Estimating the size of Europe's Blue Economy

To: MSEG IMP - meeting 29 September 2015 concerning the size of the Blue Economy

Date: 23.09.2015

NL view on the topic:

- Netherlands welcome the efforts to better underpin the significance of the Blue Economy. Not
 only by means of figures on the size in Euros or jobs, but certainly in more socio-economic
 terms and policy relevance. Therefore emphasis on the nature and dynamics of the blue
 economy for the European population and in relation to the global market which the blue
 economy is is further welcomed.
- Even though in our maritime monitor we do not calculate coastal tourism, our estimates of the size of our maritime blue economy are substantially higher than the estimates in the reports on Blue Growth made for the European Commission: 21 billion (including 4.5 indirect) gross value added, and 49 billion direct and indirect production value, versus 13 billion (see annexes).

NL efforts on the topic:

NL have an annual "harbor monitor" and "maritime (cluster) monitor since the early 2000ths – since 2013 these two have been "married", working with the Central Bureau of Statistics to improve the methodology. Please see annex 1 – summary NL maritime monitor 2014. Efforts to estimate the socio economical importance of the North sea/ socio-economic description of the marine environment as part of the implementation of the Marine Strategy (MSFD) [excluding the landside parts of the blue economy to a large extend]. A clearer understanding of the behavior of coastal tourists is being studied upon.

NL policy ambition on the topic:

- 1) To be able to **benchmark** the Dutch Maritime Cluster performance with clusters in other Member States and relevant players like Norway.
- 2) Have a clear **policy story** when talking about the (green) Blue Economy: what is the social impact of the blue economy to the Europeans? What is the cultural significance of the blue economy? How does the blue economy shows itself on a day to day basis? And where is the blue economy taking us? In order to firmly put the blue economy on the policy agenda, an answer to these questions is as relevant as a prudent (statistical) economic underpinning.
- 3) Having a clear understanding of the inter EU market and the importance of EU exports outside the EU (global market) what should we do in the field of **economic diplomacy**?
- 4) Involving the industry: it is our experience that close cooperation with stakeholders is vital to boost the blue economy. Gaining a better insight in the structure and performance of the sector(s) and the (statistical) economic underpinning thereof should be carried out in close cooperation with these sectors. NL advocate to involve the European Network of Maritime Clusters in the studies and the **peer review group** to be installed. NL suggest to follow up the idea of connecting the coastal and maritime tourism cluster with the maritime clusters as presented during the conference on 20 January 2015¹ to tackle the topic of coastal and maritime tourism.
- 5) **Minimize duplication in efforts**: we note efforts made for the implementation of the Marine Strategy Framework Directive. Economic indicators are required under the Initial Assessment. Work is ongoing in OSPAR, but with a different geographical scope on the coastal area.

NL reflection on the non-paper dated 15.09.2015

1) **Oil & gas** – it's vital to recognize that Dutch gas production is 75% onshore and 25% off shore – in contrary to the assumption in the non paper that all gas activity is offshore. For oil the

¹ Smart cooperation in coastal and maritime tourism - Encouraging transnational partnerships through clusters and networks - <u>http://ec.europa.eu/enterprise/newsroom/cf/itemdetail.cfm?item_id=7848</u>

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assumption is correct (100% off shore). If we look at the headquarter of the Dutch Gas Company (NAM), it's located in Assen – outside of the geographical area of 50Km from the coast: how do we calculate staff working there on offshore activities?

- 2) Ship building in the non paper on page 7 it's stated that turnover in shipbuilding (35 billion Euro's) is already largely included in accounts of shipping, oil and gas and fishing industry. NL argue that for some MS a vital niche in shipbuilding exists with a high impact, which ought to be reflected. The super yacht industry in NL has a turnover close to 1 billion a year. Almost half of the shipbuilding turn over for the country. For Italy this is also an important market.
- 3) The size of the blue economy in monetary terms: NL note that the bottom-up approach and the top down approach both result in a similar estimate of the size of the blue economy (approx 450 billion) – the indicators in table 2 however mix turnover, investment, gross value added and revenue. Methodically difficult to explain.
- 4) Given the notion that half (!) of Blue Economy is (coastal) tourism, NL argues that this is a vital sector to be elaborated upon. For leisure/recreation it might be possible to come up with a better line of argumentation. For example: it's without a doubt that the turnover/added value of our 400 beach pavilions (159 million 2013) is part of our blue economy. It's also quite clear where this sector is heading, turning more and more into a year round business. This turnover might be a clearer indicator than nights spent in hotels in The Hague, even for those located close to the beach. We agree to filter out travel for business to a certain extent (and try to estimate the travel for business related to the maritime clusters .e.g). Work is ongoing in the Netherlands to use data from phone companies to get a better understanding what 'coastal tourist' are actually doing with the aim to better understand how coastal tourism is interrelated to the non-coastal tourism.
- 5) **Government spending**: NL welcome a clearer picture of the efforts (and spending) by governments (on all levels), even if it remains a policy story. Fishing inspection, coast guard efforts, harbor patrol, traffic support and education seem straightforward topics to bring under the umbrella of the blue economy. Some of these services are incorporated in the Dutch monitor.

