SEA EUROPE COMMENTS ON
THE EU TAXONOMY REGULATION's DRAFT DELEGATED ACTS ON TECHNICAL SCREENING CRITERIA FOR CLIMATE CHANGE ADAPTATION AND CLIMATE CHANGE MITIGATION OBJECTIVES

Brussels, 17 December 2020

SEA Europe, representing the European shipyards and maritime equipment manufacturers ("the European maritime technology sector"), welcomes the opportunity to comment on the EU Taxonomy initiative[1] and, more specifically, on the two first draft Delegated Acts proposed by the European Commission which establish the technical screening criteria under the Climate Change Mitigation and Climate Change Adaptation objectives as per EU Taxonomy Regulation EU 2020/852.

1. Introduction

Europe's maritime technology sector is a global leader in the building of complex civilian and naval ships as well as in the production and supply of (advanced) civilian and naval maritime equipment, systems, and technologies, which are also enablers of blue (and "green") economy, including marine renewable energies. This global leadership is the result of continuous investments in research, development, innovation and high-skilled workforce.

European maritime technology companies are at the forefront in developing environmental and climate friendly technologies that enable the global shipping industry to become greener and climate neutral, in line with the "European Green Deal" ambitions. As recognised *inter alia* in the New Industrial Strategy for Europe[2], European shipbuilding with its maritime supply chain "*has the responsibility and the potential to drive*" the twin green and digital transitions[3].

In this respect, SEA Europe has welcomed, and fully supports, the ambitions of the "European Green Deal" (EUGD)[4]. These ambitions are in line with those of the European "Waterborne" Technology Platform (https://www.waterborne.eu/), whose Strategic Research and Innovation Agenda sets two targets in the framework of the co-Programmed Partnership on Zero-Emission Waterborne transport. Firstly, it aims at tackling new-build short sea ships and new-build inland vessels before 2030, whilst decreasing emissions during navigation by 50% for other ship types. Secondly, it aims at addressing all ship types operating deep-sea trades before 2050.

The present document contains both SEA Europe's general comments on the EU Taxonomy initiative (including, more broadly, the core topic of access to green finance for sustainable maritime technology investments) and its specific comments on the two proposed draft delegated acts on which the European Commission is currently seeking views from stakeholders[5].

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[1] EU Taxonomy for Sustainable Investments
[2] "A new Industrial Strategy for a green and digital Europe", of 10 March 2020- COM/2020/102 final
[3] Cr. Answer given by Commissioner for the Internal Market, Thierry Breton, to the question of the European Parliament (E-000114/20 of 16 April 2020) https://www.europarl.europa.eu/doceo/document/E-9-2020-000114-ASW_EN.html
[4] See SEA Europe Position Paper on the European Green Deal available here
[5] Public Consultation on draft delegated acts: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy

2. SEA Europe general position on the EU Taxonomy for sustainable investment

- **SEA Europe supports the EU Taxonomy initiative** and its stated goal of channelling investment into sustainable activities in line with the European Green Deal. To effectively reach its intended goals, it is however essential to ensure that the Taxonomy framework is based on **clear definitions** and **technically sound, technology neutral** and **goal-based parameters** that well take account of and reflect the **specific features** of **all** the **waterborne transport sector's related activities** (including the manufacturing of related products and the supply of relevant services).

- Sustainable finance has indeed a key role to play to stimulate and reward investments into green maritime hardware and technological solutions that will be key to transform waterborne transport into a climate neutral mode of transport. **In this regard, SEA Europe stands ready to constructively contribute to the European Commission's work** to define the most appropriate criteria for sustainable investment in the maritime sector.

- A robust sustainable finance regulatory framework, able to foster an adequate maritime financing ecosystem in Europe, is needed to reach the objectives embodied from the EU Taxonomy and the wider European Green Deal ambitions. This should amongst others entail adequate access to funding for R&D supporting fundamental research targeting the lower Technical Readiness Levels (TRL 1-3), funds to deploy demonstrative projects in the Technical Readiness Level (TRL 4-7), and financing solutions for legitimating sustainable investment in the higher Technical Readiness Levels (TRL 8-9).

