Conference Report

On 6th October 2015, the conference “Drivers for Blue Growth in the Baltic Sea Region” gathered 130 stakeholders in Copenhagen to discuss the three main pillars of the Blue Growth agenda: fostering an innovative and green Blue Economy, providing access to finance for maritime sectors, and addressing skills and qualification. The conference outcomes will inform the next steps towards stakeholder-driven ‘Master Plans’/coordinated stakeholder roadmaps in priority areas of blue growth in the Baltic Sea Region and possibly other sea-basins.

Organisers were the European Commission Directorate General for Maritime Affairs and Fisheries (DG Mare), Maritime Development Center of Europe (MDCE), Danish Maritime Authority and Baltic Development Forum.

Operational conclusions:

- The Baltic Sea Region is well placed to become a model demonstrator region in the different areas of blue growth as it has the necessary innovative capacities as well as regional governance structures and innovation strategies in place.
- The maritime sector is moving towards greener technologies and practices, but more remains to be done in order to increase the environmental sustainability and ensure growth of the blue economy in the region.
- Strategic frameworks that support first movers and strategic partnerships can be instrumental in stimulating the transition.
- There appears to be relevant funding available for Blue Growth initiatives, but coordination and coherence between funding schemes, member states, and sectors can be improved to strengthen synergies, align investments and scale up smart and sustainable solutions.
- Skills and generation gaps are presenting a challenge to future growth. There is a need for better dialogue between industry and education and training as well as for measures to raise the attractiveness of blue careers and the maritime sector in general.
• The 'Masterplans' or roadmaps should help to strengthen synergies and bring added value to regional growth through coordinating stakeholders in their work towards common/aligned investments and demonstrators, rather than establishing additional structures. They should also take the global nature of competitiveness and maritime value chains into consideration, while being based on local capacities and smart specialisations.
• As demand-side factors such as regulation or public procurement can be important drivers for innovation and market-uptake of innovative solutions, the masterplans or roadmaps should also consider demand-side actions (e.g. through joint innovative procurement) and not just technology push options.
• In particular the circular economy offers strong opportunities to unite smart and sustainable growth and help position European technologies in global markets and in the long term perspective. This could definitely be one area for the masterplans/roadmaps to explore and push forward through joint development and deployment of sustainable technologies, applications and processes.

Opening

Mr. Haitze Siemers, Head of Unit, Maritime Policy Baltic Sea North Sea and Landlocked Member States, DG MARE stated that the Baltic Sea Region is very well placed for Blue Growth as it is a dynamic region boasting some of the most innovative technologies as well as established regional structures and strategies. Still, we need to look closer at how to combine competitiveness and sustainability, and on how to attract more talent in the blue sectors. DG Mare will capture the ideas from today’s conference and feed them into the formulation of a Master Plan for Blue Growth in the Baltic Sea Region.

Mrs. Lene Espersen, Chairman of Baltic Development Forum and former Foreign Minister of Denmark underlined in her speech that the blue economy is the foundation of the Baltic Sea Region and is a key growth sector to draw on in order for the Baltic Sea Region to attract investment, research and talent to meet global international competition.

She welcomed the idea of a Master Plan for Blue Growth for the Baltic Sea region but stressed that the maritime economy is essentially a global economy, which should be kept in mind. She stressed further the need for more regional cooperation and public-private collaboration, integration in markets and innovation, and further investments in transport and energy systems.

Blue Growth for Green Innovation

This session looked closer at the relation between industry, regulation and sustainability. The maritime sector in the Baltic Sea Region is already moving towards greener technologies and practices, but more remains to be done in order to make the blue economy in the region truly sustainable. Among the take away messages was the call for regulation that stimulate, not stifle innovation. This requires predictable and harmonized frameworks that support those industry players that are first movers in sustainability. Ports play an important role in supporting sustainability in the maritime sector, and LNG is entering the market, placing new demands on infrastructure.

