



European
Commission



BLUEPRINT FOR SECTORAL COOPERATION ON SKILLS

Maritime Technologies

Responding to skills
mismatches at
sectoral level

A key action of the New
Skills Agenda for Europe

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Introduction

Technological progress and globalisation are revolutionising the way we live, learn, work and do business. Digital and other key technologies are reshaping the foundations of industry and the wider global economy.

This offers tremendous opportunities for innovation, growth and jobs, but it also requires skilled and adaptable people who are able to drive and support change.

In order to deliver **sector-specific skills solutions**, the New Skills Agenda for Europe has launched **the Blueprint for Sectoral Cooperation** on Skills. The Blueprint is a new framework for strategic cooperation between key stakeholders (e.g. businesses, trade unions, research, education and training institutions, public authorities) in a given economic sector. It will stimulate investment and encourage the strategic use of EU and national funding opportunities. The aim is to develop concrete actions to satisfy short and medium term skills needs to support the overall sectoral strategy.

The Blueprint can only bring results if it is driven and owned by sector stakeholders. In this respect, the full involvement of social partners is very important. The Blueprint has been and will continue to be discussed in an open exchange with interested parties, including in the context of sectoral social dialogue committees.

The Blueprint builds on previous work by the European Commission and sectoral partners (in particular the Sector Skills Councils¹ and the European Sector Skills Alliances²) to fight sector skills mismatches. Going forward, it could also support smart specialisation strategies, which help regions choose to specialise in sectors where they can be most competitive.³

All relevant EU and national qualitative evidence and quantitative data produced under the Blueprint will contribute to the Skills Panorama and the new Europass Framework.⁴

In this publication we outline the steps towards cooperation on skills across the six pilot sectors of this initiative. We then review specifically the needs and benefits of the Blueprint in the context of the maritime technology sector.

For more information about the overall initiative please visit <http://europa.eu/!gc96YU>

Three steps to match skills to sectors' needs

The Blueprint for Sectoral Cooperation on Skills fosters sustainable partnerships among stakeholders to translate a sector's growth agenda into a comprehensive skills strategy and to take action to address sectoral skills needs.

Six Pilot Sectors



AUTOMOTIVE



DEFENCE



MARITIME
TECHNOLOGY



SPACE
(GEO INFORMATION)



TEXTILE,
CLOTHING,
LEATHER AND
FOOTWEAR



TOURISM

The Blueprint will be extended to additional sectors in the future.

1. Is the sector ready for an EU-wide partnership on skills?

In this preliminary phase, skills gaps in the sector and their potential impact on growth, innovation and competitiveness are assessed.

The presence and maturity of the overall growth strategy for the sector is verified, as well as the link to EU policy priorities. On this basis, the decision is taken on whether to move to the next phases or not. This groundwork is carried out by the Commission in cooperation with social partners and stakeholders. It can take place in more or less structured ways, depending on the way the sector is organised.

2. Launching sustainable sectoral partnerships

Once the sectors have been chosen, the Commission supports the set-up and the work of sectoral partnerships at EU-level. Each partnership will develop a sectoral skills strategy to support the objectives of the overall growth strategy for the sector and match the demand and supply of skills.

Partners will look into how major trends, such as global, societal, and technological developments, are likely to affect jobs and skills needs, as well as their potential impact on growth, competitiveness and employment in the sector (e.g. restructuring, hard-to-fill vacancies). It will then identify priorities and milestones for action and develop concrete solutions. The partnership will:

- Revise or create occupational profiles and the corresponding skills needs, drawing on the classification of European Skills, Competences, Qualifications and Occupations (ESCO)⁵ and existing competence frameworks⁶;
- Update or create curricula while promoting sectoral qualifications and certifications;
- Promote benefits of choosing a career in the sector and foster gender balance;
- Promote job-seeker and student mobility across Europe in the sector, capitalising on the use of existing EU tools⁷;
- Identify successful projects and best practices, including effective use of EU funding;
- Design an industry-led action plan for the long-term roll-out of the strategy and its results and ensure sustained cooperation among stakeholders at European, national and regional levels.

The platforms will build on European tools relating to skills and qualifications.⁸

3. Roll-out at national and regional level

Building on the results achieved at EU level, the Blueprint will be **rolled out at national and regional level**, in cooperation with national and regional authorities, and stakeholders. The members of the EU partnerships and the Commission will actively engage in dissemination and awareness raising activities to rally all interested national and regional stakeholders and ensure broad involvement and take up. The main tasks of national/regional partnerships will be to:

- Implement the EU-level sectoral skills strategy and action plan recommendations, while adapting them to national contexts and priorities;
- Implement business-education-research partnerships on the ground, including in the context of smart specialisation⁹;
- Raise visibility and share results widely to influence EU, national and regional policies, initiatives and intelligence tools.

