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Background

This is a revised version of document 4-9 incorporating comments from the plenary.

The 2013 HELCOM Ministerial Meeting emphasized the need to work jointly in co-operation with other regional governmental and non-governmental organizations, the industry and research community, to further promote development and enhanced use of green technologies and alternative fuels, including LNG, methanol as well as other propulsion technologies, in order to reduce harmful exhaust gas emissions and greenhouse gases from ships (para 9 M).

The 2013 Ministerial also agreed to work towards the creation of a joint “Green Technology and Alternative Fuels Platform for Shipping” together with other regional actors in the Baltic Sea.

In early 2014 the Roadmap for Green Technology and Alternative Fuels for Shipping was established by, among others, HELCOM, Council of the Baltic Sea States (CBSS), Baltic Development Forum (BDF) and NDPTL with the aim to:

- “Network of Platform Actors” will be created using existing networks and project organizations under the leadership of HELCOM and the Zero Vision Tool (ZVT*) and a List of National Focal points (amongst the administrations and the industry stakeholders) will be compiled.
- A joint information sharing portal will also be developed based on experience and use of existing portals with the assistance of the Baltic Development Forum and the ZVT.

To take the roadmap further HELCOM MARITIME 14-2014 endorsed and HOD-47-2014 established in December 2014 a new sub-group (later named GREEN TEAM) under the MARITIME Working Group to promote public and private co-operation at national and Baltic Sea levels to enhance development and uptake of green technology and alternative fuels in shipping.

HELCOM MARITIME 16-2016 (September 2016) agreed to the proposal by Finland that based on identified bottlenecks the industry stakeholders and ZVT should draft a work plan for the HELCOM GREEN TEAM and to circulate the draft work plan among the HELCOM MARITIME contacts and observers for approval by the end of the year 2016.

** ZVT is a collaboration method and project platform for a safer, more environmentally, climate and energy efficient transport by sea. Within the platform representatives of industry, academy, agencies and administrations meet to share experiences and find common, workable and sustainable solutions. Today there are over 20 ongoing Joint Industry or University Projects (JIP, JUP), comprising over 160 collaboration partners from 10 countries that are using the ZVT method, reporting lessons learned and sharing knowledge. The ZVT reports have been gathered during the last five years from the on-going real life investments projects in the field of sustainable shipping covering the fields of Vessel, Infrastructure, Finance, R&D and Regulation.*
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Accordingly, the attached draft work plan 2017 for the HELCOM GREEN TEAM sub-group, drafted by Finnish and Swedish contacts, was circulated to HELCOM Maritime Contacts by the Secretariat 16 December 2016 with a request for comments and tacit approvals **by 12 January 2017**.

The only comments received in this consultation were from Cruise Lines International Association (CLIA). CLIA could agree in principle to the ToRs but had following comments on the substance for further elaboration during ongoing work:

- in sections 2.1 and 2.2 “economic growth goals” and references to economic needs should be more elaborated to be of similar detail as the environmental and transportation issues highlighted;
- work plan as outlined in section 3 may not be exhaustive at the moment and should be developed in more detail as part of the work.

Action requested

(This Revised version of the original document was done for archival purposes after the closure of the Meeting. It incorporates amendments by the Secretariat based on the following paragraphs of the agreed outcome:

The Meeting considered the Work Plan 2018 for HELCOM Maritime sub-group on green ship technology and alternative fuels (HELCOM GREEN TEAM) (document 4-9), highlighted the importance of this public-private cooperation in enabling sustainable shipping in the region taking into account the regulatory role of IMO, invited the sub-group to cooperate with the EU Sustainable Shipping Forum, requested the group to pay specific attention to the “economic growth goals” and references to economic needs in connection to sections 2.1 and 2.2 raised by CLIA, and adopted the Work Plan after making the following adjustments:

- In Part 2 item 5 add “and in line with IMO”
- In Part 3 work plan items 4 and 6 the target date should be adjusted to 10-12 October as these are the scheduled dates of MARITIME 17 in St.Petersburg, Russia
- In Part 3 item 10 add EU Sustainable Shipping Forum among the partners for cooperation.

The Meeting welcomed the aims of Finland, Sweden and Secretariat to plan detailed work of the HELCOM GREEN TEAM in the near future, including organizing a face to face meeting later in 2017.”

Further, for clarity, the year 2017 has been inserted as the validity period of the Work Plan.)

Terms of Reference and Work Plan 2017 for the subgroup GREEN TEAM under the HELCOME MARITIME Working Group

1. BACKGROUND

1.1 Year 2014

In early 2014 the Roadmap for Green Technology and Alternative Fuels for Shipping was established by, among others, HELCOM, Council of the Baltic Sea States (CBSS), Baltic Development Forum (BDF) and NDPTL with the aim to;

- “Network of Platform Actors” will be created using existing networks and project organizations under the leadership of HELCOM and the Zero Vision Tool (ZVT*) and a List of National Focal points (amongst the administrations and the industry stakeholders) will be compiled.
- A joint information sharing portal will also be developed based on experience and use of existing portals with the assistance of the Baltic Development Forum and the ZVT.