Mrs. Jenny Braat, Managing Director, Danish Maritime pointed out that while shipping today is already one of the greenest transport options, it is also a fast growing industry. Being such a big transport sector comes with a big responsibility towards sustainability, and a steady increase in transportation by sea means that we need to improve technologies just to keep the current emission levels. The speed with which
technologies transition from emerging to mature is accelerating. However, the regulatory framework must keep up with the development. Ideally, regulations should be **global** (harmonized across regions and nations), **goal-based** (to allow for innovation), introduced in a **step-wise** manner (with fixed dates), **robust** (in order to avoid frequent adjustment) and **enforced** in such a way that compliance is easy.

**Mrs. Pauli Merriman, Director of the WWF Baltic Ecoregion Programme** stated that no economic system can sustain itself when its natural resource base is being degraded. While the Baltic Sea Region has the potential to become a role model, its blue economy is far from sustainable today. Unless the marine ecosystem is restored, the Baltic Sea will underperform in terms of an economic resource. The blue and green agendas should be integrated, as a sustainable blue economy requires a green and circular economy on land. A scientifically based definition of a sustainable blue economy should be developed and used to guide common visions and targets as well as future policies and actions.

**Mr. Edvard Molitor, Senior Manager Environment, Port of Gothenburg** noted that as sea transport is increasing, ports will help support the maritime sector in its sustainable growth. Being the link to infrastructure networks on land, ports can offer services such as on-shore power supply and the bunkering of new fuel types. Waste management will be another big challenge for the ports in the future. Sustainability requires a level playing field and the possibility to identify those that do not comply. The experience of Port of Gothenburg is that most actors do comply, and by implementing environmental discounts the port has made it even easier to make the right choices.

**Mr. Max Kommorowski, Director LNG Hybrid, Becker Marine Systems GmbH & Co. KG**, presented the LNG Hybrid Barge which has been developed as an innovative and mobile solution for supplying power to ships at the port in Hamburg. Compared to marine fuel oil LNG provides a cleaner alternative as emissions are substantially lower: 22 % for CO2, 88 % for NOx and 100 % for SOx.

**Financing Blue Growth**

This session showed that there is relevant financing available for the blue sectors, but that coordination and coherence can be improved between funding schemes, member states, and sectors. Alignment of public and private investment decisions are crucial to achieve synergies and critical mass for global competitiveness. There is room for improvement in aligning or better coordinating the implementation of different strategic frameworks such as the EU Strategy for the Baltic Sea Region (EUSBSR) and national and regional smart specialization strategies. Speakers pointed out that public funding – from EU sources as well as from governments – can be critical help reduce risk for the private sector in particular where there are long-term trajectories towards profitability, and leverage private investment by sending the right signals to market players.

**Dr Harald Jahn, Head of Division of Natural Resources and Agro-Industry, European Investment Bank** presented the Investment Plan for Europe, which will release EUR 315 bn in Europe over 2015-2017. The Investment Plan will be driven by the European Fund for Strategic Investments (EFSI) which operates under European Investment Bank (EIB), channeling money from EU guarantee, EIB and other public contributions. EFSI will target market gaps, financing viable projects with a higher risk thus providing the capacity to get new projects off the ground. A wide range of sectors are eligible for applying for funding such as corporates, utilities, public sector entities, SMEs, and national promotion banks. The Investment Plan provides an opportunity for funding for initiatives within the blue economy such as sustainable management of natural resources, fisheries, aquaculture, and support to SMEs within the blue sectors. Out
of 2,500 potential projects identified by the end of 2014 approximately 450-500 are of potential relevance to the blue economy.