Funding the Blueprint

The Blueprint is a new framework for strategic cooperation between stakeholders and is independent from individual funding instruments. However, a number of funding opportunities are available to support the different steps.

Lessons learned during the pilot phase will help in refining the Blueprint, including funding arrangements.

Step 1

This is a preliminary phase of the Blueprint. It is only at the end of the step that the decision on going ahead with the Blueprint is taken, therefore there is no dedicated funding. However, relevant activities can be funded by existing instruments. Work on step 1 should start with the sector's interest. It should reflect how the sector is organised and take previous work into account. For example, calls for tender on sectoral studies could be launched by the Commission. Or, sectoral stakeholders could apply for projects under Erasmus+ Sector Skills Alliances (E+ SSA) Lot 1. Alternatively, work could be taken forward within existing structures at EU level, such as high level groups or sectoral dialogue committees.

Step 2

For the pilot phase, a specific call, open only to **the six pilot sectors**, will be published in early 2017, under the new **Lot 3 of the Erasmus+ Sector Skills Alliances**¹⁰. The call will make available € 4 million per sector to cover up to 80 % of eligible costs over a 4-year period. Only one European Alliance per sector will be supported. It must ensure good coverage of EU Member States and be representative of the sector. It must be led by representatives of the industry (e.g. companies, chambers or trade associations) and include education and training providers. The presence of social partners and public authorities is highly encouraged.

In 2017, calls for tenders will also be published under the COSME programme¹¹. Other funding opportunities and arrangements could be considered in the future, also taking into account the results of the pilot phase.

Step 3

This step needs to be financed at national and regional level. EU Structural and Investment Funds¹² (ESIF) could support Step 3 of the Blueprint, but this would require a decision by the relevant managing authorities. The EU partnerships will look into replicable models to facilitate the use of EU funding to support this step. Other public and private funding should also be used.

MARITIME TECHNOLOGY SECTOR

Why a blueprint for cooperation on skills in the maritime technology sector?



Seas and oceans are drivers for the European economy and have great potential for innovation and growth. The European maritime technology industry is a forerunner and world leader in terms of innovation. It is a key enabler, providing the more advanced technologies and structures needed to ensure the development of all other maritime activities, such as offshore renewable energies or aquaculture. This is vital to secure Europe's needs in terms of transport, defence, energy and food supply.

The maritime technology sector has a turnover of € 91 billion and directly employs more than 500 000 people of which a high percentage are high skilled. It generates at least as many additional jobs and contributes significantly to regional development (200 regions in 18 countries).¹³

The economic and financial crisis that started in 2008 dramatically hit the maritime technology sector. The industry went through painful restructuring and widespread job losses. In order to maintain its leading position, European companies abandoned mass markets in favour of complex, high-tech products and services based on knowledge, innovation and technology. It became an innovation-driven, technologically advanced industry requiring more and more highly skilled technical people. The sector is among the most research intensive in Europe, with 9 % of its GDP invested in Research, Development and Innovation (RDI). It is continuously innovating and diversifying into new activities. The industry is providing the technologies to enable the sustainable and safe development of Blue Economy activities: offshore wind, marine energies, marine biotechnology, aquaculture, deep sea exploration and surveillance etc. In addition, recent years have seen the development of multipurpose offshore platforms, serving for different activities such as aquaculture and offshore wind.

Skills gaps in the marine and maritime industry have been identified in several policy documents in recent years, such as LeaderSHIP 2020¹⁴. The 2014 Communication "Innovation in the Blue Economy: realising the potential of our seas and oceans for jobs and growth"¹⁵ highlighted that the scarcity of a skilled workforce, able to apply the latest technologies, represents one of the main obstacles to the further development of the Blue Economy. In fact, the demand for skills is changing. This is partly due to highly specific niches (in which lies the sector's future competitiveness) and also because growing markets mean more and more competing actors and technologies. A number of changes are already anticipated in the sector, linked to technological, infrastructural and business-related advancements. In this context, the most important areas of skills for the maritime technology relate to engineering and IT processes.

Closely linked to the availability of new skills is the need for dedicated research & development programmes, able to deliver innovative technologies. For example, in recent years, the maritime transport sector has been working on designing and producing environmentally friendly and energy efficient ships, with the overarching objective of supporting a stable perspective for continuous investment in "greening" the sector.

Only by anticipating employment and skills needs can the sector address emerging and future skills gaps and shortages. Close cooperation between stakeholders from both the industry and the education and training world is therefore key to ensuring sustainable growth.

Find out more

Details about European Commission initiatives to develop skills in the maritime technology sector:
https://ec.europa.eu/growth/sectors/maritime_en

Blue Careers in Europe: <https://ec.europa.eu/easme/en/call-proposals-blue-careers-europe>

Expert group on “Skills and Career Development in the Blue Economy”:
http://ec.europa.eu/dgs/maritimeaffairs_fisheries/contracts_and_funding/calls-for-applications/index_en.htm

What can the blueprint achieve?

