

Part I - General Information

Project: CLIPPER

Partner organisation: Turku University of Applied Sciences

Other partner organisation involved: Regional Council of Southwest Finland

Country: Finland

NUTS2 Region: South Finland (Etelä-Suomi in Finnish)

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Part II - Policy Context

The Action Plan aims to impact:

- Investment for Growth and Jobs programme
- European Territorial Cooperation programme
- Other regional development policy instrument

Name of the policy instrument addressed: Regional maritime ambition

Background

The Turku region is the most important production cluster of Finnish maritime industry. One-third of the maritime industry companies are located in the Turku region. The turnover of maritime industry companies in Turku Region has been growing since 2010 steadily and this development is expected to grow in the near future.

The Finnish shipbuilding competence is on a high level due to extensive experience, through a rapid industrialisation process during last 70 years. Through consolidation and increased specialisation during and after this period, the previously small Finnish shipbuilders became relevant actors on the international market.

Since the 1970s the production diversified into car ferries and cruise ships. The 1990s and 2000s were the gold time of building cruise ships at the shipyards of Helsinki and Turku. After several mergers and MBOs spin off from the shipyards picture of Finnish Maritime industry is what it is at the moment.

Finnish shipyards have provided vessels for ship-owners around the world, for example the world class cruise vessels operating in the world seas. Besides cruise ships, Finnish shipbuilding is specialised in passenger ferries, icebreakers and military ships.

In Finland there are up to 1000 maritime industry companies which employ 30 000 persons. Marine industry turnover is € 8 billion and growing in future years, and over 90% of the production is exported. Finnish shipyards, repair and offshore yards employ 15-20 % of the maritime industry work force. Big and global technology manufacturers (propulsion systems, cargo handling, etc.), as well as design and engineering offices, etc. employ the rest 80-85% of the industry's employees.

Meyer Turku Ltd is the strongest maritime company in Turku Region. Meyer Turku Shipyard is specialised in cruise ships, car-passenger ferries and special vessels. The company has also subsidiaries, which provide necessary final solutions and services. Piikkiö Works Oy is a cabin factory in Piikkiö, Shipbuilding Completion Oy provides turnkey solutions to public spaces in ships and ENG'nD Oy is an engineering company offering services for shipbuilding and offshore activities.

It is very clear that the maritime technology industry is very important in our region. That is why the **policy instrument addressed** is "**Regional maritime ambition**" linked with the Guidelines for Finnish Maritime Policy. The target is to analyse how the regional public policy authorities implement the strategies and programmes addressed to maritime industry development in the region. There has been maritime industry supporting initiatives and actions in recent years and some of these actions have evolved to be even stronger in the near future.

The objective of the Action plan in Southwest Finland (SWF) Region was defined: to secure a sustainable future for the maritime industry in Finland / Southwest Finland. This objective can be achieved by:

1. Stronger regional collaboration and structured, open cooperation with different actors
2. Increasing international cooperation
3. Understanding maritime industry development by systematic foresight processes

Action 1: Regional cooperation structure

1. The background

The regional authorities have realized the significance of the maritime technology industry for region's employment and the economy. The main regional authorities are Regional Council of Southwest Finland and the Southwest Finland Centre for Economic Development, Transport and the Environment (ELY Centre). The Regional Councils are mandated in Finnish law and each council receives its funding from its member municipalities. They also receive funds for regional development from the Government and the European Union.

