

# DRAFT TERMS OF REFERENCE FOR PHASE ONE OF THE NEW EUROPEAN MARITIME CLUSTER STUDY

## I.1. INTRODUCTION

The maritime cluster is a very important, but not always recognised economic cluster in the EU which recently experienced a revived interest from politicians and policy makers. The maritime cluster comprises<sup>1</sup> shipping, shipbuilding, offshore (supply), inland shipping, dredging, seaports (and related services), fisheries, water sports industry, maritime services, marine equipment industry and the Navy.

The cluster has not always been recognised in the past, partly because the available statistical data gives an incomplete image of the cluster and of the interrelationships with the rest of the economy. Since its start-up in 1997 the Dutch Maritime Network commissioned a series of studies to shed light on the size of the maritime cluster, the interrelationships within the cluster and the contribution of the cluster to the national economy. For many sectors, complete bottom-up inventories were made and a deep understanding of the ins- and outs of the cluster were generated. The studies revealed not only a strong contribution of the cluster to the Dutch economy, but also contribution to international trade.

Some years ago, also the European Commission commissioned an inventory study on the European maritime cluster. Policy Research Corporation performed this task and gave a first insight in the size and scope of the European maritime clusters (for the EU-15) based on 1997 data<sup>2</sup>. The figures in that study give a proximate – but major – figure for turnover, value added, employment and expenditure effects, both in direct terms as in indirect terms (resulting from purchases in other sectors).

Main findings of this research project *Economic Impact of Maritime Industries in Europe* were:

- an overall rather low availability and quality of data (statistics were in many cases incomplete, out-of-date or non-reliable);
- a difficult or impossible comparison between years, countries or sectors, due to lack of data and mismatches in definition;
- a serious lack of data with respect to the economic importance for sectors such as ports- and port related services, offshore supply sector and maritime services;
- a lack of bottom-up data or a thorough top-down estimation scheme, which makes it difficult to interpret data from the statistical sources<sup>3</sup>.

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<sup>1</sup> These sector definitions come from the Dutch Maritime Network, but of course it should be part of the study to see whether these definitions are also suited for the analysis of the European Maritime Clusters.

<sup>2</sup> Study commissioned by the European Commission, DG Enterprise (contract reference number ETD/99/502486). For this assignment Policy Research Corporation collaborated with the Bremen-based Institute for Shipping Economics and Logistics (ISL).

<sup>3</sup> From the statistical data one usually cannot distinguish between – for example – a relocation of certain (parts of) companies to other countries and an overall decrease of activity level.

Furthermore, the calculation of indirect effects is hindered because of the limited information on interconnectivity between companies. In order to work out a comprehensive and balanced maritime policy it is recommended to investigate in more detail the relationships between certain sectors (e.g. shipping sector and shipbuilding (with production separated over EU-25 countries)).

## **I.2. PURPOSE OF THIS CONTRACT**

The ultimate goal of the study is to work out a robust methodology that allows to provide a detailed overview of the current economic impact and the (border crossing) interaction between sectors of the maritime clusters.

In the *first phase*, the challenge would be to propose a clear and uniform definition for each of the maritime sectors, to test the availability (and quality) of data for policy purposes and to work out a strategy to fill the gaps in the (quality of the) statistical data. Typically this strategy will include efforts to work out a solid benchmark case as well as a monitoring instrument enabling a regular (e.g. two-year) update.

In the *second phase*, the required in-depth research (to be proposed in the first phase) will have to be conducted. All necessary actions to be able to provide robust estimates for the different sectors are included in this phase two. A stratified combination of top-down and bottom-up analysing techniques must be part of the approach. Included in phase two is also the calculation of the total economic impact of the European maritime clusters in terms of value added and employment. Besides the direct impact of the sector, this also includes the indirect impact generated through purchases in other sectors, not only in the home country but also in the other EU-25 countries.

## **I.3. SCOPE OF THE STUDY**

The scope of the current project outline concerns the *first phase* only and comprises the collection, analyses and assessment of data:

- mapping the differences in definitions used in the different countries and investigating the ‘match’ of the maritime sectors in relation to the standard statistical classifications (in particular NACE<sup>4</sup>);
- analysing the available statistical data for each of the sectors and performing a consistency check on the time series data;
- identifying the data sources in more detail and getting insight in the periodicity of the data sources available.

From the collection and assessment of data, a strategic plan should be derived on how to set up a research study for the EU-25 countries (+ Norway) to collect “missing data” and on how to work out

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<sup>4</sup> Nomenclature générale des Activités économiques dans les Communautés Européennes.

procedures for practical statistical updates based on Eurostat material, with a view to develop input-output analysis for the European maritime clusters on a regular basis.