The Blueprint will gather key stakeholders from different maritime technology segments and diverse geographical areas, enabling them to:

- **Identify skills needs** (both sector specific and soft skills) **and related profiles** in the areas of i) traditional maritime technology products, such as shipbuilding and offshore oil & gas, etc. ii) renewable energy including offshore wind, ocean energy, etc. iii) other Blue Economy relevant sectors, for example aquaculture, marine biotechnology, monitoring & observation;
- Develop and implement a programme or scheme to **improve the image** of the maritime technology sector at EU level and to **raise awareness** of career opportunities;
- Develop a programme to boost **ocean literacy** across Europe, through innovative activities;
- Create schemes to develop **internship and mobility programmes** for students across Europe to test their acquired skills in relevant companies or public bodies;
- Develop a **maritime entrepreneurship** scheme to support students with innovative ideas in the maritime technology sector.



Links to other related projects and initiatives

A European Skills Council for the Maritime Technology Sector was established in 2014 to identify skills gaps and create regional and inter-sectoral synergies through social dialogue. It carried out a survey that demonstrated a lack of qualified and available people in the job market and forecasted an increase in employment over 2-5 years. It delivered a list of the most demanded skills and occupations and showcased best practices. The work needs to continue now to facilitate planning and coordination of activities at national and regional level and ensure that the educational providers give students the necessary skills and training to meet evolving industry needs. This will be vital to helping the maritime technology sector stay competitive worldwide.

- The Blue Careers in Europe call for proposals was launched in February 2016 under the European Maritime and Fisheries Fund (EMFF) and managed by the European Commission and EASME. The call brings industry and education/training providers together at local and regional level to design and implement actions replying to the skills needs of the maritime labour market of an identified sector. In addition, projects will implement awareness raising and dissemination activities on ocean-related issues with a view to increase the visibility and attractiveness of blue careers' opportunities, for example among secondary school and higher education students. The projects will start in January 2017.
- An expert group on "Skills and Career Development in the Blue Economy" has been set-up by the Commission to develop the skills policy within the Blue Economy. Given the complexity and variety of the issue, the group representatives cover different sectors of the Blue Economy (shipping, shipbuilding, tourism, ocean energy, aquaculture, fisheries, marine biotechnology, etc.) and also represent the different sea basins.

Endnotes

1. **European Sector Skills Councils:** <http://ec.europa.eu/social/main.jsp?catId=784>
 2. **Projects financed by Erasmus+:** https://eacea.ec.europa.eu/erasmus-plus/actions/key-action-2-cooperation-for-innovation-and-exchange-good-practices/sector-skills-alliances_en
 3. **Smart Specialisation Platform:** <http://s3platform.jrc.ec.europa.eu/home>
 4. **Skills Panorama:** <http://skillspanorama.cedefop.europa.eu/en>; Europass: COM(2016) 625
 5. **European Skills, Competences, Occupations, and Qualifications(ESCO):** <https://ec.europa.eu/esco/portal/home>
 6. **Examples of competence frameworks:** Digital Competence Framework for Citizens, **the** Entrepreneurship Competence Framework **and the** European e-Competence Framework
 7. **Examples of EU employability and mobility tools:** Erasmus+, EURES, Drop'Pin, European Alliance for Apprenticeships
 8. **Examples of EU skills & qualifications tools:** European Qualifications Framework, ESCO, Europass, ECVET **and** EQAVET
 9. **Smart Specialisation Map:** <http://s3platform.jrc.ec.europa.eu/map>
 10. **Erasmus+ Sector Skills Alliances:** http://eacea.ec.europa.eu/home/erasmus-plus/actions/key-action-2-cooperation-for-innovation-and-exchange-good-practices/sector-skills_en
 11. **COSME Programme:** https://ec.europa.eu/growth/smes/cosme_en
 12. **EU Structural and Investment Funds (ESIF):** http://ec.europa.eu/contracts_grants/funds_en.htm
 13. **Joint SEAEurope and IndustriALL Europe Position, February 2016**
 14. **LeaderSHIP 2020, The sea, new opportunities for the future, 20 February 2013**
 15. **Communication from the Commission: "Innovation in the Blue Economy: realising the potential of our seas and oceans for jobs and growth" - COM(2014) 254/2 (13 May 2014)**
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The Blueprint for Sectoral Cooperation on Skills is a new framework for strategic cooperation to address short and medium-term skills needs in a given economic sector. This publication focuses specifically on the maritime technology sector and shows how stakeholders (businesses, trade unions, public authorities, research, education and training institutions etc.) can apply the framework to address challenges, illustrating the steps towards delivering sector-specific skills solutions through sectoral partnerships.

The Blueprint currently focuses on six pilot sectors including: Automotive; Defence; Maritime Technology; Space (geo-information); Textile, Clothing, Leather & Footwear (TCLF); and Tourism. It will be extended to additional sectors in the future.

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