Regional Council of Southwest Finland clearly points out in the SWF Regional Strategy and in Smart Specialisation Strategy the significance of maritime industry in our region. Regional Programme of Southwest Finland identifies focus areas of development and implementation for 2018-2021:

*“The Regional Programme identifies the current themes and actions to be taken to reach the Regional Strategy’s vision and priorities. Southwest Finland is a resilient region with a diverse industrial and trade profile, where education and know-how are held in key role. The region is currently undergoing a strong acceleration of technology industry (**especially shipbuilding** and automotive) and positive economic development, which continue to rise the employment rate. At the same time the so-called positive structural change demands increase in higher education in technical fields, promotion of mobile labour force and ensuring sufficient housing options for the workers. In order to meet their full potential the positive growth objectives need a favourable structural environment.*

For the period 2018-2021 the focus areas are the following, as adopted by the Assembly on December 11, 2017:

*Smart specialization focuses resources to regional strengths, which are: **blue growth and industrial modernisation**, innovative food chains, and life science and health technologies.”*

In 2018, the Regional Council of SWF launched the Blue Growth webpage for dissemination the relevant maritime actions, news and events in the region.¹

The Region of Southwest Finland has been active in supporting maritime industry in EU level with eg. CPMR. The "LeaderSHIP 2030" Policy Position calls on the European Commission to launch a European Industrial Strategy for maritime industries. Maritime industries should be defined as the strategic industry in the European level as the Europe's maritime technology sector comprises some 300 shipyards and more than 28 000 maritime equipment manufacturers and technology suppliers.

¹ www.sininenkasvu.fi)

The City of Turku has been very active on developing the Maritime technology Industry in the region. Some activities are Turku Seas2020 Strategy in 2016, starting the Blue Industry Park development, funding the maritime technology lecturer at Turku University of Applied Sciences and initiating Maritime Accelerator Programme and Turku Future Technologies University Network.

Also Finnish government has indicated some funding in recent years for maritime industry RDI activities (eg. Arctic Seas Programme by Business Finland) and maritime industry training/education (Ministry of Education and Culture): extra funding for technology degree training and training infrastructures and Ministry of Employment & the Economy (continuing training and labour market education).

There has not been any integrated Maritime Policy in Finland before this year. The first maritime policy paper by Finnish Government “Guidelines for Finnish Maritime Policy” was published in early 2019. The policy guidelines determines the focus areas of Finland’s maritime policy concerning oceans and seas, and present measures required for reaching the set objectives. **The aim of this document is to enable Finland to develop its maritime policy into a clear area of strength.** In these policy guidelines, the protection of the seas, maritime logistics, the maritime cluster incl. maritime technology industry and marine production are selected as priority areas. The horizontal themes connected to all priority areas include automation, digitalisation and data; competence building, research and education; exercising influence at the EU and international level; a secure operating environment; financing.

Despite the importance of maritime technology industry in SWF Region, **the maritime development activities are very fragmented.** The roles of different partners were not clear and not well defined. During the CLIPPER project phase 1 the regional stakeholders clearly realized that many of the partners’ region already have structures or plans to create structure that could be used in SWF.

CLIPPER partner regions have various actions and structures for regional maritime development. Although the maritime industry has been very important industry in SWF region for years, there has not been any strategic and concise implementing plan.

The new, more structured form of cooperation activity plan was needed. The region has learnt a lot from CLIPPER partners activities and good practices. We have studied the innovation and cluster structures in CLIPPER regions for the development. Regional or national cooperation policy is relevant policy tool to enhance the companies with different actors. Examples of the clusters, public-private structures and different networks interesting for SWF Region are eg. Scottish Maritime Cluster, Northern Germany Maritime Cluster, Neopolia.

One example is Pays de la Loire maritime industry sector and the “RESOLUTIONS” scheme, although it can’t be transferred to southwest Finland action directly. The open innovation idea of RESOLUTIONS and the SME and large company collaboration has a link to Maritime Accelerator Programme in SWF.

The CLIPPER regions' cluster policies will not be adopted as such in SWF, but the lessons and examples, best practices and policy improvements from other regions are useful in developing the regional cooperation structure in SWF. Some of the questions to be analysed are:

- What are the concrete objectives and the incentives of collaboration
- How the collaboration can be created and structured (informal vs formal activities)
- What are the concrete actions that the partners can to achieve together
- What are the funding possibilities of the cooperation activities

CLIPPER implementing phase will show how the Action Plan and other the Blue Growth activities are achieved in Southwest Finland.