Mr. Claus Schultze, Policy Officer, Maritime Policy Baltic Sea North Sea and landlocked Member States, DG MARE showed that significant ESIF and other EU funds are available for blue growth initiatives, in particular through ERDF. However, the fragmented nature of the funding landscape calls for setting clear priorities, and maximizing synergies between funds. EU funding could also be better aligned with the EU Strategy for the Baltic Sea Region (EUSBSR). First DG Mare estimates put the EMFF and ERDF funding available at EUR 7-9 bn. However this excludes the funding for innovation channeled through smart specialization strategies. The total ERDF and ESF funding made available for countries/regions bordering the Baltic Sea, for instance, stands at close to R 24 bn, of which more than half is dedicated to innovation in the broader sense including for blue growth-related investments. MS and regions should be encouraged to prioritize blue growth investments in the implementation of their smart specialization strategies e.g. by including selection criteria to that effect in their ERDF/ESF OP implementation. One of the actions that should form the basis of future 'Masterplans'/roadmaps should therefore be a mapping to enable more coordination and synergies between the different strategic frameworks and related funding streams based on a mapping of stakeholders of their relevant smart specialization priorities and sub-priorities related to blue growth value chains. This can then lead to a matching of partners to team up and work towards strategic interregional pilots and demonstrators to help implement joint roadmaps.

Dr Fritz Köster, Director General of the National Institute of Aquatic Resources, and Danish national delegate to BONUS. BONUS enables the EU to participate in long-term research programmes undertaken jointly by member states. From the beginning, the focus has been on the Baltic marine environment. In 2011, the programme included catchment, coasts and innovation – moving more and more towards merged research and innovation projects - and in 2017 begins a next phase which will focus on sustainable development, blue growth, and the North Sea. This will increase the global potential and provide a higher potential for blue growth in the entire region. Cooperation and coordination should and can be improved between programming/funding initiatives, member states, science policy and stakeholders, maritime sectors, and scientific disciplines, in particular if it is about getting stronger backing from member states and regions to bringing research results to market.

Mrs. Birgit Sølling Olsen, Deputy Director-General, Danish Maritime Authority explained the successful case of e-Navigation and showed how a series of regional EU co-funded projects have started a global policy process and can become a global breakthrough in regard of implementation of e-navigation. In this way, regional financing of Blue Growth can generate global benefits. E-navigation allows ships to receive all the different pieces of information required to steer the ship – previously delivered through different channels and often on paper - on one single screen, which makes for safer and more convenient navigation. The system is being developed and implemented in the Baltic Sea Region and in the Arctic. IMO and IALA that are supporting the initiative will hopefully take the process towards global implementation. To achieve further growth, employment and innovation there is a need for increased development and innovation in Blue Growth. This requires some basic drives at EU-level, policy awareness, EU (co) funding, a common vision, coordination and cooperation – also with the industry - and a supportive regulatory/standard setting.

Skills and talent attraction for regional Blue Growth
This session addressed the skills gap in the blue sectors, which is thought to present a challenge for future growth. Speakers pointed out that educational institutions are not keeping up with industry
demands, and that the maritime sectors have an “image problem”, partly related to generation and gender, which makes it difficult to attract talents. Suggested measures include stimulating dialogue between industry and educational institutions, increase mobility of students and professionals to build transnational capacity, improving information to schools and career advisors, and making vocational training more desirable. Blue jobs can be marketed as a sector with very little unemployment, comparatively high pay, and plenty of opportunities for leadership roles in a global environment.

Mr. Jan Boyesen, Business Development Manager, Maritime Development Center of Europe (MDCE) presented an initiative run by EMUC to increase the supply of labour and skills in the maritime sector in Denmark. Forecasts indicate massive lack of skilled labor in the future while at the same time there are fewer and less talented students in relevant vocational training. The project which runs 2015-2018 will develop more than 40 new maritime training programmes based on industry needs, create 200 new internships and raise the attractiveness of becoming a maritime craftsman by e.g. offering better information to students and career advisors.

