



Study feeding into the mid-term review of the implementation of the Atlantic Action Plan

DIRECTORATE GENERAL FOR MARITIME AFFAIRS &
FISHERIES

Final Report

December 2017



Building a better
working world

EUROPEAN COMMISSION

Directorate General for Maritime Affairs and Fisheries

Unit A3 – Sea basin strategies, Maritime Regional Cooperation and Maritime Security

E-mail: MARE-A3@ec.europa.eu

*European Commission
B-1049 Brussels*

***Europe Direct is a service to help you find answers
to your questions about the European Union.***

Freephone number (*):

00 800 6 7 8 9 10 11

(* The information given is free, as are most calls (though some operators, phone boxes or hotels may charge you).

LEGAL NOTICE

This document has been prepared for the European Commission however it reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

More information on the European Union is available on the Internet (<http://www.europa.eu>).

Luxembourg: Publications Office of the European Union, 2018

ISBN 978-92-79-79982-2

doi: 10.2771/617404

© European Union, 2018

Table of contents

1.	Context	7
1.1	Presentation of the Atlantic Area	15
1.2	The Atlantic Strategy and its Action Plan.....	21
2.	Introduction	28
2.1	Objectives and scope of the evaluation.....	29
2.2	General approach and timeline	30
3.	Evaluation findings	32
3.1	Relevance & coherence of the Action Plan	33
3.2	Effectiveness of the Action Plan.....	42
3.3	Implementation & efficiency of the Action Plan.....	59
3.4	Impact & sustainability of the Action Plan.....	65
3.5	EU added value of the AAP	104
4.	Conclusions & Recommendations	106
4.1	Transversal conclusions.....	107
4.2	Summary table of recommendations.....	110
5.	Annexes	116
5.1	Intervention logic & evaluation framework.....	116
5.2	List of interviews	129
5.3	Methodology for the project monitoring database	133
5.4	Open Public Consultation	138
5.5	Project case studies.....	147
5.6	Regional case studies.....	166
5.7	Overview of national & regional strategies analysed	202

Figures & tables

Figure 1: Simplified intervention logic of the Action Plan	8
Figure 2: Distribution of the number of projects by Specific Objective	12
Figure 3: Distribution of investment (M of EUR) by Specific objective	12
Figure 4: Repartition of funding by Member State.....	13
Figure 5: Population growth across the Atlantic area (2014-2016)	15
Figure 6: GDP per capita across the Atlantic area (2015).....	16
Figure 7: Tertiary Education across the Atlantic area (2015)	18
Figure 8: Unemployment across the Atlantic area (2016)	20
Figure 9: Timeline of development of macro-regional and sea basin strategies across the EU	22
Figure 10: Schematic presentation of the governance and implementation system	26
Figure 11: Overview of the evaluation approach.....	31
Figure 12: OPC - With regards to the ten specific objectives of the Atlantic Action Plan, to what extent do these still correspond to the needs in the Atlantic area?	34
Figure 13: Extract of the 'intervention logic' of the Atlantic Action Plan.....	42
Figure 14: OPC - Has the Atlantic action plan been able to achieve any of the following results?	43
Figure 15: OPC – To what extent has the action plan influenced policy developments in line with its priorities at...?.....	45
Figure 16: Distribution of ESIF resources (planned) by Member State and Fund in the Atlantic area (including Atlantic regional OPs and national programmes, excluding TA)	47
Figure 17: Distribution of planned ERDF & ESF commitments by Thematic Objective in the Atlantic Area (including Atlantic regional Operational Programmes, national programmes and transnational cooperation programmes)	50
Figure 18: Distribution of relevant planned ERDF & ESF commitments by Action Plan priority (based on evaluator analysis of intervention fields)	51
Figure 19: OPC - To what extent has the action plan had an influence on the priorities of different funding sources (so as to create new funding opportunities for Atlantic priorities)?	52
Figure 20: OPC – In your opinion, what are the main bottlenecks regarding the implementation of the Action Plan?.....	60
Figure 21: OPC - How useful is the Atlantic assistance mechanism for the implementation of the action plan in terms of...?	63
Figure 22: Distribution of the number of projects by Specific Objective	66
Figure 23: Distribution of investment (M of EUR) by Specific objective	66
Figure 24: Repartition of funding by Member State.....	67
Figure 25: Breakdown of projects related to Specific Objective 1.1/1.2 by country	72
Figure 26: Distribution of total expenditures related to Specific Objective 1.1 & 1.2 (M of EUR)	72
Figure 27: Breakdown of Specific Objectives 1.1 & 1.2 projects by source of funding (budget invested)	73
Figure 28: Breakdown of Specific Objectives 1.1 & 1.2 projects by source of funding (number of	

projects financed)	73
Figure 29: Distribution of total expenditures supporting Specific Objective 2.2 (M of EUR)	81
Figure 30: Breakdown of projects supporting Specific Objective 2.4 by country	86
Figure 31: Distribution of total expenditures supporting Specific Objective 2.4 (M of EUR)	86
Figure 32: Breakdown of Specific Objective 2.4 projects by source of funding (budget invested)	87
Figure 33: Breakdown of Specific Objective 2.4 projects by source of funding (number of projects financed)	87
Figure 34: International cooperation mechanisms of relevance to the Action Plan	94
Figure 35: OPC - Overall, to what extent has the action plan achieved its key priorities in terms of:..	95
Figure 36: OPC - Do you believe the action plan has allowed the Atlantic area to accomplish more than what could be achieved by the Member States individually?	105
Figure 37: Action Plan intervention logic	116
Figure 38: Structure of the evaluation grids	119
Table 1: Overview of the Atlantic Action Plan	23
Table 2: Comparison of the architecture of the Action Plan with other action plan documents	38
Table 3: Comparison of the SDG 14 targets with the Action Plan	38
Table 4: Overview of largest projects supporting Specific Objectives 1.1 & 1.2	70
Table 5: Overview of largest projects supporting Specific Objective 1.3	74
Table 6: Overview of largest projects supporting Specific Objective 2.1	77
Table 7: Overview of largest projects supporting Specific Objective 2.2	79
Table 8: Overview of largest projects supporting Specific Objective 2.3	82
Table 9: Overview of largest projects supporting Specific Objective 2.4	84
Table 10: Overview of largest project supporting Priority 3	88
Table 11: Overview of largest projects supporting Specific Objective 4.1	90
Table 12: Overview of largest projects supporting Specific Objective 4.2	92
Table 13: Summary table of recommendations	111
Table 14: Interview list	129
Table 15: Overview of project monitoring database data sources	135