#### **I.4. DEFINITION**

Usually it is rather difficult to strictly define the ‘content’ of different economic activities, which means that finding a proper balance between sector specific characteristics on the one hand and more general characteristics on the other hand is a continuous challenge<sup>5</sup>. The harmonisation to the NACE classification has had as main advantage that the statistics for the EU-25 have become more comparable, but sometimes this has resulted in losing more detailed information on individual member states.

One should bear in mind that the imperfect match between NACE classifications and sectors like offshore supply, seaport and related services, recreation, maritime services, maritime equipment and the Navy will require a good understanding of the inputs and outputs of the maritime sectors.

#### **I.5. METHOD**

##### ***a/ Data-gathering phase***

Data collection will be a first important step in the project. For countries like the UK, France, the Netherlands, Germany and Norway several more detailed studies are available and also in the earlier study of Policy Research Corporation many data sources are listed. However, for many sectors and countries there will have to be made a large effort to bring together different data material as well as a more detailed study of the available statistics at the national statistical offices.

##### ***b/ Analysis phase***

The main challenge is to be able to provide a reasonable explanation of the statistical data at hand. The analysis or data assessment phase should result in a good overview of data available, quality of data, differences between data sources and possible explanations for these differences.

##### ***c/ Judgment phase***

Starting from the information *sub a/* and *sub b/* the consultant should be able to provide an expert judgment on the quality of the statistical data and to construct either a consistent time series for a

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<sup>5</sup> Because no two firms are the same, there may be in strict sense as many activities as companies. Via classifications this diversity of activities is reduced to classes, being as homogeneous as possible in relation to the most relevant criteria. Usually, the activities are grouped on the basis of inputs, production processes and outputs. This makes it possible to intertwine statistical data with other information sources, and hence to use the data for strategic and/or policy purposes. Most of the time, the classifications are designed starting from a top-down approach, because this requires in general less sector expertise. From a sector perspective the statistical classifications therefore are quite often to less ‘practical’.

sector or propose the steps needed (and to be taken in the second phase) to arrive at such stage. Also important is that the consultant is aware that the usual top-down approaches have to be taken with care and that he is able to judge the robustness of ‘estimates’ provided by statistical offices for the most recent years. At last, the consultant should be able to propose a ‘uniform’ definition framework.

## **I.6. ORGANISATION AND BUDGET AVAILABLE**

The project described before is rather intense and requires a team with a senior profile because of the importance of assessment and judgment of data. Also, there should be created a common understanding within the EU and the European Network of Maritime Clusters on the (sub)sector definitions used. Despite there will be relatively much information available on certain sectors for a number of countries, there remains much work to be done, not only for the less documented sectors but also in terms of (cross) quality check(s) of the available data. For about half of the EU-25 countries this will imply (some) field research. It is estimated that in total the project will require 350 project days, with 60% on senior level, with a maximum budget of € 300 000 VAT excluded.

## **I.7. TIMETABLE**

The results of the first phase have to be delivered by the end of October, in order to get them presented at the second European Maritime Policy Conference. Clearly, this requires a fast start-up and a strict and solid time frame.

## **I.8. QUALIFICATIONS**

In this project it is not only important to collect information on statistics, but also to start a discussion with the stakeholders and to bridge the differences in interpretation and definitions between the countries. Therefore, a process approach should be followed as to bring a common knowledge base into the respective cluster organisations in the EU-25. This also provides a platform for discussing different interpretations of the data from different statistical sources.

### *Minimal qualifications*

The candidate should be very experienced in the maritime industry and be able to prove his expertise and experience with this type of data assessment.

Furthermore the candidate should prove that he has the necessary qualifications:

- expertise in the different maritime sectors;
- experience with practical analyses of cost structures in maritime industries;
- in-depth knowledge for at least half of the sectors that have been distinguished;
- earlier study work for at least half of the EU-15 and 2 of the other 10 member countries, preferably on shipping or another strongly demand generating maritime sector;

- thorough understanding of inter-country input-output analysis and corresponding methodological tools.

The technical qualifications of the candidate should be detailed by providing a short review of the main qualifications of the candidate and by including extensive CV's of all members of the proposed project team.

## **I.9. OUTPUT**

The main outputs of the project can be summarised as follows:

- a proposal for a European standard for maritime cluster and sector definitions, taking into account present practices and regular statistical sources, ensuring a best possible fit;
- an assessment of the availability and quality of economic and statistical studies and data for the EU-25 countries + Norway, and equally an assessment of non-available data;
- an outline Terms of Reference for a possible research study for the EU-25 countries + Norway to collect "missing data" and to work out procedures for practical statistical updates based on Eurostat material, with a view to develop input-output analysis for the European maritime cluster on a regular basis.

## **I.10. AWARD CRITERIA**

The award criteria are a combination of quality and price.

The quality criterion is very important and will be judged on the proven experience with this type of research. It is understood that the assessment of data and judgment in order to come to relevant management information is an important but time-consuming task, which requires a deep sector knowledge (more than statistical skills).