To take the road-map further HELCOM MARITIME 14 established a new sub-group (later named GREEN TEAM) under the MARITIME Working Group to promote public and private co-operation at national and Baltic Sea levels to enhance development and uptake of green technology and alternative fuels in shipping. Terms of Reference was drafted.

1.2 Year 2015

HELCOM MARITIME 15 instructed the GREEN TEAM to further develop public-private co-operation with inspiration from processes and methods used in the region, such as the ZVT methodology (www.zerovisiontool.com), where deployment in the Baltic Sea is looked into in the respect of Vessel technology, Infrastructure, Finance, R&D and Regulations. This in order to secure structured and transparent collaboration in the field of green technology and alternative fuels for shipping.

The GREEN TEAM chairmanship was decided to be shared between Finland and Sweden. The aim of the joint action by the administrations and the private sector stakeholders was, and is, to promote an early introduction and use of new technological solutions and alternative fuels for ships. A questionnaire to support the future work was carried out in 2015 and the outcome was presented in the HELCOM MARITIME 15 meeting. The Meeting agreed that the Terms of Reference of the GREEN TEAM should be interpreted so that also other interested industry and NGO actors, which are not official HELCOM observers, can be members of the sub-group, as public-private partnerships are central for the tasks of the GREEN TEAM. The Meeting also invited the Contracting Parties and industry stakeholders/NGOs to nominate focal point(s) to the GREEN TEAM.

1.3 Year 2016

HELCOM MARITIME 16 agreed to the proposal by Finland that based on identified bottlenecks the industry stakeholders and ZVT should draft a workplan for the HELCOM sub-group under the MARITIME Working Group to enhance the cooperation between the public and private stakeholders in the framework of the Green Technology and Alternative Fuels Platform for Shipping and to circulate the draft work plan among the HELCOM MARITIME contacts and observers for approval by the end of the year 2016.

2. TERMS OF REFERENCE for the HELCOM sub-group of Green Technology and Alternative Fuels for Shipping

1. Promote public and private partnership at national and Baltic Sea levels, such as the activities of the St. Petersburg Initiative, for enhancing development and uptake of green technology and alternative fuels in shipping;
2. Further develop public–private co-operation with inspiration from the roadmap developed at the Viking Grace Conference in January 2014 using it as a tool for a structured dialogue;
3. Facilitate knowledge and information sharing among the Contracting Parties, Observer Organizations and other actors regarding green technology and alternative fuels;
4. Draw inspiration from the Zero Vision Tool methodology in order to secure structured and transparent collaboration in the field of green technology and alternative fuels for shipping;
5. Discuss the need for regulatory additions or amendments or other actions needed within the mandate of HELCOM MARITIME and in line with IMO;
6. Consider and, when possible, develop incentives for the developments of green technology and alternative fuels, i.e. green shipping index, if there is a clear case where existing regional initiatives are inadequate;
7. Coordinate the sub-group’s activities with other regional organizations and platforms in the framework of green technology and alternative fuels to enhance coherence and synergy building;
8. Discuss technical issues on availability of technology to meet the NOx TIER III requirements;
9. In carrying out tasks 1 and 8, arrange seminars and other relevant events.

2.1 Society Focus Need

HELCOM Baltic Sea Action Plan (BSAP) is an ambitious program to restore the good ecological status of the Baltic marine environment by 2021. One of the main goals is to enhance environmentally friendly maritime activities. One way forward to achieve the goal is to use green technologies and alternative fuels to minimize air and other pollution from ships. Failure to reach the objectives for maritime activities will impair the achievement of a healthy Baltic Sea unaffected by eutrophication, with its life undisturbed by hazardous substances and with favorable status of biodiversity.

HELCOM Ministerial Declaration from 2013 emphasized the need to work jointly in co-operation with other regional governmental and non-governmental organizations, the industry and research community, to further promote development and enhanced use of green technologies and alternative fuels, including LNG, methanol as well as other propulsion technologies, in order to reduce harmful exhaust gas emissions and greenhouse gases from ships, Further on the Baltic Sea states agreed to work towards the creation of a joint “Green Technology and Alternative Fuels Platform for Shipping” together with other regional actors in the Baltic Sea.

The economic growth goals and environmental responsibility is also a high-priority issue in the work of the Council of the Baltic Sea States (CBSS) and the St Petersburg Initiative. It is important to continue sustainable development of the region and public-private cooperation.

For the EU member states the strategy of the BSR region (Vision 2030) and the EU Transport Strategy 2050 show the need to speed up the process to reach the aim where more use of sea transport is defined. In the latter a 50% shift is defined of medium distance intercity passenger and freight journeys from road to rail and waterborne transport by 2050.

The society need also includes a process which should entail a creation of more job opportunities to keep, and enhance, competitiveness.