Executive Summary



Executive summary

Context

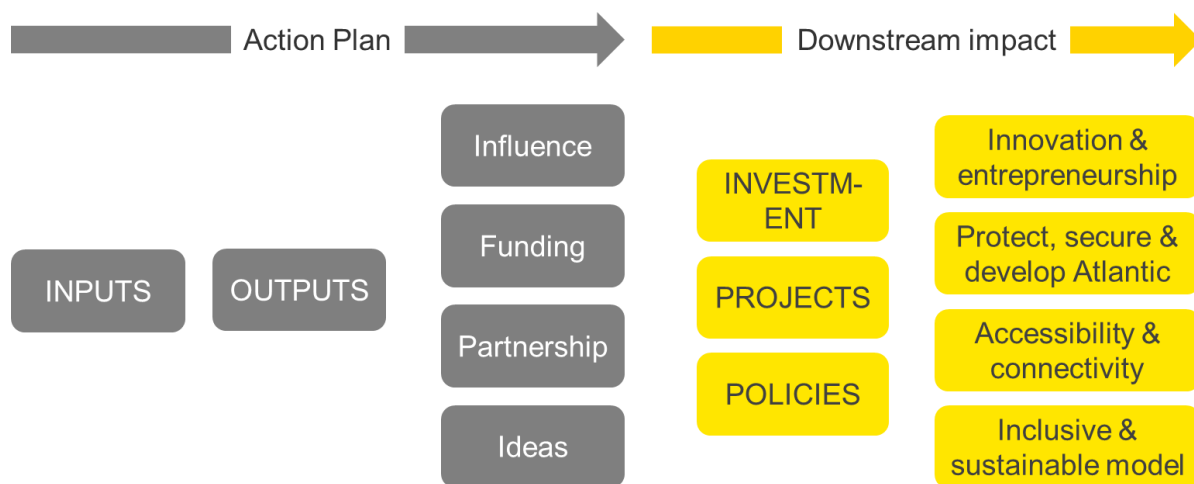
One of the pillars of the EU's Integrated Maritime Policy, the concept of Sea Basin Strategies is based on the idea that each sea region is unique and requires its own tailored strategy that takes into account its unique strengths, weaknesses, threats, opportunities and challenges. Their development (along with the concept of 'macro-regional strategies' more generally) was pioneered in the Baltic Sea region, which adopted its macro-regional strategy in 2009. The experience in the Baltic Sea gave rise to calls for a similar initiative in the Atlantic. While the same 'macro-regional strategy' tool was not taken up, a Commission Communication on *Developing a Maritime Strategy for the Atlantic Ocean Area* was adopted in 2011. This was followed by the development of an accompanying Atlantic Action Plan over the course of 2012 – 2013 and its adoption in 2014. The Action Plan is structured around four priorities and ten specific objectives. In addition, a total of 37 actions under 20 headings targeting activities and focus areas at a project level have been identified.

Approach & work undertaken

The Atlantic Action Plan states that *the Commission will closely monitor [its] implementation, draw lessons learnt and assess progress made [and] prepare a mid-term review of the implementation... before the end of 2017*. In this context, DG MARE requested an independent evaluation study to feed into the mid-term review. The objectives of the present study were to provide analyses and draw useful conclusions on the relevance, the coherence, the implementation, the effectiveness, the EU added-value and the impact and sustainability of the Action Plan. The results were the basis for the identification of recommendations aimed at improving the next stage of implementation.

The reconstruction of the Action Plan's intervention logic was developed on the basis of the Action Plan document and the evaluator's own reasoning. As an Action Plan with no dedicated financing instrument, it was necessary to separate conceptually the impact of the Action Plan itself from the wider impact generated downstream by projects, policies, and other actions and decisions *influenced* by the Action Plan (see annex 1 for the detailed intervention logic).

Figure 1: Simplified intervention logic of the Action Plan



On the basis of the intervention logic presented above, an evaluation framework was developed providing an overarching analytical structure for the evaluation. This framework was developed around eight evaluation questions grouped into five groups corresponding to the standard evaluation criteria used at EU level (see annex 1).

The evaluation was implemented in three sequential phases running from April to November 2017. The inception phase included primary documentary review and scoping interviews, as well as the design of the intervention logic, evaluation framework and data collection strategy and tools. The data

collection phase was launched upon validation of the Inception Report at the end of May 2017. It consisted of documentary review, an interview programme, five regional case studies and ten project case studies. Overall, over 130 interviews were conducted with stakeholders across the EU, including some 50 face-to-face interviews with stakeholders during the five regional case studies. A project monitoring database was also developed including approximately 1 200 projects identified as contributing to the Action Plan. The final phase of the evaluation (Analysis & reporting) consisted of the compilation and analysis of all data collected and the formulation of conclusions and recommendations.

Evaluation findings

The evaluation found overall that the Action Plan is a relevant document in that it reflects the wide range of needs and challenges that can be observed across the Atlantic area, all of which remain relevant today. The inclusive nature of the Action Plan is appreciated by many stakeholders and provides flexibility in implementation. Nonetheless, some priorities may need to be enlarged or clarified to ensure that specific needs, challenges and opportunities are taken into account (see section 3.1.1). The Action Plan is also generally well aligned with the strategies and priorities of relevant actors at EU level and beyond.

While being inclusive of the diversity of needs in challenges, the Action Plan does not adequately prioritise specific Atlantic challenges and areas of high added value for EU cooperation. The Action Plan explicitly references and is well aligned with all relevant policy frameworks (e.g. CFP, Blue Growth, MSP, MSFD, etc.), but it generally limits itself to ‘contributing’ to or ‘supporting’ their implementation in the Atlantic, rather than identifying specific challenges or obstacles that are unique to the Atlantic area. It thus can be characterised as a somewhat generic document and offers little additionality compared with the existing policy framework.

Finally, the document does not reflect widely accepted best practices in terms of developing operational documents. It does not set out specific and concrete objectives, or a framework for monitoring and evaluating success. Nor is there any indication of the relevant parties responsible for implementing the actions or an analysis of the instruments that can be mobilised to support the different priorities and objectives.

RECOMMENDATION

- ▶ **Review the priorities of the Action Plan in order to provide sharper focus on i) areas with clear added value for sea-basin level cooperation, and ii) opportunities and challenges specific to the region and not well supported in transversal policy documents in order to achieve greater additionality. Consider restructuring the architecture of the Action Plan to improve its internal coherence and introduce best practices.**
- ▶ **Set out specific, measurable attainable and attributable indicators for the Action Plan in order to better manage implementation and measure the ultimate impact.**

A more detailed presentation of recommendations is available in section 4.2.

Policy evolutions and funding priorities at EU and national level were found to be largely supportive of and aligned with the priorities of the Action Plan. However, this is primarily a function of the broad nature of its objectives and alignment with existing priorities rather than evidence of the direct influence of the Action Plan. In particular, the Action Plan struggled to achieve a significant influence on the programming process for ESIF for 2014 – 2020. The requirement in the Common Provisions appears to have been effective in raising awareness of the document, but much less so in terms of spurring Managing Authorities to take concrete steps to support the Action Plan. ‘Softer’ measures implemented to influence the programming process do not appear to have had much more success. More generally, the evaluation found that a lack of systematic and structured engagement with relevant stakeholders and the very broad nature of the

Action Plan objectives did not help achieve influence on funding priorities and strategies.