- **Significant investments will be needed indeed for R&D, development and deployment** of various possible solutions that will meet the energy demands and needs of the entire waterborne transport sector. This relates to fundamental research as well as to demonstrative projects. Such investments are needed to ultimately enable this mode of transport to transit from a low carbon footprint to a full zero-emission mode of transport, **in accordance with the ship's specific operational profile and the customer's needs and purposes.**

- In this context, **access to competitive "green" financing in Europe is and will be vital for the entire European waterborne transport sector, including the European maritime technology,** which is by nature highly capital intensive and operating at global level and hence exposed to fierce (and often unfair) competition notably from the Far-East shipbuilding nations. Tangible suggestions in terms of better access to green financing in Europe for viable shipbuilding projects are amongst others: (i) a longer repayment profile (>15-18 years) of the asset in order to incorporate and legitimate the price increase on the asset in current business models of operators, (ii) a temporal guarantee to bridge the perceived residual value risk in case bank financing is inadequate due to limited risk appetite (too high technological risks) - *this relates to newly built vessels as well as to retrofit vessels* - and (iii) financial support to European operators via European shipyards and maritime technology companies on sustainable investments to stimulate the market introduction of technological advanced equipment in assets which are applicable and predictable (considering the commercial lead times). In this regard, level playing field should be secured by coordinating the necessary financial support at EU level.

- In order to encourage the entire sector to invest significantly in the transformation of waterborne transport into a zero-emission mode of transport, investments need to be underpinned by a legal framework that offers **legal certainty** to the entire sector.

- Undistorted market access and a continued level playing field globally must be ensured. From a technical point of view, **as shipping is global, the Taxonomy work should be associated with, and closely linked, to relevant international rules and technical standards**.

- The Taxonomy should stimulate and push sustainable activities in the shipbuilding sector (and not breaking them up). Therefore, **a growth path based on the best available technologies in combination with the sailing profile of the vessel** (either newly built or retrofit) should be incorporated in the EU Taxonomy for climate mitigation and climate adaptation. This means catalysing sustainable investments towards technical available boundaries and not discouraging investments in available advanced technologies because of too ambitious thresholds (e.g. blends of fossil fuels with biofuels, ship efficiencies, transport of fuels, technology neutrality).

- **Life-time of vessels is long;** hence facilitating the development of future technologies without downgrading the ones assessed as transition technologies today is essential. Besides, due to the life-time of the vessels, the Taxonomy will only provide the right incentives, if it distinguishes between new buildings and investments in existing vessels (retrofit) in Europe when assessing their sustainability according to their remaining service life. It should be noted that the life cycle approach is twofold covering the life cycle of the asset and the life cycle of the fuel or energy carrier used, hence taking into account the contribution to the circular economy and the environmental impact of new fuels.

Against this background, SEA Europe believes it will be essential to **adequately consult the full European maritime sector, including the European maritime technology sector**, in the discussions concerning the sustainable finance taxonomy, in order to secure the framework conditions that could facilitate the climate-neutral transition of the Waterborne transport sector.

3. SEA Europe comments on draft delegated acts on climate change mitigation and climate change adaptation[6] and related technical screening criteria

SEA Europe's comments below refer to the proposed technical screening criteria, as laid down in Draft delegated acts under consultation (hereinafter "draft delegated acts").

a. <u>Introductory comments</u>

As a preliminary observation, it is noted that the technical screening criteria laid down for the **manufacturing activities, namely for "*manufacturing of low carbon technologies for transport*" (including vessels and related components) under Section 3.3,** are almost identical to those for the "***transport*" activities under Section 6 of the draft delegated acts**. In other words, under the draft taxonomy criteria, the "production" process is simply identified with its final "product". SEA Europe therefore expresses great concern that the Taxonomy criteria do not take into account – and hence would not reward accordingly – e.g. the higher qualitative standards, in terms of sustainability and environmental compliance, that apply to European manufacturers compared to foreign manufacturers in other jurisdictions, e.g. in East Asia, who vice versa do not always abide by the same standards.

