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DIRECTORATE-GENERAL FOR MARITIME AFFAIRS AND FISHERIES

Brussels,

MARE A.1

Kick-off meeting of the marine knowledge expert group

Friday, the 19th of January 2018

DG MARE, Brussels

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Opening of Meeting

COM opened the meeting, explained the reason of the 3 sub-groups and gave some practical information about the establishment of the Wiki as a common space to work together. It also added that the official documents will continue to be published on the Maritime Forum.

COM presented the 3 collection of best practices, one per each sub-group and announced the decision of making these documents official and public. For this reason, **COM asked for permission of making personal data and contacts public. Everybody agreed.**

All presentations and a list of participants are on the [maritime forum](#). This summary is intended to cover the main points raised by the group.

1. Subgroup: Education-Industry Cooperation

A. Blueprint for skills cooperation in the maritime technology sector

COM gave a brief presentation about the Blueprint and its policy context. The Blueprint is a framework for strategic cooperation at EU level in a specific sector to develop skills intelligence and skill development. In the last years the EU has funded many projects to foster industry-education cooperation. Nevertheless, the lack of a consistent sectoral strategy at European level did not allow the single projects to have the expected impact.

The Blueprint is composed of three main phases:

1. Selection of sector (the maritime technology sector replied to the requirements below):

- Clear link to EU policy
- Existence of skills gaps/shortages and potential impact on growth, innovation and competitiveness
- Maturity of the growth strategy for the sector
- Existing stakeholder involvement and commitment

2. Creation of EU partnership: this is created through a call for proposal financed under Erasmus +. For the maritime technology sector, the call was launched in 2017 and the project was awarded at the end of the year. The project has just started.

- Comprehensive partnership: social partners, ET providers, chambers of commerce, trade organisations
- Skills implications of sector strategy
- Development of a sector skills strategy + concrete solutions + long term action plan to roll out the strategy at national/regional level
- Use of EU tools: e.g. EQF, ESCO, Europass

3. Implementation at national and regional level: this is the most important part of project

- Strategies and actions adapted to national regional context

- Cooperation with managing authorities starting from now
- Focus on EU structural funds

The EU partnership on the maritime technology will be run by CETMAR, which won the grant presenting the MATES project proposal. Lucia Fraga, member of the expert group, is in charge of MATES.

Presentation of MATES:

- Project framed on the New Skills Agenda
- 17 partners from 8 countries will participate from 2018 to 2021 with a 4 M€ grant from Erasmus + program.
- MATES' objective is to develop a skills strategy that addresses the main drivers of change to the maritime industry.
- Maritime technologies value chain understood as shipbuilding and off-shore energy sectors, with their intersections and all associated activities and services.
- Identify SKILL GAPS and TRAINING SOLUTIONS on the managerial and operational level
- Special attention will be paid to the gaps regarding: Digital (and data enabled) skills, Green skills ,and innovation and knowledge management skills
- Ocean Literacy activities will spread an updated image for the maritime technologies in the blue economy

Project plan: Following a circular schema: PLAN-DO – CHECK – ACT.

First year of activity will contribute to elaborate a preliminary strategy plan for bridging current and future skills needs:

- Stakeholder mobilisation
- Baseline strategy and foresight of future scenarios considering State of Play and main trends.
- Priorities and action lines: experts to validate the work to be done
- Pilot experiences: will be detailed on the light of first results, and run during 2 years
- Critical revision will allow to select best practices and recommendations.
- An Industry led long-term action plan based on the experience of the pilot actions

The following 2 years will allow the project to test solutions, check them and present a final strategy plan:

The project will organize 3 regional workshops held in each of the 6 areas of the partnership and 2 international workshops to present and validate regional results. Workshops should contribute to define the baseline strategy to have a clear picture of the state of play at the beginning of the project activity, and should contribute to present and validate the long term strategy at the end.

External experts will be invited to participate to act as consultancy experts in the revision of activities, validation processes and evaluation of results.