RECOMMENDATION

- ▶ **Continue efforts to direct greater funding towards Action Plan priorities and coordinate existing instruments.**
- ▶ **Strengthen the role and mandate of the Atlantic Area Interreg programme in supporting implementation of the AAP.**

Nonetheless, some successes can be noted, notably the funding provided through H2020 in support of the implementation of the Galway Agreement, referenced in the Action Plan. To back up the political commitment behind the Galway Statement, dedicated H2020 calls were published in 2014 – 2015 to support research in the Atlantic area in priority areas. These calls contributed directly to the ‘international dimension’ of the Action Plan, as well as Priority 1 & 2 objectives.

On the other hand, the Action Plan has contributed to strengthening the community of actors in the Atlantic area, raising awareness and building support for a common set of priorities. The Atlantic Forum initiative launched to frame the process of elaborating the Action Plan was highly successful in creating momentum and buy in and events organised regularly since the launch of the Action Plan continue to provide a platform for networking and information dissemination. While the Action Plan has contributed to deepening the community of actors in the Atlantic, it has struggled more to widen it beyond stakeholders with strong experience participating in EU level cooperation and bring new stakeholders into the fold. Much of the networking that Action Plan events have supported has thus been largely between already well integrated communities of actors, limiting its ultimate added value.

Knowledge and awareness of the Action Plan ‘on the ground’ varies significantly by type of stakeholder and sector. There exists a strong core of stakeholders with a general to detailed knowledge of the Action Plan, including in particular universities and research centres, as well as clusters and other intermediary organisations working with members to mobilise EU funds. Beyond this core group, a second group consisting mainly of public authorities can be identified with a much more varied level of knowledge. Finally, a third group of stakeholders was identified with generally little to no knowledge of the Action Plan or Atlantic Strategy. This includes a wide array of relevant actors.

Considering the level of knowledge by sector, research & innovation actors tend to be the most knowledgeable of the Action Plan and display the highest level of ownership. In other sectors, one can note a relatively lower level of general awareness. This includes some surprising communities that were strongly targeted by the Action Plan, such as fishing & aquaculture, marine renewable energies, environmental conservation & protection, maritime safety and security or tourism.

The Action Plan has not contributed to supporting the launch of new projects, or meaningfully influencing projects in their development. While networking opportunities implemented through the Action Plan and the general momentum created have provided appreciable motivation to stakeholders across the region to pursue their project ideas, it has not been able to provide significant support to successfully launching new projects. As already described, the Action Plan had only limited success increasing the availability of funding to support its implementation. On the other hand, services designed to support project promoters have been of limited use or relevance to users. Aside from projects supported through H2020, it is difficult to attribute any projects directly or even indirectly to the Action Plan. Of the large number of project promoters consulted, all considered that their project would have been launched in absence of the Action Plan.

RECOMMENDATION

- ▶ **Place greater emphasis on demand rather than supply-side stimulation to drive**

implementation of the Action Plan through enhanced and optimized support to project promoters.

The lack of dedicated funding is almost universally underlined as an impediment for implementation by stakeholders. Evidence collected would support that the lack of funding has tended to undermine raising awareness of the Action Plan and achieving influence on the 'project level'. While it is difficult to refute these findings, they should not be considered as a deficiency of the Action Plan itself. The Action Plan sought above all to act as a tool to enhance coordination of existing funding sources and policy frameworks and, where possible, direct more funding to its priority areas. At the same time, it is clear that the strategic deployment of a small envelope of funding may be considered as an instrument for enhancing implementation.

The roles and responsibilities of actors implicated in the governance of Action Plan implementation have largely developed organically over time. There is thus scope for greater formalization and development of the roles of different actors, in particular in taking into account relevant best practice from macro-regional strategies. Specifically:

- ▶ Regional, local and civil society stakeholders are not strongly involved in the governance of the Action Plan. The role of stakeholders 'on the ground' is largely seen as developing and implementing projects, with little scope for participation in the governance of Action Plan implementation.
- ▶ The role and objectives of the ASG are not explicit. To date, it has generally been focused on monitoring and steering the work of the Assistance Mechanism, with relatively less discussion of strategy, coordination or projects. ASG members also generally have limited time and resources to devote to Action Plan matters. Finally, the wide range of priorities covered by the Action Plan makes it challenging for ASG representatives to effectively cover all issues.
- ▶ The role of the Commission has not been clearly defined and has developed informally over the years. DG MARE has focused in the first years of the Action Plan on building strong cooperation with DG RTD and DG REGIO. However, strong coordination and cooperation with other Commission Services has been relatively slower to develop. Some other issues, such as high turnover, have also impacted its role.

RECOMMENDATION

- ▶ **Take steps to strengthen the governance & coordination of Action Plan implementation.**

As the only budget line dedicated to the implementation of the Action Plan, the Assistance Mechanism has been an extremely valuable tool. It has satisfactorily performed its designated activities in line with its Terms of Reference. However, the Assistance Mechanism has not been equipped with adequate resources to fully achieve its (overly) ambitious objectives. In particular, the wide ranging set of priorities in the Action Plan contributes to scattering limited available resources across an extremely diverse range of stakeholders. In the context of limited resources, the objectives and tasks may thus need to be better focused more narrowly. Secondly, the objectives and tasks do not appear to always be fully aligned with the most pressing needs identified at different levels. It can also be noted that the role of the Assistance Mechanism duplicates in some cases existing resources available to project promoters at EU level.

RECOMMENDATION

- ▶ **The role of the Assistance Mechanism should be refocused and prioritized to focus on areas of greatest added value.**

Considering the direct impact of the Action Plan to date, its achievements have been more

qualitative than quantitative. Given the findings of the evaluation concerning the effectiveness of the Action Plan, the picture that can be observed today in terms of policy developments and projects being implemented across the Atlantic area would likely have been very similar in the absence of the Action Plan. However, the efforts during the elaboration of the Action Plan and the first years of its implementation have clearly contributed to laying the groundwork for achieving greater downstream impact in the future. They have contributed to developing the community of stakeholders across the Atlantic area and building awareness of the Action Plan and its objectives. They have also helped to put in place networks of policymakers and funding programmes. Finally, the Action Plan has contributed to developing a more comprehensive picture of what is happening across the Atlantic.

While it is difficult to directly attribute the existence (and ultimate impact) of most ongoing projects across the region to the Action Plan, it is nonetheless interesting to take stock of projects that are contributing to its implementation. In addition, a wide range of policy developments at EU and national level have contributed to realising the priorities and objectives of the Action Plan. Looking at projects implemented since 2014, 1 216 unique projects supporting the implementation of the Action Plan were identified in the project monitoring database across the Atlantic area at national and EU level. Together, these projects represented over EUR 6 billion in investment.

As illustrated in the figures below, the most ‘active’ Specific Objectives concerned those supporting entrepreneurship & innovation (1.1 – 1.2) and protecting and exploring the marine environment (2.2). In terms of the volume of investment, the connectivity priority of the Action Plan (3.1) is by far the largest thanks to a number of mega-investments in port development supported by EIB loans and the CEF, followed by marine renewable energies. Notable levels of investment can also be noted in the areas of entrepreneurship & innovation and protecting and exploring the marine environment.