We express similar concern in noting that some technologies are specifically mentioned in these draft delegated acts as this is at odds with the general principle laid down in Article 19(1) a) of the Taxonomy Regulation, which calls for **technological neutral** screenings. As it will be explained further, SEA Europe is highly concerned that referring to specific technologies will set a precedence for future delegated

[6] Annexes to **COMMISSION DELEGATED REGULATION** (EU) …/…of XXX supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives. See here: https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12302-Climate-change-mitigation-and-adaptation-taxonomy

acts and revisions thereof, ultimately preventing cost-competitive green technologies to be developed, with wider negative impacts.

Finally, it is of utmost importance to ensure that that the technical screening criteria and definitions under these and future delegated acts as to what may be regarded as a sustainable investment are not only technically sound and robust but also **clear.** This is vital to ensure the **necessary legal certainty** and **long-term predictability**, which are both fundamental prerequisites for investment in a global, capital- and technology- intensive industry, both for investors, financial institutes, regulators, manufacturers, operators and all the relevant value chain players.

b. <u>Specific comments applying to both Section 3.3 ("Manufacturing of Low Carbon Technologies for Transport") and Section 6 ("Transport") of the Draft Delegated Acts:</u>

I. Zero direct (tailpipe) CO2 emissions

In both Sections 3.3 and Section 6, the draft delegated acts for the 'Climate Change Adaptation' and 'Climate Change Adaptation' objectives contain the following Taxonomy "eligibility criteria":

> *(….) "The activity complies with one or more of the following criteria:*
> *a) the vessels have **zero direct (tailpipe) CO2 emissions**;*
> *b) **until 31 December 2025**, **hybrid vessels** use at **least 50 % of zero direct** (tailpipe) **CO2** emission **fuel mass** or **plug-in power** for their normal operation; (....)*

Firstly, SEA Europe considers it is inappropriate to use the "***zero direct (tailpipe) CO2 emissions***" criterion due to the following reasons:

- The above criterion does not take into account the energy efficiency of the ship (e.g. comparing two ships with a similar operational pattern, the most energy efficient will have a better environmental footprint despite the carbon content of the fuel);
- In order to progress towards climate protection, a life cycle assessment (LCA) of fuels is indispensable (well-to-wake approach instead of tank-to-wake only);
- The narrow focus on direct (tailpipe) CO2 emissions could set perverse incentives because zero tailpipe emission fuels, such as blue (fossil) hydrogen, would satisfy this criterion, whereas climate neutral synthetic fuels (e.g. e-methanol) would be excluded;
- A zero-emission goal for 2026 requires a reliable international implementation of the above mentioned LCA of maritime fuel and sufficient production capacities and distribution infrastructure.

Strictly speaking, the use of biofuels would not be eligible considering tailpipe only as these contain CO2. However, from a life cycle perspective, most of these fuels should per definition be carbon neutral. A significant reduction in GHG emissions will be achieved by blends of biofuels with fossil-based fuels. In this regard, B7/B20/B50 or blends with higher biofuel content should be exempted.

This will also align with the requirements set in Directive 2018/2001 on the promotion of the use of energy from renewable sources (Article 29) which sets sustainability criteria on eligibility for financial support for the consumption of biofuels. Moreover, companies compensating CO2 emissions utilizing land-based solutions (CCS) would not be eligible despite it could make more sense to do so from an energy efficiency perspective decreasing the total CO2 footprint. Deepsea shipping will have the hardest time to decarbonize, so alternative means here also could be a speedier way forward to decarbonize those ships. By way of example, use of EGCSs scrubbing HFO exhaust gas would save up to 25% upstream emissions compared with 0.5/0.1% Sulphur fuels[7].

