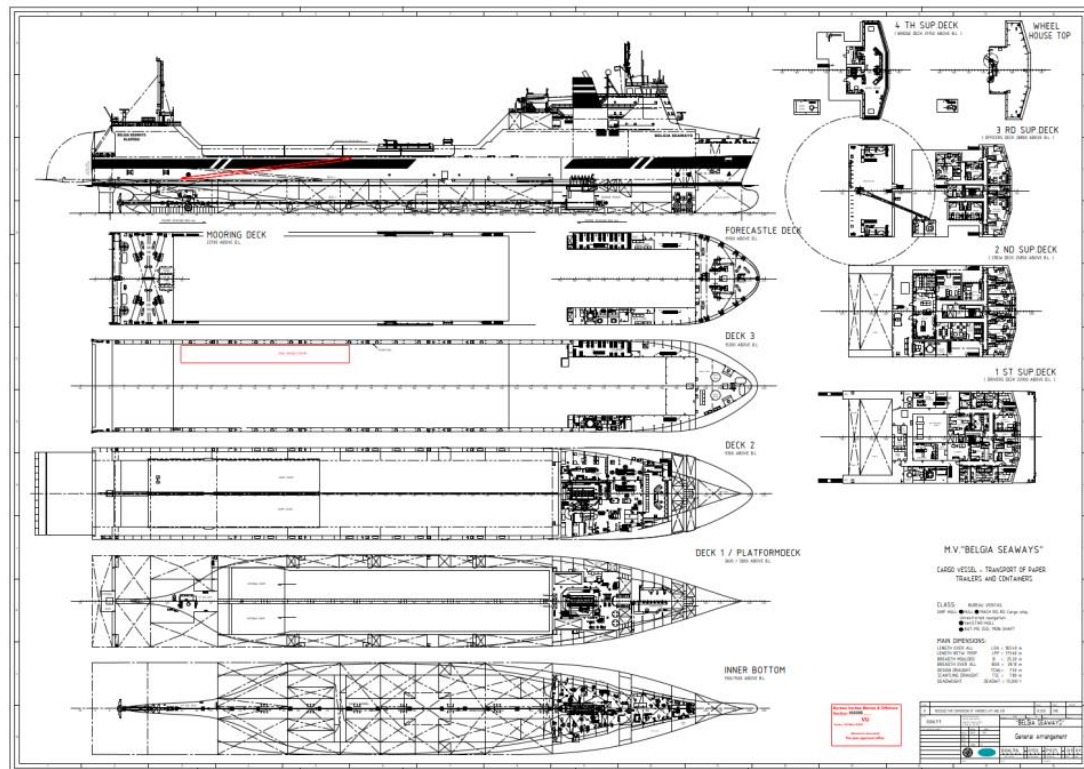
Consider the following:

1. LLMC Convention
2. BUNKERS Convention
3. Wreck removal convention by Denmark
4. Letter of undertaking
5. Aftermath of hazmat misdeclaration

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

5th Tabletop Exercise on Places of Refuge (2022) _ Participants Final

ANNEX I – Ship particulars



Appendix D - Agenda

Agenda: 5th Tabletop Exercise on Places of Refuge

Place and date: European Maritime Safety Agency (EMSA), Lisbon 12, 13 and 14 July 2022

Day 1 - Tuesday, 12 July 2022 – Awareness training session

| Lisbon Time | Agenda Item | Speakers/Comments |
|---------------|---|-------------------|
| 14:00 – 14:30 | Registration | |
| 14:30 – 15:30 | Training Session on Places of Refuge and introduction to EMSA services and platforms: <ul style="list-style-type: none">■ SafeSeaNet Ecosystem Graphical Interface (SEG)■ SafeSeaNet (SSN)■ Situation Report (SITREP)■ Dangerous and Polluting Goods (HAZMAT) – Reporting obligations■ Hazardous and Noxious Substances (HNS) Information services:■ MAR-CIS / MAR-ICE | EMSA |
| 15:30 – 16:00 | Coffee Break | |
| 16:00 – 17:00 | Training Session on Places of Refuge and introduction to EMSA services and platforms (cont.). | EMSA |

Day 2 - Wednesday, 13 July 2022 – Tabletop Exercise

| Lisbon Time | Agenda Item | Speakers/Comments |
|---------------|--|---------------------------------------|
| 08:30 – 09:00 | Registration | |
| 09:00 – 09:15 | Opening session <ul style="list-style-type: none">■ Welcome■ Introduction to the Tabletop Exercise on Places of Refuge■ Objectives | EMSA DG MOVE |
| 09:15 – 09:30 | EMSA Services and platforms: <ul style="list-style-type: none">■ SEG, SSN■ Dangerous and Polluting Goods (HAZMAT) – reporting obligations■ MAR-ICE | EMSA |
| 09:30 – 10:30 | Introduction of the scenario: <ul style="list-style-type: none">■ Legislation■ Present situation■ Weather conditions | Tabletop Exercise Director Denmark |

Tabletop Exercise MV "BALTIC UMBRELLA"- 2022

| Lisbon Time | Agenda Item | Speakers/Comments |
|---------------|--|--|
| | <ul style="list-style-type: none"> ■ Geographical conditions ■ Detail of the Ro-Ro vessel ■ Crew and passengers ■ Cargo (Loading Plan) | |
| 10:45 – 11:00 | Coffee Break | |
| 11:10 – 11:05 | Introduction to Incident Report and 1 st SITREP | Tabletop Exercise Director Denmark and EMSA |
| 11:05 – 11:20 | Presentation by Class on Emergency Response Service (ERS) | American Bureau of Shipping (ABS) |
| 11:20 – 11:35 | Presentation by Salvors | Towage & Salvage (Multraship) |
| 11:45 – 12:30 | Breakout groups | Facilitators |
| 12:30 – 13:30 | Lunch Break – At EMSA | |
| 13:30 – 15:30 | Breakout groups | Facilitators |
| 15:30 – 15:45 | Coffee Break | |
| 15:45 – 16:30 | Breakout groups (cont.) | Facilitators |
| 16:30 – 17:30 | Plenary session: reports of breakout groups and discussion | Tabletop Exercise Director Denmark and group facilitators |
| 19:30 | Cocktail/Dinner An informal get-together will be organised for the evening at EMSA premises | EMSA – Hall of the Conference Room |

Day 3 - Thursday, 14 July 2022 – Tabletop Exercise

| Lisbon Time | Agenda Item | Speakers/Comments |
|---------------|------------------------------|--|
| 09:15 – 09:30 | Summing up the first day | Tabletop Exercise Director Denmark |
| 09:30 – 11:15 | Breakout groups | Facilitators |
| 11:15 – 11:45 | Coffee Break | |
| 11:45 – 12:30 | Plenary Comparing results | Tabletop Exercise Director Denmark and group facilitators |
| 12:30 – 12:45 | Conclusions | Tabletop Exercise Director Denmark and DG MOVE |
| 12:45 – 13:00 | Presentation by Norway | Norway |
| 13:00 – 13:15 | Closing the event | EMSA and DG MOVE |