Figure 2: Distribution of the number of projects by Specific Objective

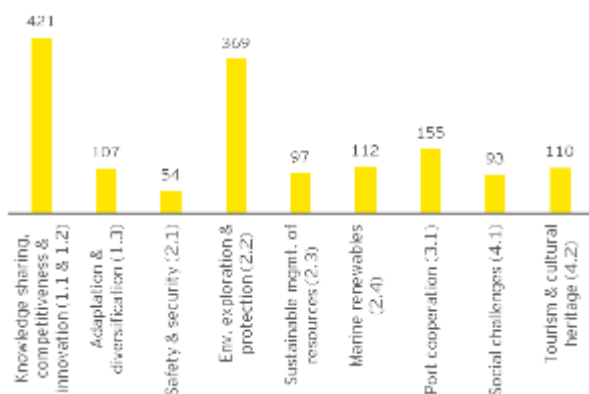
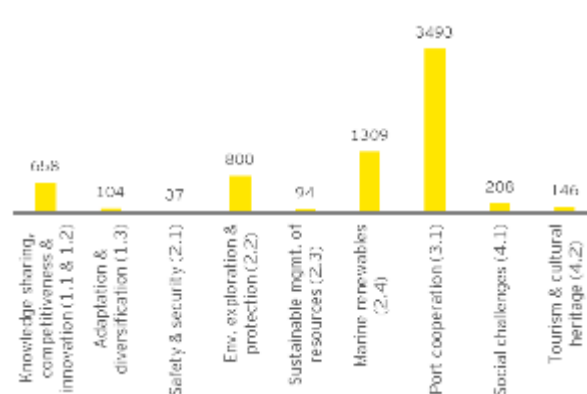
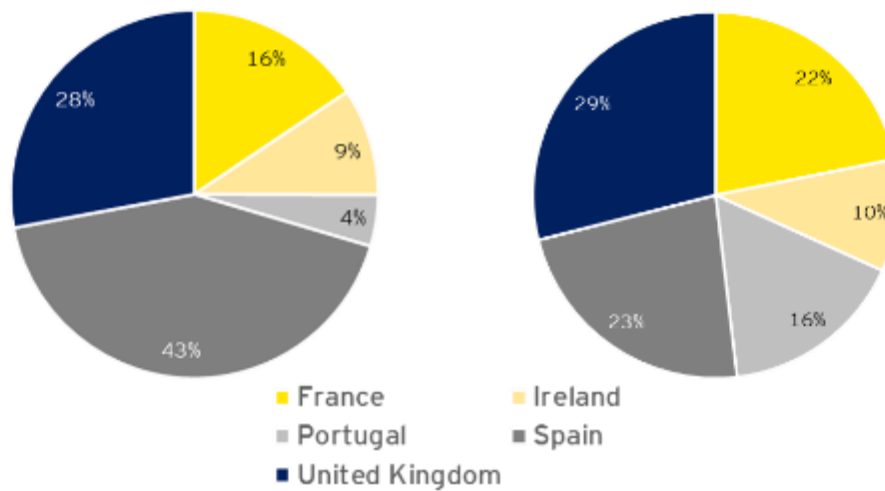


Figure 3: Distribution of investment (M of EUR) by Specific objective



Considering the repartition of spending by Member State, the largest sums were invested in Spain and the UK as can be seen in the figure below. This is in large part due to a small number of large investments (notably through the EIB). For example, the EIB supported a EUR 1,2 billion framework loan for investment in Spanish port development. Likewise, a EUR 800 million investment through the EIB was made in the development of the West of Duddon offshore Windfarm in the Celtic Sea. Discounting these big ticket investments, the repartition of funding across the Atlantic Member States is generally in line with their size. Considering the number of projects in which east Member State participated, one can note a somewhat more equal distribution considering the relative size of Member States. While Spanish actors benefited from the largest amount of funds, they only represented 23% of project participants in all projects. The UK on the other hand displays a higher degree of participation, as does France. While Portuguese beneficiaries only accounted for 4% of overall investment, they represent nonetheless 10% of all participants in projects.

Figure 4: Repartition of funding (left) and project participation (right)¹ by Member State



Finally, although the Atlantic Action Plan aims to foster cooperation across borders and promote initiatives on a transregional and transnational level, it can be noted that most projects remain implemented on a national level. Only around 30% of all projects were transnational in character, involving more than one Member State. These projects were implemented largely through existing EU level cooperation programmes. Priority 1 has the highest percentage of transnational projects, with around 42% of projects being implemented across borders. Priority 2 reflects the average with 31% of projects being implemented on a transnational basis. Under Priority 3, only around 12% of projects were transnational, while under Priority 4, around 20% of projects were implemented across borders. There is little evidence to date of coordination or cooperation between national funding sources across the region.

¹ The number of project participants from each Member State as a proportion of the entire population of participants in the project monitoring database.



Context

1. Context

1.1 Presentation of the Atlantic Area

Five EU Member States share a maritime façade on the Northern Atlantic. The Atlantic area comprises 49 NUTS2 regions from the western and southern part of the United Kingdom, Ireland and Portugal as well as the northern and south westernmost part of Spain and northern and western France. This area includes six Outermost Regions.

Demographic trends

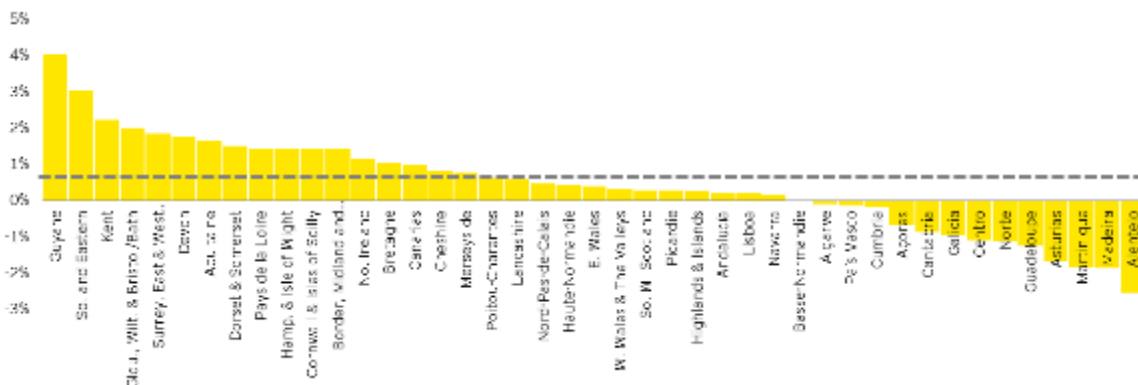
In 2016, the Atlantic Area had a population of 76,1 million inhabitants, including 3,7 million inhabitants in the six Outermost Regions. The more narrowly defined Atlantic Coastal Area (coastal NUTS3 regions) made up 75% of this population, with hinterland areas of the coastal NUTS2 regions generally more sparsely populated. The Atlantic Area population represents 15% of the total EU population and nearly 40% of the population of the five Atlantic Member States.