2. Actions

From January 2020, there will be a new, well-structured concept with defined roles and responsibilities of public policy activities on maritime industry development in SWF Region. The main responsible partners of maritime development in Southwest Finland region are **Regional Council of Southwest Finland** and **Turku Science Park Ltd** (TScP). City of Turku operates through TScP and other public authorities will have minor role.

The universities have their roles in RD/enterprise collaboration and high-level education and in some individually defined actions/projects.

The work plan of Regional is not yet finalized, but the as the CLIPPER project stakeholder group's meetings will continue after the project phase 1, the stakeholders group - lead by the Regional Council - will be the informal steering group of the **Regional cooperation structure** sharing the relevant information of maritime industry actions and preparing the regional actions, strategies and programmes. The stakeholder group or some members of the group will have a preparatory role in joint actions, communication and dissemination.

3. Players involved

Turku Science Park Ltd (as development centre mainly owned by City of Turku) will be responsible for enterprise contacts, relations and under "Maritime Turku" concept: see website <https://turkubusinessregion.com/en/spearhead-fields/maritimeturku/> (still under construction). Regional Council of will have stronger role public policy in national and international level incl. activities in CMPR context and EU level. The Regional council is also responsible for Smart Specialisation Strategy. During the Autumn 2019 the updated version of 3S was launched in SWF Region, and the maritime industry has even stronger emphasis than before on "Blue Economy and modernisation of technology industry". Some on the focus points of 3S are derived from the CLIPPER project actions and lesson learnt from other partners when analyzing the good practices of the partners (etc. RD actions, International cooperation). All the public policy authorities have roles and they are committed to the actions.

These actions ensure that the most significant partner work together in well-structured manner and the actions concerning region's maritime industry development and interests are taken into account when preparing action for maritime industry RDI and company development actions.

4. Timeframe

In early 2020 Turku Science Park Ltd and Regional Council of SWF will start to re-structure the regional maritime development concept, "Maritime Turku" concept.

The draft of the timeframe at this point:

- Finalized and endorsed by relevant partners (Spring 2020)
- Preparing the plan of regions activities in international and national events and trade fair/conferences (eg. European Maritime Day) (winter 2020)
- The stakeholder group will continue the meeting and sharing information (continuing process)

5. Costs

To be defined

6. Funding

Mainly regional funding, City of Turku, Universities, European projects if possible

Action 2: Technology Campus Turku

1. The background

One of the major questions that has raised in CLIPPER was how companies and universities could collaborate better in order to produce innovations research projects and new products. We tried to learn what are the tools and practices that help universities and companies work together better, and what would be the best public support instruments or incentives for this cooperation.

The CLIPPER project has accelerated the process of understanding the importance of RD activities and strengthening the University –Enterprise cooperation, RD activities and technology training and development. For SWF Region the main lessons learnt by CLIPPER Project partners for the RD activities are examples like *Interface concept* (<https://interface-online.org.uk/>) and *RD Centre concepts*. *Interface*, presented by our partner in **Fife**, has established processes in finding and accessing academic expertise, research, technologies, specialist facilities and funding. Interface also facilitates clusters of businesses and academics working together to tackle industry sector challenges leading to transformational outcomes and impacts. *RD Centre concepts* in **Schleswig-Holstein** are cases that help SWF to understand the close connections and learn new tools to cooperate with universities and companies.

Technology Campus Turku aims at strengthening the co-operation in education and training of technology between the Turku region universities, universities of applied sciences, municipalities and the business world. The Technology campus promotes the technology education and research of the four universities in Turku, ie the University of Turku, Åbo Akademi University, Turku University of Applied Sciences, and Novia University. At the same time, it combines university resources to support product development and innovation in the region. <https://teknologiakampus.turkubusinessregion.com/uutiset/> (in Finnish)

Some parts of Turku Future Technologies RD collaboration concept can be integrated in Technology Campus activities. TFT aims to identify and categorize the needs of companies to provide structured information on the needs of companies to universities and Technology Campus Turku. Technology campus Turku and universities can then use structured information to guide and develop their own training operations. The objective of TFT's operations is to raise the level of technical expertise of companies in the region and thereby improve competitiveness. Enhanced competitiveness is expected to improve the region's prosperity. TFT is looking for a related research group from its Higher Education Institutions. The research group and the company will focus on the topic and possibly launch a research project or study will be done for thesis or student work.