2.2 Industry & University Focus Need

In the HELCOM 2015 questionnaire responses as well as from the industry & university reporting from the projects using the ZVT method, we learn that the task 4-6 of the Terms of Reference are to be prioritized; to enhance a structured transparent cross-border collaboration, discuss regulatory additions or amendments, and coordinate/enhance an agreed index. This has its basis in mainly two things;

1. the Baltic Sea region itself could be seen as a Pilot area to restore its good ecological status with the international regulations (Special Area under MARPOL Annex I, IV, V and VI (SECA)), later also a NECA (Nitrogen Emission Control Area), which means that the industry investments, and studies, are at many times proceeding, going beyond, international initiatives. The area has world-first initiatives such as ferry run on LNG, LNG ship-to-ship bunkering in city area, ferry run on Methanol, cold iron investments in port and onboard, LNG infrastructure investments and more.
2. being located in this Pilot area, industry has taken the first necessary steps including creating Pioneering Practice (technology infrastructure and regulatory wise), and the need to enable a tipping point to reach a new normal where green investments are the choice for both good environment and profitable business, are next on the agenda.

To take the next step, the forerunners' higher risk when going through a process of change, has to be shared. One way of doing that is to measure benefits to society when choosing green to find a denominator that focus on the initiative and lesser on which company that is investing. To be able to do this, the University need to align measurement models, both available and those which have to be established, that are linking resources from Financial Instrument (FI) availability and its pricing, together with reductions of fees/dues to actual external benefit (to the climate, environment, sea and society), have to be supported.

3. WORKPLAN FOR THE HELCOM SUB-GROUP GREEN TEAM in 2017

Taking all the above into account (included the suggested priorities) the following workplan (WP) for the GREEN TEAM is suggested for 2017 using the traffic light approach for the status;

NO	STATUS	ToR NO	WP ITEM	RESPONSIBLE	TARGET DATE	COMMENT
1		2	Circulate a draft workplan among the HELCOM MARITIME contacts and observers for approval by the end of the year	Co-chairs/ ZVT	20-dec-16	
2		2	Confirming registered participants of the sub-group, keep invite and keep it open for more to join		28-feb-17	Confirm the co-chairs and working roles as well as the focal points among the member states and observers during January 2017. Establish the workplan in a kick-off meeting in February.
3		3, 4	Establish the GREEN TEAM <u>reporting mechanism and method</u> based on the traffic light idea where green shows agreed solutions, yellow issues needed to be discussed further and red main barriers and obstacles hindering green development and investments in our vulnerable sea area.		30-jun-17	The background information is from the results of the questionnaire in 2015 and the outcome of the ZVT reports. The outcome will be arranged into the following themes: <ul style="list-style-type: none"> • Vessel (technology and design) • Infrastructure (port development) • Finance (to cope with the transition towards a new normal) • Regulation (new and updates) • R&D (new identified areas and support moving forward)
4		3, 4	Report the outcome of the GREEN TEAM reporting mechanism and method to HELCOM MARITIME 17		30-10-12 oct-17	For accept at the HELCOM MARITIME in 2017 The main barriers, obstacles and challenges hindering the development and investments in

						green technology and alternative fuels in shipping
5		3, 4	Develop a GREEN TEAM <u>outcome reporting structure</u> , based on the internal reporting, and establish a permanent reporting mechanism to inform HELCOM MARITIME working group of the latest information gathered from the industry and ZVT reports.		01-jan-18	Ongoing procedure when implemented
6		5	Considering the regulatory bottlenecks/challenges hindering green investments, and define the so far established solutions on a regional level and within the mandate of HELCOM MARITIME		30 10-12- nov-17	Base the information on ZVT reporting and, if decided by this group, an extra survey among the other stakeholders
7		6	Considering effective incentives to accelerate green investments, propose a way forward with a common Baltic Sea incentive scheme, where significant benefits to society and sea are addressed. Possible new incentive schemes will be addressed.		30-jul-17	This will be based on the information on already existing information such as the ZVT ECA Bonus Pre-study, Joint University Project ZERO.8 measurements and monetization to find societal/sea benefits, Environmental Performance Indicators etc.
8		6	Existing regional and local incentive systems to be compiled and compared (such as index, tax exemptions etc). Any clear inadequacy will be recognized.		30-jul-17	The information of the following existing incentives in the Baltic Sea region will be outlined and their harmonized use investigated: <ul style="list-style-type: none"> • Environmentally differentiated fairway dues • Environmental Ship Index • Tax exemption on onshore power supply for shipping
9		6	Explore the possibilities, taking into account existing financial instruments for the Region and financial institutions in the Region, of developing a Baltic Sea financial instrument for risk sharing and guarantee mechanisms, including pricing based on society and sea benefits, together with the public and private sector to find workable solutions to enhance investments in Green technology and alternative fuels		30-dec-17	The sub-group will identify and recommend a possible financial institution to lead this work.
10		7	Continue to coordinate the GREEN TEAM activities with other regional organisations and platforms in the framework of Green Tech and Alternative Fuels (<u>EU SSF</u> , EGMP working group in CBSS, BDF, SPI, EUSBSR and others)		ongoing	
11		9	Continue the started work on a joint information portal / digital or in real life (seminars) where exchange of knowledge and lessons learned are conducted		ongoing	<ol style="list-style-type: none"> 1. Suggestion is to coordinate a follow-up together with CBSS, to the Roadmap start-up WS in 2014, in September 2017 2. Some with special focus on the implementation of NECA and NO_x abatement technologies

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