Thematic presentations:

1. Margaret Eleftheriou (expert and member of the MATES consortium) presented the part of the project related to the definition and identification of occupational profiles on maritime technologies
 - Very often information doesn't get translated anywhere else
 - Reference to ESCO, which is a multilingual classification of European skills, competences, qualifications and occupations that attempts to bridge the gap between education and unemployment. Three pillars: skills, competences, qualification. ESCO is multilingual, nevertheless there are many challenges related to the different languages and translations. Interoperability tool works reasonably well. It enables skills based job matching, is skills and competences centred, and doesn't award qualification.
 - Aim to understand requirements for the tools needed to support the mapping process after the release of ESCO v1
 - The prototype couldn't deliver quality results
 - More efficient to use knowledge of the public employment service experts (PES)
 - ESCO needs MATES new occupational profiling
 - ESCO needs MATES professional experts
 - MATES needs to form a new expert group
2. Tim Deprez (expert and member of the MATES consortium) presented the link of the project with the marine training initiatives (see presentation for more information)
 - Marine training platform: it is very difficult to get a clear view of what kind of marine training is available in Europe
 - On the education website there are always the same problems popping up: badly described, different terms, different learning outcomes, different qualifications
 - MT e-platform: MSc, PhD, CPD, short training courses
 - There is lack of information about future job possibilities
 - Involvement in MATES: host regional workshop, creation of training and information portal,
 - Creation of an integrated MATES training information portal made available through project website
 - Link to ESCO: In the work of ESCO you need to describe skills and qualifications that lead to these skills.
3. Rui Azevedo (expert and member of the MATES consortium) presented the work that will be done on the stakeholders' outreach and the involvement of the industry
 - Very important for success of MATES, stakeholder participation and industry cooperation
 - Internationalisation: network of cooperation with other European maritime clusters
4. Lucia Fraga Lago explained how the project will embed the industrial perspective in ocean literacy initiatives, spreading an updated image for the maritime technologies in the blue economy, with a convincing message that the sector has a high-tech future with a long-term positive perspective.

Table discussions

1. Margaret Eleftheriou: Most people are concerned with employability skills: employers take basic skills for granted; they're looking more for soft skills, which are difficult to identify; Need for a guidance project, so that employers can learn how to use the various tools at their disposal. Many people don't use ESCO because it's too complicated. She encouraged fostering the link between ESCO and MATES project.
2. Tim Deprez: The key question is how to increase the impact of marine training initiatives. We need to ensure that the training provided fill the needs from the job market. We should follow up the market trends, the attractiveness of certain jobs and then promote education. There is strong need for ambassadors. We need to focus on all levels of education and not only at university. Companies need to be involved in the training development, from the content to the training offer, as well as financially, for instance by sponsoring specific educational programs. Internships can also be a valid way of training future workforce, by involving students when they are still young. Therefore, communication and branding are important elements that should deserve adequate level of investment.
3. Rui Azevedo: The theme is maritime technologies and industry mobilisation: open and wide theme, got 27 contributions. Rui asked the group to share projects, documents, relevant organisations and platforms that could be helpful for MATES. These different materials indicated the high impact of maritime technology and digitalisation on the productive process, with consequences on the content of education and training. Some occupational profiles are changing due to the use of new technologies and processes and thus there is a need for new skills. MATES will try to bring together different stakeholders (universities, training organisations, public administration and industry) to address these issues.
- Lucia Fraga Lago: We received 23 inputs related to past and ongoing projects to take into account, either as an inspiration to develop activities, either as a possible partner to joint efforts:
 - Events: hackatons, scholar contests, and celebration days: European Maritime Technology day (October 2018, special section for shipbuilding)
 - Projects delivering materials, methods and references related to the attraction of youngsters to maritime careers;; newton room;
 - Projects oriented to raise awareness on the ocean issues and promoting Ocean literacy: sea-u Europe

We also received inputs about Organisations and networks to contact, in order to enlarge MATES network in Ocean Literacy to the Baltic, and also through the Atlantic and the Mediterranean, including contacts in France, Germany, Greece, Italy, the Netherlands, Poland, Sweden, UK, and Zyperus.

One of the key messages received from participants was related to the importance to start activities of Ocean literacy and the presentation of maritime careers from the very early ages. The campaigns to attract youngster could even be oriented to parents, as it has been found in the Netherlands, that main influence in career decision is determined by the mothers.

B. EU Skills Panorama

Stelina Chatzichristou, from the European Centre for the Development of Vocational Training (CEDEFOP), presented an overview of the EU Skills Panorama. Experts pointed out that it would be useful to have clear definitions of terms (i.e. maritime technology, maritime economy) within the database. CEDEFOP works closely with national advisors to improve the definition for these broader terms. This was further discussed when talking about the importance to focus on the overall maritime economy to build bridges and to enable mobility.