The region is characterized by a polycentric network of medium-sized urban centres. Atlantic cities, with a few exceptions like Lisbon, Dublin or Bilbao, are not usually classified as “large cities”. The Atlantic area is home to only two Alpha- cities in the Globalization and World Rankings Research Institute. Atlantic cities remain relatively modest in size compared with the major urban centres of the West European ‘backbone’ stretching from North West England to Northern Italy in the south. Most Atlantic cities are peripheral to national economies and geographies. These include cities such as Porto, Seville, Bordeaux, Nantes, Le Havre, Cadiz, A Coruña, Liverpool, Glasgow or Belfast and smaller growth poles.

While harbouring much potential, their size can make it difficult to reach critical momentum alone. In this context, cross-border cooperation between cities has long been a strategy in the region going back to medieval trading relationships. In recent decades, these inter- and intra-networks have thrived in the context of European Territorial Cooperation programmes. In June 2000, the Conference of Atlantic Arc Cities emerged from an initiative led by the city of Rennes to gather representatives of Atlantic cities and networks of Atlantic cities.

However, the region remains largely characterised by rural and remote areas. The top ten NUTS3 regions, which make up 30% of the total Atlantic area population, are home to as many inhabitants as the sixty smallest regions. A number of regions can even be characterized by an extreme level of isolation, such as the Outermost Regions, some parts of Ireland and large parts of Scotland’s highlands and islands.

Figure 5: Population growth across the Atlantic area (2014-2016)



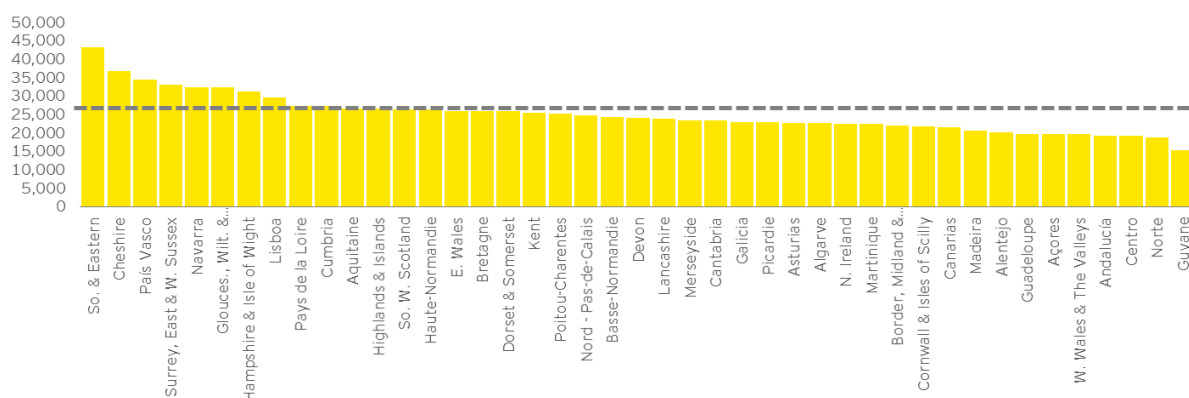
Between 2014 and 2016, the Atlantic Area’s population grew by 0,62%, in line with the overall growth of the EU population – 0,65%. As can be seen in the figure above, many regions are struggling with shrinking populations as local populations age and inhabitants leave in search of

economic opportunities, in particular many parts of Portugal and northern Spain. Overall growth of the region is buoyed by dynamic economies in areas such as southern Ireland, southwestern and southern UK and parts of France.

Economic trends

In 2015, the total GDP of the Atlantic Area stood at EUR 2 175 billion, representing 15% of the EU GDP and 35% of the GDP of the Atlantic Member States. The centres of economic gravity in the Atlantic Area include southern and eastern Ireland, Andalucía, Surrey & Sussex, the Bristol / Bath area and southwest and northern France. These areas represent some 35% of the overall GDP of the region.

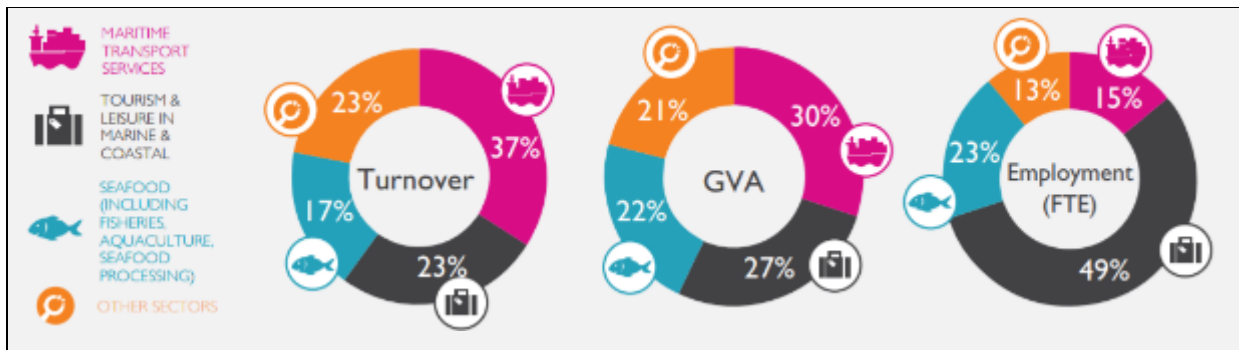
Figure 6: GDP per capita across the Atlantic area (2015)



As can be seen in the figure above, the Atlantic Area is highly diverse in terms of the level of economic development. It includes a number of relatively affluent regions, including southern and eastern Ireland, southern England, parts of northern Spain and the Lisbon metropolitan area. It also includes a number of regions with a GDP per capita significantly lower than the EU average. Aside from the Outermost Regions, this includes the Norte, Centro and Alentejo regions of Portugal, Spanish regions such as Galicia or Asturias, Cornwall & the Isles of Scilly or parts of Ireland.

Few data are available on the overall size of the Blue Economy, in particular its significance in a particular sea basin. No system of indicators based on reliable data exists at present that is capable of measuring the precise effect of activities directly or indirectly relying on the sea. According to the last available figures published by the Commission (2014 ECORYS study on Blue Growth), the total size of the Atlantic Blue Economy, including only those activities that can be allocated to the Atlantic area, was at least EUR 26,8 billion in Gross Value Added, accounting for over 800 000 Full Time Equivalents.

The Socio-Economic Marine Research Unit at NUI Galway has been commissioned by the national Marine Research Programme to monitor and report regularly on the performance of Ireland's ocean economy - work first begun in 2009. According to the most recent report published in 2017, Ireland's ocean economy had a turnover of EUR 5.7 billion. The direct economic value was worth EUR 1.8 billion (approximately 0.9% of GDP) and it provided employment for 30 176 FTEs.



Historic maritime industries such as fishing or ship-building & repair still and will continue to represent a mainstay of economic activity and a large portion of the Blue Economy in many regions across the Atlantic area. In the Cornwall region, for example, two of the three largest employers in the region are in the sector of ship building & repair. However the overall importance of these sectors to national economies has generally been in decline, despite opportunities for regeneration such as the development of aquaculture. Indeed some of the most affluent regions of the Atlantic area today, such as the Cork area of Ireland, have seen an economic resurgence driven primarily by non-maritime sectors (e.g. pharmaceuticals and tech).