[7] Comparison of CO2 emissions of MARPOL Annex VI compliance options in 2020 (CE Delft). (Concawe points at 10% (Environmental Impacts of Marine SO2 Emissions, Report 1/18, 2018, Concawe) and the supplemental IMO fuel availability study points at up to 4.4% (EnSys Energy with Navigistics Consulting, Supplemental Fuel Availability Study – Final Report, 15 July 2016))

Secondly, with regard to the requirement *b) "**Until 31 December 2025 (…)**"*, SEA Europe considers it would be premature to require green shipping to be associated with zero tailpipe CO2 emissions as from 2026. A transitional period towards zero-emission alternative fuels will be longer than 5 years and, in this period, deep sea shipping should be considered green using e.g. blended fuel.

Thirdly, with regard to the above requirement b) that "***(…) Hybrid vessels use at least 50 % of zero direct (tailpipe) CO2 emission fuel mass or plug-in power for their normal operation*",** SEA Europe considers it is inappropriate to use "50% (…) fuel mass" as the criterion due to the following reasons:

- It is not clear how "CO2 emission fuel mass" should be determined.
- The requirement to use 50% zero emission fuels would exclude bridge technologies / fuels necessary for achieving upcoming intermediate milestones of CO2 reduction, which could be achieved by a combination of existing energy saving technologies and low-carbon fuels (including LNG as a transitional fuel). Instead, it should be permissible to implement a 50% reduction of CO2 emissions by a combination of technologies and fuels;
- This criterion favors a specific technology (e.g. "plug-in power") going against the technology and fuel neutral principle. In any event, the alternative of plug-in (electrical) power would require more definition to qualify as an equivalent criterion considering the upstream emissions in the production, transport and storage of alternative fuels.

II. Vessels not dedicated to the transport of fossil fuels

Section 3:
3.3) Manufacture of low carbon technologies for transport (…):

*(j) inland freight water transport vessels, **not dedicated to transporting fossil fuels***
*(l)sea and coastal passenger water transport vessels, **not dedicated to transporting fossil fuels***

Section 6:
(…)
6.2) Inland freight water transport:
6.4) Sea and coastal freight water transport:
6.8) Retrofitting of sea and coastal freight and passenger water transport:
6.9) Retrofitting of inland water passenger and freight transport:

*(…) Vessels are **not dedicated to the transport of fossil fuels (…)***

Under the proposed Taxonomy delegated acts, ships **not** dedicated to transport fossil fuels are considered eligible for sustainable finance and investment. Vice versa, ships dedicated to carry fossil fuels are not considered eligible.

SEA Europe recommends this criterion should be reconsidered for the following reasons:

- It is unclear why transport of fossil fuels should be not permissible if performed under safe conditions not posing a significant harm to the environment and the ship itself is using sustainable propulsion systems. It should be noted that what a ship is carrying as a cargo is not directly related as to how environmentally friendly that ship may be.
- The criterion lacks clarity also as to what its intended goals are precisely. Ships are seldom dedicated to carry one specific fuel as cargo, but a variety from one voyage to the next. As currently drafted, the criterion makes it difficult to assess whether a ship is eligible or not. On top of that, the ship operator will not be informed of whether his cargo originates from fossil fuel (ammonia is a good example hereof).

- If the intention behind such criterion is to refer to carriage of fuel for the ship's own use, it goes without saying this would be very problematic, as there could be no guarantees given from bunker suppliers around the world that the fuel used always will be fossil free and not a blend. Shortage of non-fossil alternative fuels will dominate the picture up to 2030 and perhaps even beyond.