It is also important to be clear about the target audience of the Panorama – at the moment this is policy makers, policy experts, but phase two will expand the target group to include career guidance people. Furthermore, the Panorama will be proactive in giving out the product, instead of waiting for people to find the product.

While the way the dashboard looks now is the outcome of a lot of discussions, the aim is to set a story. The data presented on the dashboard comes from CEDEFOP forecasts, not reports.

Experts noted that doing data collection based on subsector increases its feasibility, through getting reliable information. Furthermore, information on occupation level is useful for employers, since there is a gap in information.

Table discussions

1. What type of information/data would be more useful (thinking about labour trends, skills trends)? Qualitative? Quantitative?

Start with a baseline, which is already established → What kind of added qualifications will let people move into other sectors in the blue economy? There is a general lack of standardisation and it would be useful to receive more information and data in:

- Leisure sector
- Superyacht sector
- Off-shore wind energy
- Protectionism in Europe
- Feasibility of moving around in Europe
- Forecasts on specific jobs for education institutes to invest in specific training programs
- Required certificates on a country-bas

2. What information is already available?

There is information available for the shipping sector, with exceptions of the hotel side of cruise ships. BIPCO has two reports on future shortcomings, and the DREWEY report is also a good reference point.

3. Which are the main drivers affecting labour market and skills in the maritime economy?

The experts mentioned: aging workforce is either a retention problem, or opportunities are better outside the blue economy. Furthermore, attracting young people in Europe is the issue (lifestyle competences). STEM issue: when they do get them it's a retention problem. The blue economy is a

male oriented sector → there is room for gender policies promoting women doing occupations in the blue economy (WHISPER).

2. Subgroup: Ocean Literacy

A. EU Atlas of the Seas

COM gave a short presentation of the EU Atlas of the Seas, by exemplifying the rationale behind and the overall purpose. COM also pointed out that a revision of the tool is on-going and that for this reason we are seeking advice from experts about how the Atlas should look like, which info should contain and which should be the target group.

Table discussions

Experts pointed out that the map is not dynamic, is not updated regularly and is therefore out of date. Furthermore, it is not clear who the target group is: further developing the atlas should be based on having a clear target group. A number of scientific/technical maps exist already (i.e. EAA, EMODnet, etc.). Perhaps it would have more added value to create an Atlas used for educational purposes. If the purpose of the Atlas becomes ocean literacy, there could be more focus on interactivity, news, possibility to explore, info graphs, images etc.

Other points for improvement:

- Source of data is not listed clearly, this should be fixed
- What's the difference between this and EMODnet?
- It is not device-friendly
- Atlas should be simplified
- Some sectors need almost minute-like updates, whereas others need less (i.e. shipping vs windfarms)

The Atlas could also have a filtering feature (similar to Encyclopaedia of Life), which allows you to choose who you are (e.g. student, policy-maker, teacher) and get a map accordingly. The map could be the non-scientific output of Copernicus, or a platform for prediction of future jobs. The Atlas should be inspiring through ocean literacy, and if schools use it, then journalists and politicians are more prone to use it, increasing its visibility.

B. The Ocean Literacy at international level and the EP pilot project

Francesca Santoro, from IOC-UNESCO, gave a presentation about the work done so far at European and International level on ocean literacy. Following a brief introduction of the main milestones of ocean literacy development so far, she explained what the latest trends in the field are and the main initiatives coming up. There is an apparent regionalisation in Europe, which is important in establishing a civic relationship with the ocean: for this you need to feel close to the seas. Mare Nostrum is a good example. National ocean literacy networks are also being created in some EU countries such as Poland, Italy, Ireland and Sweden, which bring together different types of stakeholders. There are also national educational programs already developed like in Ireland and Portugal. Ocean literacy is not just science education, but also art, history, languages, etc. Finally, there is also a big international push: the UN

Ocean Conference (June 2017, New York) worked around the idea of voluntary commitments and UNESCO submitted a commitment on ocean literacy (outcome of the conference was the call for action 'partnership is the new leadership'). The next UN ocean conference will take place in 2020, hosted by Portugal and Kenya.

In this context, two important processes took place: UNGA approved to make 2020-2030 the decade of ocean science for sustainable development; and IOC UNESCO has been given the mandate to develop the plan.