NL reflection on the non paper questions :

(1) the definition of the blue economy (section 2.1);

- In general the definition of the blue economy proposed works fine (1) primary sectors and (2) secondary sectors. We feel that (3) smaller sectors ought to be included too.
- For communication purposes we suggest to work on a communication line to explain what (market) activities are intrinsically linked to the sea. A few examples: (a) seaweed is a component in chocolate milk and toothpaste. (b) influences of the sea on whisky <u>https://www.masterofmalt.com/blog/post/coastal-whisky-the-curious-relationship-betweenwhisky-and-the-seas.aspx</u> (c) the traditional sea salt industries in e.g. France, Portugal, Spain and Greece [note extraction of salt is in the figures in appendix 1] (d) the blue bio technology industry (pharmaceutics), (e) scientific research and other government expenditures (education, fishing inspection, coast guard functions).
- (2) the main sectors identified (has any important contribution been forgotten?);
- NL miss the cruising industry as a relevant market in the non-paper. It is believed (a.o. by the industry itself) that cruising in many ways and forms still has an enormous growth potential. We do not see cruising as a separate indicator in the non paper.
- (3) the assumptions made (focus on market economy, neglecting business travel or day trips, etc);
- In general NL see a similar result using the bottom-up approach uses in the Blue Growth studies and the top down approach towards GDP (approx 450 to 500 billion). For high level communication purposes NL have no preference for one specific approach. For benchmarking within the EU and outside a bottom-up approach seems more suitable. For the Dutch maritime

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monitor a combination of the top-down and bottom-up approaches is been used (see the summary of the used methodology in the background information on page 4).

- We would like to see the summed up figure for the Blue economy of the EU if the Dutch maritime cluster monitor approach would be used in combination with the final calculations on coastal and maritime tourism.
- NL agree to filter out travel for business to a certain extent (and try to estimate the travel for business related to the maritime clusters .e.g). We recommend to have day trips included and be more specific on tourism (EU internal and incoming from outside EU) in general.

(4) the estimate of number of people employed (in EU and Member States);

• We in general agree with the estimate of 5 million direct and indirect numbers of employees. Also because we have no evidence that the number is off by more than 5%. We would welcome a better explanation of the indirect (upstream and downstream) jobs. This would be useful for communication purposes. Question remaining is to whether or not take on board governmental/scientific/educational jobs. NL would welcome such an attempt.

(5) the conclusions regarding growth rate;

- Concerning the disagreement in dynamics in shipping employment NL suggest to have a look into the effect of changes in flags of vessels and see if that helps clarify the differences found.
- (6) the most appropriate approach for estimating the contribution to GDP.
- See (3).

NL reflection on Eurostat background document:

NL appreciate the efforts put into compiling the background document and see it as a worthwhile start for a discussion. A few comments at this point in time:

- Similar topics arise for discussion as in the non paper which is on the agenda for the 29th of September mainly geographical scope on coastal areas and being more specific on coastal tourism, but also on the contribution of landlocked countries, who are players and important in the value chain, specifically when taking an EU perspective on the matter.
- On page 18 Eurostat mentions under 'main economic activities' : « public administration, defence, education, human health and social work activities'. This is not elaborated upon. We would like to see a story line and potentially figures in this regard.
- NL does not understand the reason why in figure 18 (page 13) no data for the Netherlands is found on value added of the maritime manufacturing sector. As explained building of ships and floating structures, pleasure and sporting boats and repair and maintenance are important activities in the Dutch Maritime Cluster. This is particularly odd given the data on the number of enterprises where in figure 19 where NL is reflected.
- NL wonders if Eurostat gathers information on order portfolios of for example the ship building industry. Portfolios are an important indicator for the short and midterm economical forecast.
- Same goes for information on job openings in the blue economy with a specific focus on the positions which are difficult to fill and efforts to get the needed workforce with required skills. Hence education and training is an important pillar of the NL maritime strategy 2030.