However, **a wide variety of other maritime sectors continue to underpin growth and job creation across the Atlantic area.** Coastal tourism and marine leisure, which is estimated to represent a third of the marine economy in Europe overall (EUR 183 million GVA – Commission Study on Blue Growth), is a critical component of many economies in the coastal area. In the Canary Islands, for example, tourism represents a third of the region’s GDP. Marine transport, as well, remains an important sector in most Atlantic Member States. Other emerging Blue sectors also have the potential to contribute significantly to Blue Growth in the Atlantic area in coming years. Estimates published by the Commission in 2014 in its Communication on Ocean Energy put the total number of jobs that could be created in the Ocean Energy sector by 2035 at 26 500, a large majority of which would likely be concentrated in the Atlantic area.

The Blue Economy in the Atlantic area continues to face many challenges to its development. Many of these are common with other sea basins, such as the need for financing or more effective planning. As most Atlantic cities are peripheral to the main urban and economic centres on the national level, they struggle with issues of connectivity. Relying on often fragile secondary connections with major transport hubs, the issue of accessibility and connectivity remains an obstacle to integration and synergies with the rest of the continent.

Research & higher education

The area is home to a healthy ecosystem of R&D&I actors. The Science and Technology Sector across the Atlantic area is well developed and provides ample employment opportunities, employing around 14,5% of the active population on average (approximately 11 million persons overall across the Atlantic area in 2016). Yet there are large discrepancies in the field. While in regions like Surrey, East and West Sussex the Bath Area around 20% of the total population is employed in the S&T Sector, the value drops to 10% in some regions of Spain.

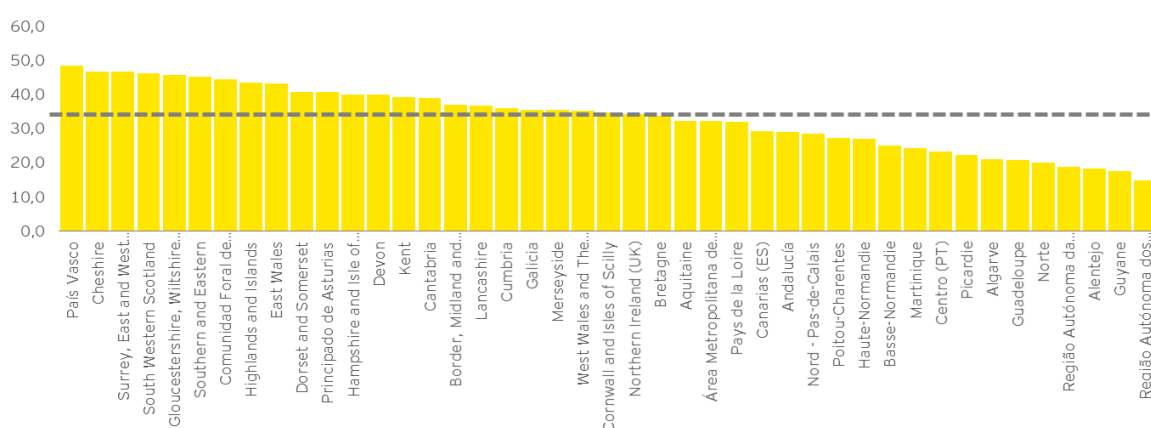
According to the European Cluster Observatory², there are 129 business incubators, clusters

² The European Cluster Observatory is a single access point for statistical information, analysis and mapping of clusters and cluster policy in Europe. More information and source data can be found at: <http://www.clusterobservatory.eu>

and other similar types of innovation organisations across the Atlantic area, including ten clusters focusing specifically on maritime technologies (some also covering other related areas). These are concentrated in Spain, France and Portugal, with relatively fewer in the United Kingdom. Major urban centres with a high concentration of innovation organisations include Porto, Nantes, Bilbao and the Liverpool area. The French region of Brittany also stand out for the number of organisations.

The average level of R&D expenditure does not yet reach the target value of 3% of GDP set out by EU2020. It ranges between 1% and 2% in most regions, with some regions from all involved countries except Ireland threatening to fall below the 1% mark. Only a few regions in the southern United Kingdom manage to attain or exceed the 3% mark. In general, level of patent applications filed in the Atlantic Area lags behind that of Central Europe, with the regions of Bretagne and Navarro constituting an exception. In general, the Atlantic Area shows a medium to low level of patent applications.

Figure 7: Tertiary Education across the Atlantic area (2015)



The Atlantic area is a relatively well educated region. On average 35,4% of inhabitants have a tertiary degree compared with 30,7% at EU level. Yet there are large discrepancies across the different regions as can be seen in the figure above. Some regions, mainly in the United Kingdom have a tertiary education rate of nearly 50% while regions in Portugal and oversea France range around 15%.

Atlantic ports

The Atlantic coastline has long been an important maritime gateway to Europe with a high volume of freight and vessel traffic running up the Atlantic coastline. While the Atlantic area comprises a number of important ports, they have long faced strong competition from Northern European ports preventing the emergence of large super ports in the region. Furthermore, multimodal access to many ports in the Atlantic area is less developed than in other regions of Europe. This is especially prevalent in the southern regions, with some ports in Spain showing accessibility values below 50% of the European average.

Maritime safety & security

The Atlantic coastline faces a multitude of maritime safety and security issues. These require constant observation and adaptation. Through global shipping activity, Atlantic waters are faced with a constant threat of invasive species. Out of 27 very high risk invasive species identified by a European Commission report in 2015, 11 could be found in Atlantic waters, while out of 58 high risk species identified, 45 posed a threat to the maritime environment of the Atlantic. Other safety and security concerns include prevention of shipping accidents such as oil spills as well as fast-response mechanisms that minimize potential damages. In this context, the expanse of the Atlantic creates a specific challenges in terms of monitoring and deploying search and rescue efforts.

Environment & renewable energies

The Atlantic area has a wealth of natural areas and biodiversity. Many coastal areas are characterized by relatively high levels of biodiversity and protected areas. However, the coastal areas, where a large part of the biodiversity is found, are often areas of high human activity. This leads to intense environmental pressure on many coastal areas, in particular around the Azores and at major ports. These areas are further impacted by invasive species and by pollution associated with farming and industrial activity. Marine litter and contaminants pose a problem for marine birds and mammals, while radioactive discharge as well as pollution from offshore oil and gas sites has decreased in recent years. Some communities of fish that up until recently were severely endangered by overfishing have shown signs of recovery in recent years.

The Atlantic area is particularly at risk for the impact of climate change. Increasingly extreme weather poses a threat especially to coastal regions, as illustrated by the Xynthia windstorm in 2010. Regions all across the Atlantic area can be hit by floods and storms, while southern regions in Portugal and Spain are often faced with wildfires and droughts.