A first step has been the organisation of the first international conference on ocean literacy (Italy, December 2017) and the launch of the Ocean Literacy for All Toolkit. The toolkit is not only for theoretical knowledge, but also activities (tips with how to adapt to different student levels and age groups). IOC UNESCO is keen to involve private sector, from companies to foundations. While the toolkit is only available in English, at the end of month it will be available in French and Spanish; Portuguese, Swedish and Croatian are being discussed. Finally IOC-UNESCO will soon launch an International Platform on Ocean Literacy to gather best practices in the field from around the world.

At European level, the European Parliament made an important step in this direction, by financing a pilot project to boost ocean literacy in Europe. DG MARE will implement this 2-year project and has developed so far a draft plan for actions, to be discussed with the experts. The three main objectives proposed by COM are: i) the creation of a EU coalition for the seas and oceans, from which activities will be coordinated with schools, industry, media, financial institutions, foundations, philanthropists, citizens initiatives, scientists and the public sector; ii) a European Network of Blue Schools; iii) a European Youth Forum for the Ocean.

Table discussions

Experts pointed out that the project should build on existing initiatives – this requires an assessment of existing practices, models, resources, materials. Furthermore, the project should target the imbalance that exists in gender representation within the blue economy. It is also crucial to target young people, as they have the passion and will to create lasting change.

The amount of money for this project is not sufficient to be broken down to country-level projects. It would be more useful to create bigger, long-term projects that have no national limitations. Many experts suggested the creation of a common hub (similar to IOC UNESCO Ocean Literacy Portal) for Ocean Literacy that can have added value to all three proposed groups (European Coalition for the Seas and Oceans; Creation of EU network of Blue Schools; Creation of European Youth Forum).

The hub could forecast future needs and provide a link with things that need to be addressed by other EU tools (e.g. Erasmus+); could contain material for education that can be shared by and contributed to by MSs and Blue Schools; could be a platform to connect young ocean ambassadors and could become a communication platform between decision-makers and these ambassadors. The platform could also have a component of 'Blue Schools Awards', which schools can acquire by prescribing to certain principles of ocean literacy; as well as create blue partnerships between towns/regions. Besides involving schools, the Blue Award could be extended to the private sector too.

The organisation of Blue Festivals (either separate or incorporated into EMD) could extend the scope of citizen involvement in ocean literacy. The experts also suggested investing in a television series broadcasted in all EU languages, linked to marine ecology/marine tourism/marine economy. The purpose of the series would not be an 'educative one', but an anecdotal one where people can draw their own conclusions.

Other ideas included organising regional events; preparing common tools for non-formal education; production of easy to read brochure on ocean literacy for distribution to merchant ships to raise awareness of seafarers; initiatives combining on-the-ground activities (i.e. beach cleaning) with educative actions, led by industry; stimulating competition between harbour cities on cleaning projects; creation of a European Day for Sea at School.

3. Subgroup Lifelong Learning, Training and Mobility

A. How to better use the EMFF direct management budget for educational and mobility programmes?

In the context of the EMFF budget (2014-2020) for implementing Integrated Maritime Policy, COM explained that part of the budget was allocated in 2016 for a call for proposal to boost industry-education collaboration in the Blue economy. This was followed by presentations of 2 projects, namely by CETBC - Cooperation in Education and training for blue careers (presented by Jaap Gebraad) and MENTOR - Blue Career Centre of Eastern Mediterranean and Black Sea (presented by Zacharias Siokouros).

Table Discussions

1. What to do with future EMFF calls for education and training? Keep open or specific?

Experts suggested keeping them open, but listing the expected outputs and potential action areas. These could be promotion of actions to harmonise qualifications; to ensure the gender balance; sharing of MOOCs; elaborate on the impact of digitalisation. The call should also consider future career paths, upskilling and retraining.

Experts suggested as well the call to remain open to national projects with preference to transnational ones (real justification needed for only national ones); look at transversal training opportunities; create synergies with other funding programs; and target the creation of a centralised hub to share information on marine and maritime professions.

2. Mobility Schemes: Target Group? Level? Organisations involved?

The experts suggested a number of different potential target groups. Many professions and skills are transferrable, so there could be a focus on mobility from non-blue to blue sectors. While students are often 'covered' by existing Erasmus schemes, established professionals, the unemployed, and companies are not, so they could also be the target group. Furthermore, at the professional level, long-term mobility schemes are problematic (due to social commitments, i.e. family); the EMFF funds could

give incentive to schemes that tackle this issue. Mentoring is often an issue in mobility, so mobility schemes should target this. Mobility should also be within the sector, between education institutes and companies, and SMEs.