Q&A: filtering out effects of capital cities: a subject for future analysis?

NL feels that there is something to be said for filtering or correcting statistics for capital cities, and/or even for cities which are major economic hotspots. The reasoning being that such cities in some Member States are found in the "coastal region" and in some Member States these are not. In NL Amsterdam, Rotterdam and The Hague are within the coastal region. The reason NL is looking at the maritime cluster and later on adds the coastal tourism and recreational sector (in some calculations e.g. for the Marine Framework directive) is the spread of the cluster over the country.

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Background info on estimation size NL blue economy

Blue Growth Study Ecorys March 2014 for MARE

The Netherlands has a diversified maritime economy, worth at least € 13 bn., and employing about 140,000 across 9,000 enterprises. Deep-sea and short-sea shipping are important and centred around the Rotterdam and Amsterdam ports, as well as some other harbours. Off-shore oil & gas is the second largest maritime industry, however growth prospects are bleak. Attention is shifting towards construction of water projects, which has grown steadily over the past years. Key industry players are presenting solid average annual growth year by year also through mergers and acquisitions (e.g. of Smit-Tak by Boskalis). Innovation is one of the main drivers of growth in the sector and research institutes such as TU Delft and Deltares help to strengthen the competitive position of the maritime economy in the Netherlands and its export potential. Shipbuilding remains important in the north of the country. Inland waterways and yachting count a large number of small enterprises.

Dutch Maritime Monitor (Ecorys 2014)

In 2013, the direct and indirect production value was almost \in 49 billion. The total value added amounted to \in 21 billion, including 4.5 billion indirect value added. This means the maritime cluster generates 3% of the total GDP of The Netherlands. The sector provided employment for around 224,000 people, which is around 2.5% of total employment in The Netherlands. Of these jobs, 158,000 were direct employment. The Maritime Cluster consists of around 12,000 enterprises.

Ecorys has carried out a monitoring study for the maritime cluster, on behalf of the Ministry of Infrastructure and Environment and in cooperation with Maritime by Holland (Stichting Nederland Maritiem Land). The maritime cluster consists of the following maritime sectors: shipping, shipbuilding, offshore, inland shipping, dredging, ports, navy, fishing, maritime services, watersports industry and marine equipment supply. The study consists of a description and analysis of the economic and labour market for 2013 as well as the trends on these markets for the years 2006-2013.

Methodology of the Dutch maritime monitor [summary]

To establish the economic impact of the eleven sectors in the Dutch maritime cluster three steps have been followed:

- 1) Demarcation of the sector;
- 2) Determining the number of enterprises and number of employees;
- 3) Determining the turnover, production value, added value and export.

When statistical / public data is available on sector level, a top down approach has been followed. If such data is not or only partially available a bottom up approach is used. This is the case for four sectors: shipbuilding, offshore, dredging (hydraulic engineering) and maritime services. The main source of data for the bottom up approach is the National Information Database on Employment (LISA).

Further explanation can be given on the methodology, but this requires translation into English.

Summary

Background and purpose

Ecorys has carried out a monitoring study for the maritime cluster, on behalf of the Ministry of Infrastructure and Environment and in cooperation with Maritime by Holland (Stichting Nederland Maritiem Land). The maritime cluster consists of the following maritime sectors: shipping, shipbuilding, offshore, inland shipping, dredging, ports, navy, fishing, maritime services, watersports industry and marine equipment supply. The study consists of a description and analysis of the economic and labour market for 2013 as well as the trends on these markets for the years 2006-2013.

Methodology and comparison with the Maritime Monitor 2013

The methodology of the Maritieme Monitor 2013 needed to be revised for several reasons. Due to the fact that the Dutch Central Bureau of Statistics has revised their statistics in 2014, the resulting figures are not the same as presented in the previous Monitor study (Maritime Monitor 2013). Because the revision of figures has only taken place for the years 2010 and beyond, the figures for the period 2006-2009 have been calculated based on the trends reported in the Maritime Monitor 2013 over the same period. This trend has been projected on the figures for 2010 in order to achieve a continuous timeline from 2006 until 2013.