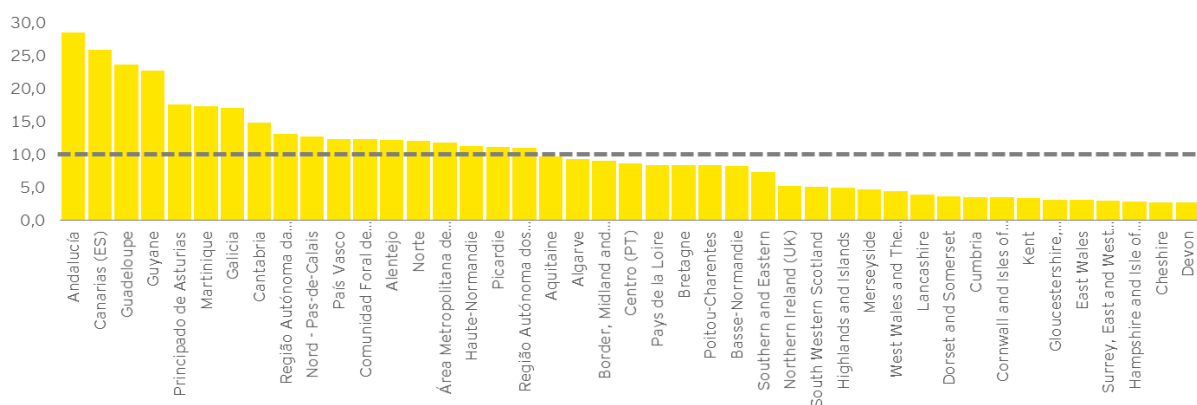
At the same time, the constant winds of the region provide an immense opportunity for the production of energy. The Atlantic Area is the second main transnational area for wind power in Europe. The United Kingdom boasts the largest number of offshore wind parks, accounting for around 40% of all offshore turbines installed in Europe.³ While the total amount of power generated in the Atlantic Ocean is eclipsed by the values of the North Sea, it is nevertheless projected to increase 100 fold over the medium term. Furthermore, almost all regions provide opportunities to promote other types of Marine Renewable Energies such as wave or tidal power, providing new employment opportunities as well as fostering innovation and research.

Social aspects

The Atlantic area is marked by stark contrasts. Highly dynamic urban areas coexist alongside remote and isolated areas with persistently high unemployment and facing demographic decline. While economic opportunities are largely concentrated in high growth urban areas, it has been persistently challenging to create and maintain wealth in rural areas. This is in part due to the fact that large parts of the Atlantic area suffers from accessibility issues. Even in high potential growth cities like Cork, land and air accessibility remains a challenge to attracting people and investment.

³ The UK's offshore wind capacity is mainly located in the North Sea, where shallower waters and strong winds have provided favourable conditions. However, it also boasts the largest installed capacity in the Atlantic area (mostly located in the Celtic Sea). Offshore wind capacity in the Atlantic area amounts to 1 993 MW of installed capacity: Robin Rigg (180 MW), Ormonde (150 MW), Walney Phase 1/2 (368 MW), West of Duddon Sands (389 MW), Barrow (90 MW), Burbo Bank (90 MW), North Hoyle (60 MW), Gwynt y Mor (576 MW), Rhyl Flats (90 MW)

Figure 8: Unemployment across the Atlantic area (2016)



As can be seen in the figure above, there is a large gap across the board between Northern and Southern Areas. While regions in Ireland, the United Kingdom and to a lesser extent France exhibit population increases and high levels of employment, regions in Spain and Portugal struggle with depopulation and unemployment. The average unemployment rate across the Atlantic Area is 10%, but some regions in Spain and overseas France exhibit values around 25%. Youth unemployment rates paint an even more extreme picture. While regions in Spain had a youth unemployment rate between 30% and 58% in 2016, rates in the United Kingdom only ranged between 10% and 15%.

A shared identity and long history of cooperation

The region boasts a strong common cultural heritage and identity on the sub regional level.

This is exemplified by regions such as the Basque country and Bretagne. The cultural solidarity between these regions is largely based on their maritime character and the existence of so many ports. Many cities feature the common cultural idea of the Atlantic Ocean as a gate to the world, benefitting from its historical role as a major communications route. The Atlantic areas historical, cultural and economic links are strongly turned outwards across the Atlantic to the New World. Outermost regions like the Azores act as bridges between Europe, the Americas and North Western

Sea basin-level cooperation mechanisms

- ▶ The **OSPAR Commission** was established in 1992 as the mechanism for governments to cooperate on implementation of the Convention for the Protection of the Marine Environment of the North East Atlantic.
- ▶ The **Atlantic Arc Commission** is one of the Conference of Peripheral Maritime Region's 6 geographical Commissions and contains members comprised of local and regional authorities from the UK, Republic of Ireland, northern Spain, Portugal and France.
- ▶ The **Conference of the Atlantic Arc Cities** is a network of territorial cooperation, based on the particular identity and challenges of Atlantic Cities. It facilitates cooperation among its members and with other actors, creating awareness in the European institutions about issues concerning the Atlantic Cities.

Africa.

Many instances of bilateral or multilateral cooperation and the regional and local level can be found. Examples of such initiatives include Eixo Atlântico, Chaves-Verin Eurocity, the Loire-Brittany Metropolitan Area, the Association of Local Governments of Wales and France, the network of Great West Cities, and the Conference of Brittany Cities. In particular, the bilateral cooperation between local and regional authorities in southern England and northern France has been steadily increasing

since the 1980s. Even though well-developed patterns of cooperation can be observed, the Atlantic area remains a very expansive zone, accommodating different cultures from the southern Portuguese

Focus on the Outermost Regions

The Outermost Regions refers to the Islands far away from the European mainland, namely the Azores, Madeira the Canaries and Overseas France. These regions face challenges specific to their location. Due to their remoteness, these regions are often **less developed** and exhibit **lower GDP per capita** and **higher unemployment rates**. Infrastructure is often lacking and access to specialized services can be difficult. Nevertheless, they also provide **unique opportunities**. The distinctive environment of these regions allow for innovative projects in areas ranging from scientific initiatives and high tech research facilities in the field of **renewable energies, astrophysics and climate science** to exploring **sustainable tourism** and diversifying the local economy.

Islands to the rough Scottish coast.

1.2 The Atlantic Strategy and its Action Plan

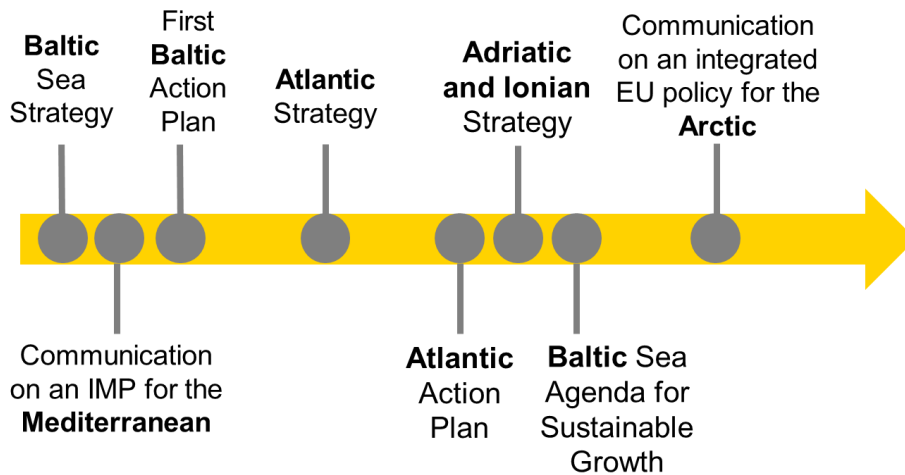
Since 2007, the EU's Integrated Maritime Policy (IMP) has sought to provide a more coherent approach to maritime issues, with increased coordination between different policy areas and within specific geographic areas. The IMP integrates these so-called marine sector policies (energy, climate change, environmental protection and conservation, research and innovation, competitiveness and job creation, international trade, transport and logistics) with the aim to provide *an effective means of achieving coinciding policy goals and cost-efficient solutions*. The IMP sets out five cross-cutting policies, including: i) Blue Growth, i) Marine Knowledge, iii) Maritime Spatial Planning, iv) Integrated Maritime Surveillance, and v) Sea Basin Strategies.