2. Action

The main objectives of Technology Campus Turku are the new way of collaboration of regions universities. The main actions are:

- Create new **cooperation models in technology training, common training modules** in different regional universities
 - Eg. Joint courses and training sessions/modules
- Build up “**Regional Technology Research Strategy**” by the end of 2020 which identifies the:
 - Research and development needs and challenges of maritime industry
 - Competence gaps of the regions maritime industry
 - Region universities strengths and weaknesses
 - Drafts the roadmap and the steps to achieve the
- Develop new **integrated technological research and training infrastructures**, incl. using common **innovation environments and labs systematically**
 - Joint laboratories and technical testing infrastructure.
 - The New Energy and Digital Technology Transformation Investment Project (2018 – 2020) investments have mainly installed in the MTC premises. The investments are for new energy and digital technology aiming build a strong research and innovation environment that will enable the development of the technical competitiveness of industry in Southwest Finland. There will be new investments regionally for digitalisation on manufacturing technology industry incl. Maritime technology industry. The investments are based on the strong need of RDI activities and increasing recruitments of technical experts in Southwest Finland because of regions’ positive structural change.

These activities will lead to advanced technical expertise in the region and eventually to attractiveness of the maritime industry. The policy instrument “Regional maritime ambition” will be improved by growing RD –enterprise collaboration enhancing the competitiveness of region’s maritime industry, especially SMEs.

The main objective of **Turku University’s** activities in Technology Campus process is to produce more Master of Science (MSc), Technology, Engineer and Maritime Professionals for the region's growing needs now and in the future. The expansion of the training of Masters of Science in Engineering is essential to match the needs of the local businesses and the ongoing positive structural change in the Region. That is objective of one partner only.

3. Players involved

City of Turku and Turku Science Park Ltd are the responsible partners. The regional universities: University of Turku, Åbo Akademi University, Turku University of Applied Sciences and Novia University all have significant role in implementing the actions in high-level technical training and RD activities of regional maritime industry.

University of Turku, Åbo Akademi University, Turku University of Applied Sciences will be the main owners of Machine Technology Center Turku Ltd (MTC) after acquisition in winter 2020. Then MTC role as laboratory infrastructure provider will grow during next months.

One example of maritime industry's support for high-level technical training and RD collaboration is the donation of two professorships for technology education by Meyer Turku Shipyard, Elomatic and Cadmatic in November 2019

https://www.meyerturku.fi/en/meyerturku.com/media/news_releases/news_releases.jsp

Board of The Turku Science Park ltd is also the formal steering group of Technology Campus Turku. The board members are city of Turku, universities and the companies.

4. Timeframe

The preparation on Technology Campus Turku started in 2017 when the positive structural change was realized and the lack of technical experts in maritime industry was becoming critical. In 2018 the final decisions of funding, the structure and possible resources were made.

The next steps are provided by the opportunity of 2nd phase of CLIPPER:

- Identifying and categorizing the needs of companies to provide structured information on the needs of companies to universities and Technology Campus Turku (in winter 2020)
- Creating and finalizing the Technology Campus and universities cooperation model in practice (Spring 2020)
- Research infrastructure and Role and services of MTC as laboratory and test environment provider (Spring 2020)
- Validating and starting the Master level training programmes (lead by University of Turku in Autumn 2020)

5. Costs

Public funding 300 000 €/year for Technology Campus Turku activities. The actual training and RD projects are not included.

6. Funding sources:

City of Turku, universities, ERDF, EMFF