Mr. Andrius Sutnikas, Klaipeda Science and Technology Park shared the experiences made when establishing the LNG terminal at the Klaipeda port. In preparation for the terminal there was a need to build a market and competence on LNG in Lithuania and Latvia. This was achieved through the training of 300 experts, the establishment of an LNG experts’ network, and the creation of an LNG value chain of 430 companies. These measures created five business spin-offs and allowed the region to promote themselves as a pilot region, partly within the EUSBSR Priority Area (PA) for Clean Shipping.

Ms. Alessia Clocchiatti, Policy Officer, Maritime Policy Atlantic, outermost regions and Arctic, DG MARE presented the Blue Careers initiative launched by DG Mare to address the skills gap which hinders the full potential of blue growth. The attractiveness of the blue sector should be improved both through awareness raising among potential students and though better career paths for those already in the sector. Coordination between industry and education should be strengthened: while the maritime industry is changing very fast with the introduction of new technologies and the internationalization of the markets, educational institutions are slow in adapting to the labour market needs. More students should be encouraged to embark on vocational training while also achieving the relevant soft skills – including an English vocabulary – needed in a global sector. DG Mare will launch a call for proposals next year to increase dialogue between industry and education, preferably led by clusters, in order to design and implement concrete actions to support careers development at local and regional level. The partnerships will be most preferably led by maritime clusters and will include SMEs.

Mr. Giuseppe Sciacca, Senior Policy officer CPMR introduced the Vasco Da Gama initiative which seeks to stimulate youth mobility – a key measure to increase competence in the maritime sector. The initiative further seeks to promote the quality of education in the maritime transport sector, address skills gap through mobility schemes for students and seafarers, management of human resources, harmonization of programmes and semesters, and the design of innovative hardware and software.

Blue Growth – how can the EU support Blue Growth in the Baltic Sea Region?

Mr. Haitze Siemers, Head of Unit, Maritime Policy Baltic Sea North Sea and landlocked Member States, DG MARE stressed that the conclusions from the conference, together with those from the event in Kiel in the spring of 2015, will serve to inform the next steps of the Blue Growth Masterplan Initiative for the Baltic Sea Region. He pointed out that this is a key moment to define the maritime economy of the future, that the stakeholders gathered at the conference were key actors in this regard and that long-term out of the
box thinking, a global orientation, cooperation across sectors and making full use of the coordination capacity of the EUSBSR will be essential.

Mrs. Lisbet Dyerberg, Deputy Permanent Secretary, Ministry of Business and Growth of Denmark, highlighted that Blue Growth as a concept is catching on and potentially presents a perspective, which balances the demand for sustainability and the demand for growth. She stressed that Denmark had substantial experience in Blue Growth in the Baltic Sea Region – not least in terms of the EU Strategy for the Baltic Sea Region. Thus, a regional approach would make sense to help promote projects with global potential. However, it should be borne in mind that the maritime industries are global in nature and depend on a global framework. A Master Plan should not be an exercise in creating new structures; instead it should facilitate integrated approaches and coordination among the existing frameworks, not favouring one solution or sector over another.


**Blue Growth for Green Innovation**
- [Environmental regulation as a driver for technology development](#) - Jenny Braat
- [WWF Drivers for Blue Growth in the Baltic Sea](#) - Pauli Merriman
- [Ports as Drivers for Blue Growth](#) - Edvard Molitor
- [Becker Marine Systems](#) – Max Kommorowski

**Financing Blue Growth**
- [EFSI](#) – Harald Jahn
- [European Structural and Investement Funds](#) - Claus Schultze
- [Bonus and innovation funding](#) - Fritz Koester
- [Financing Blue Growth](#) - e-Navigation - Birgit Sølling Olsen

**Skills and talent attraction for regional Blue Growth**
- [Future maritime craftsman](#) – Jan Boyesen
- [Value chain for LNG](#) – Andrius Sutnikas
- [Skills and talent attraction](#) - Vasco da Gama - Giuseppe SCIACCA