SEA Europe recommends that transport of fossil fuels by ships should be eligible if performed under safe conditions not posing a significant harm to the environment and the ship itself is using sustainable propulsion systems. Should this recommendation not be accepted, it should be at least made clear that eligibility of vessels dedicated to transporting fossil fuels (under the afore-mentioned conditions) should be still possible provided that certain technical criteria, e.g. higher emission reduction thresholds than those applying for the other ships, are met under the Taxonomy.

III. Unclear link between EEDI/EEOI for ships and heavy duty vehicles CO2 emission values

In both Sections 3.3 and Section 6, the draft delegated acts read as follows:

> *Inland freight water transport vessels, not dedicated to transporting fossil fuels, that:*
> *(…..)*
> *(ii) until 31 December 2025, have direct (tailpipe) emissions of CO2 per tonne kilometre (gCO2/tkm), calculated (or estimated in case of new vessels)* ***using the Energy Efficiency Operational Indicator, 50 % lower than the average reference value for emissions of CO2 defined for heavy duty vehicles (vehicle subgroup 5- LH) in accordance with Article 11 of Regulation (EU) 2019/1242. (….)***
>
> *sea and coastal freight water transport vessels not dedicated to transporting fossil fuels, that:*
> *(…)*
> ***(****iii) until 31 December 2025, and only where it can be proven that the vessels are used exclusively for provision of coastal services designed to enable modal shift of freight currently transported by land to sea, the vessels that have direct (tailpipe) CO2 emissions, calculated* ***using the International Maritime Organization (IMO) Energy Efficiency Design Index (EEDI), 50 % lower than the average reference CO2 emissions value defined for heavy duty vehicles (vehicle subgroup 5-LH) in accordance with Article 11 of Regulation (EU) 2019/1242 (….)***

SEA Europe finds it is **unclear** why emission per transport work for freight carrying ships using respectively EEOI and EEDI should be related to requirements for "heavy duty vehicles" as proposed in the above section.

IV. Do Not Significant Harm (DNSH) criteria in Section 6 (Transport) of the Draft Delegated Acts

SEA Europe wishes to reiterate the need for technological neutral criteria, as also under DNSH. To stimulate technology innovation, legal certainty as well as goal-based and scientifically justified criteria should be used for all sustainability goals, with a view to provide clear guidance for the implementation of emission reduction as well as for the protection of water and marine resources and the transition to a circular economy. A goal-based approach will promote development of technologies which have not been considered/pursued earlier due to cost-competitive reasons but changes in requirements change the market norms. Hence, in SEA Europe's view, it is highly recommended in the context of the Taxonomy to refer, instead, to threshold values. A goal-based approach will also remove ambiguity where clear definitions are not available – an illustrative example is the reference to "closed-loop" exhaust gas cleaning systems in the current drafts.

V. Definition of Waterborne transport activities

The definition of waterborne "transport" activities is based on the NACE statistical codes which do not however reflect the variety and diversity of waterborne transport segments (including ship niche segments in which European yards are still active as manufacturers) and maritime activities. If such variety is not clearly reflected in the definition of "eligible" transport activities, the risk is that both the product (the vessel) and the production (ship manufacturing) may ultimately not be considered as

"green" and hence eligible under the Taxonomy. SEA Europe therefore would like to suggest a non-exhaustive classification of waterborne transport activities along the following division:

SEA EUROPE PROPOSED DEFINITON OF WATERBORNE TRANSPORT ACTIVITIES:

1. Sea and coastal newly built vessels

"Vessels designed, equipped and manned for performing activities at sea and/or in coastal waters and/or in ports and/or on waters nominated as maritime waters, including, ***but not limited to:***

- Vessels for the transport of cargo
- Vessels for the transport of passengers
- Vessels for the combined transport of cargo and passengers
- Offshore service vessels for the oil and gas industry and for the renewable offshore energy sector, such as windmill installation vessels, anchor handling tugs, chase and guard vessels, fast crew tenders, diving support vessels, stand by vessels
- Special purpose vessels, such as ice-breakers
- Dredging vessels
-Research vessels
-Fishing vessels
- Tugboats, mooring vessels, pilot vessels and other specialised non cargo carrying vessels

"Not included are restaurant and bar activities on board ships, when provided by separate units, renting of pleasure boats and yachts without crew, renting of commercial ships or boats without crew and operation of "floating casinos"".