In addition to this revision, the methodology for the sector Maritime Services and Watersports industry has been changed. Finally the company lists used for the sectors dredging, marine equipment supply and offshore has been updated in order to be representative for the sector. Consequently more companies have been taken into account. As a result the figures presented in this Monitor are not comparable with the ones from the Monitor of 2013.

The Dutch maritime cluster in 2013

In 2013, the direct and indirect production value was almost \in 49 billion. The total value added amounted to \in 21 billion, including 4.5 billion indirect value added. This means the maritime cluster generates 3% of the total GDP of The Netherlands. The sector provided employment for around 224.000 people, which is around 2.5% of total employment in The Netherlands. Of these jobs, 158,000 were direct employment.

An overview of the location of the establishments of the Dutch companies within the Dutch maritime cluster is given in the next figure. It can be seen that there is a concentration of maritime related companies in the western part of the country (area of Rotterdam).

Figure 0.1 Regional spread of the establishments of Dutch companies that are part of the maritime cluster in 2013 (excl. establishments in the sector ports)



Evolution of the Dutch maritime cluster until 2013

The direct employment in the Dutch maritime cluster increased in 2013 by 1,300 persons compared to 2012 employment figures. Total production value and value added also increased by \in 610 million (2%), respectively

€ 266 million (2%). In 2013 the maritime cluster performed better compared to the Dutch economy as a whole where employment decreased with 1.3% (compared to a 1% increase for the maritime cluster) and the increase in Dutch GDP (+0.3%) was smaller compared to the increase in value added of the maritime cluster (+2%). Total exports of the maritime cluster amounted to € 21 billion in 2013. This means the cluster has a share of 4% of total Dutch exports of goods and services.

The graphs below present the index figures of the developments in direct value added and direct employment per maritime sector, for the period 2006-2013 (2006 is the base year and set at 100).

Shipping, fishing, shipbuilding, the navy and inland shipping generated a (direct) value added in 2013 which was below the level of 2006. For the sectors shipping and inland shipping this is caused by low tariffs resulting from overcapacity in the sector. In the fishing sector traditional fishing suffers from high fuel costs, decreasing productivity at mussel farms and lower revenues in the pelagic fishery. In the shipbuilding industry the lower value added results from a lower employment number. The added value of the navy has declined due to a cutback in expenses.

The number of employees is more stable in 2013 compared to 2006 than the value added. In the sector dredging, the number of employees increased the most, followed by the sectors offshore, ports, shipping, maritime services and marine equipment supply. Employment in the sectors navy, shipbuilding, watersports industry and fishing declined. In inland shipping (direct) employment remained stable.





Labour market

Total employment in the maritime cluster increased by 1,300 jobs compared to 2012 (+1 %). In the same period the employment in the Dutch economy decreased by 1.3%. The employment in the maritime cluster (including indirect employment of 66,000 persons) accounts for about 2.5 % of the employment in the Dutch economy. In particular new jobs were created in the dredging sector and the offshore sector.

Notwithstanding the slight increase in employment the current demand for new staff is modest, excluding the shipbuilding and navy sectors. These two sectors both report a relatively high number of vacancies, which to a large degree are difficult to fulfil. For the near future most sectors expect difficulties with finding the right employees for high qualified technical positions. This labour demand is mainly caused by the

retirement of older employees. Greying of the working population plays a role in most sectors, especially in the water sports industry and with the navy.

The employment situation in the maritime cluster is increasingly characterised by more flexible contracts. In line with the overall trend in the Dutch economy the share of temporary staff increased in most maritime sectors.





Innovation

The maritime sector will have to remain innovative in order to be competitive. The expenses for R&D by the maritime cluster amount to 3.9% of the value added. This is considerably higher than the current average of 2% (of the GDP) for the Dutch economy as a whole. The Dutch maritime cluster performs better compared to the benchmark set for R&D by both the European Commission (3% of GDP) and the Dutch government (2.5% of GDP).

Future developments

The importance of the offshore industry for the maritime sectors has increased significantly over the past years and has provided a large boost to several maritime sectors. Shipbuilders have become more focused on building maintenance and support ships, shipping companies are focussing on the market for offshore support and the maritime equipment suppliers have received more orders from the offshore sector. The offshore sector itself has also benefitted from the increased activities.

In the coming years, offshore activities, including the development, production and distribution of wind energy will continue to be important for the Dutch maritime cluster.