2. Retrofit and upgrade of sea and coastal vessels

"Retrofit and upgrade of vessels designed, equipped and manned for performing activities at sea and/or in coastal waters on sea and/or in coastal waters and/or in ports and/or in waters nominated as maritime waters, including, but not limited to:

- Vessels for the transport of cargo
- Vessels for the transport of passengers
- Vessels for the combined transport of cargo and passengers
- Offshore service vessels for the oil and gas industry and for the renewable offshore energy sector, such as windmill installation vessels, anchor handling tugs, chase and guard vessels, fast crew tenders, diving support vessels, stand by vessels
- Special purpose vessels, such as ice-breakers
- Dredging vessels
-Research vessmes
- Fishing vessels
- Tugboats, mooring vessels, pilot vessels and other specialised non cargo carrying vessels

"Not included are restaurant and bar activities on board ships, when provided by separate units, renting of pleasure boats and yachts without crew, renting of commercial ships or boats without crew and operation of "floating casinos".

N.B. A similar categorisation should be considered also for **Inland newbuilt vessels** as well as for **retrofit and upgrade of inland vessels**

Finally, it should be stressed that market access and a continued level playing field must be maintained. Thereto from a technical point of view, the Taxonomy should also rely on class certificating companies notifying vessel types in combination with Energy Efficiency Design Index

(EEDI). This is to avoid that eligible vessels are disadvantaged because these vessels have not been defined in the EU Taxonomy while they are acknowledged by class certifying companies.

c. Comments on Section "6.16. Infrastructure for water transport"

Section 6.16 reads as follows:

> *1. The activity complies with one or more of the following criteria:*
> *(a) the infrastructure is dedicated to the operation of vessels with zero direct (tailpipe) CO2 emissions: electricity charging, hydrogen-based refuelling;*
> *(b) the infrastructure is dedicated to the provision of shore-side electrical power to vessels at berth;*
> *(c) the infrastructure is dedicated to the performance of the port's own operations with zero direct (tailpipe) CO2 emissions;*
> *(d) the infrastructure and installations are dedicated to transhipping freight between the modes: terminal infrastructure and superstructures for loading, unloading and transhipment of goods.*

SEA Europe suggests that the following point should be added:
NEW "(e) Until 31/12/2025: the infrastructure and installations are allowing to diminish the related-emissions of vessels using them, including their charges/discharges operations, by 20% at least in comparison of situation as per 31/12/2020."

d. Comments on "Section 9. Professional, scientific and technical activities":

The current text reads as follows:

> 1. *Research, applied research, experimental development in natural sciences and engineering of solutions, processes, technologies and other products* ***dedicated to*** *the reduction, avoidance or removal of GHG emissions (RD&I).*

Finally, SEA Europe suggests the wording "***contributing to***" should be used instead of "dedicated to".

4. Concluding remarks

In sum, SEA Europe supports the intended goals of the EU Taxonomy initiative and believes that such initiative could potentially offer stimulating opportunities for Europe's maritime technology sector provided that it is based on clear definitions as well as technically sound, technology neutral and goal-based parameters that well take account of and reflect the specific features of all the waterborne transport sector's related activities (including the manufacturing of related products and the supply of relevant services).

SEA Europe trusts the above comments will be taken duly into account and remains available to provide any further clarification that may be required.

About SEA Europe
SEA Europe represents close to 100% of the European shipbuilding industry in 16 nations, encompassing the production, maintenance, repair and conversion of all types of ships and floating structures, commercial as well as naval, including the full supply chain with the various producers of maritime systems, equipment material, and services.

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