Development of Sea Basin Strategies

The concept of Sea Basin Strategies is based on the idea that each sea region is unique and requires its own tailored strategy that takes into account its unique strengths, weaknesses, threats, opportunities and challenges. The development of sea basin-level strategies (and macro-regional strategies more generally) was pioneered in the Baltic Sea region, where neighbouring countries sought out a novel instrument to support a collective response to the environmental deterioration of the Baltic Sea. Following intensive efforts under the Swedish Presidency of the EU in the second half of 2009, the EU Strategy for the Baltic Sea Region was launched in 2009 as the first comprehensive EU strategy to target a 'macro-region'. The first Action Plan for the Baltic Strategy was subsequently adopted in 2009, with updates adopted in 2013 and 2015. In 2014, a Sustainable Blue Growth Agenda for the Baltic Sea Region was also adopted.

Since the Baltic Sea Strategy was first launched, the sea basin approach has progressively developed in Europe's other sea basins as shown in the timeline below. Each has developed following its own trajectory and approach, reflecting the variety of different contexts, challenges and pre-existing cooperation structures. In 2009, a Communication was presented by the Commission on a path towards an Integrated Maritime Policy for better governance in the Mediterranean. A strong process of political cooperation at sea basin level has been facilitated in the Mediterranean by Union for the Mediterranean, for example the recent Ministerial Declarations on the blue economy (2015) or on environment and climate change (2014).

Figure 9: Timeline of development of macro-regional and sea basin strategies across the EU



Responding to strong interest from regional cooperation bodies in the Atlantic, the Commission adopted an Atlantic Strategy in 2011. This was followed by the development of the Atlantic Action Plan over the course of 2012 – 2013 and its adoption in 2014. In 2013, the European Parliament proposed and approved a 'preparatory action' for a regional strategy in the North Sea region and work remains ongoing towards building a more structured sea basin partnership. Following Council Conclusions in 2012, an EU Strategy for the Adriatic and Ionian Region was also launched in June 2014. In 2016, a joint Communication was published by the Commission on integrated European Union policy for the Arctic. The outermost regions have unique assets and potential to develop their blue economy. In late 2016, the Commission launched a study to help outermost regions find sustainable Blue Growth opportunities and a Commission initiative targeting these regions may follow.

A Sea Basin Strategy for the Atlantic Area

In 2008, the mayors of Atlantic called for through the *Charter of San Sebastian for a more ambitious, more open and more effective cooperation*. The 2009 General Assemblies, both of the Atlantic Arc Commission as of the Conference of Atlantic Arc Cities also signalled a clear will to go towards a system of territorial cooperation where the structural funds and sectorial programmes were more closely coordinated in a common effort. The presidencies of the two organizations met in September 2009 with the Spanish Presidency of the European Council, proposing a model similar to the Baltic territorial cooperation.

The Spanish Presidency subsequently took up the issue as part of its 2010 Presidency agenda. Much to the consternation of the original proponents, exchanges within the European Council in 2010 led to a decision that creates the Atlantic strategy as a 'maritime' strategy rather than a 'macro-regional' strategy in the image of the Baltic Sea Strategy. Although a subtle nuance, this entailed DG MARE being designated as the primary chef de file rather than DG REGIO and kept more influence in the hands of national rather than regional capitals.

The Commission subsequently began its work and issued a Communication in 2011 on a Strategy for the Atlantic Area. The Communication considered the challenges and opportunities facing the Atlantic Ocean, grouped within five themes: i) implementing the ecosystem approach, ii) reducing Europe's carbon footprint, iii) sustainable exploration of the Atlantic seafloor's natural resources, iv) responding to treats and emergencies, and v) socially inclusive growth. The Atlantic Strategy Communication also called for the creation of an 'Atlantic Forum'. The purpose of this initiative, which received EUR 1,2 million in funding from the European Parliament, was to allow Member States, Parliament, regional authorities, civil society and representatives of existing and emerging industries to contribute to elaborating options for achieving the objectives.

Operationalising the Strategy: the Atlantic Action Plan

Following an initial round of bilateral consultations between the Commission and Member States, an Atlantic Forum Vision Paper was prepared to frame the consultation process. The stated objective of this process was to *gather ideas for concrete action from the local level that will then be reviewed and refined through a transparent process involving all relevant stakeholders...* Agreed priority actions and projects would then be endorsed through the publication of an Action Plan which should help to inform discussions on Partnership Agreements and Operational [and Cooperation] Programmes. A series of thematic workshops were organised in the five Atlantic Member States over the course of 2012-2013 to facilitate this process, in addition to general communication activities, such as the creation of a dedicated website.

A Leadership Group was set up to give political guidance to the Atlantic Forum, to ensure that it complied with the Forum's mandate and to endorse the Forum's objectives, process and outcomes. A Steering Group was also established, reporting to the Leadership Group, responsible for reviewing inputs from the Atlantic Forum on an ongoing basis.

From these initiatives sprang an Atlantic Action Plan sponsored by the Irish presidency and presented in May 2013. The Action Plan encourages MS to work together in areas where they may have previously worked individually, particularly with regards to the sharing of information, costs, results and best practices, as well as generating ideas for further areas of cooperation of maritime activities, in order to render the Atlantic Area more dynamic in terms of economic growth, jobs and an attractive place to live. The Action Plan was structured around four priorities and 10 specific objectives. In addition, a total of 37 actions under 20 headings targeting activities and focus areas at a project level were identified. These are presented in the Table 1 below.

Table 1: Overview of the Atlantic Action Plan

Priority	Specific Objective	Actions
Promote entrepreneurship and innovation	1.1 Sharing knowledge between higher education orgs, companies and research centres	1.1.1 Networking and co-operative research between research centres, higher education and business in the Member States
		1.1.2 Transferring knowledge and insights, as well as skills between higher education, business and research, including through regional, national and cross-border maritime clusters and technology platforms.
	1.2 Enhancement of competitiveness and innovation capacities in the maritime economy	1.2.1 Putting in place educational and training measures , including crossborder programmes and mutual recognition of national education and training programmes
		1.2.2 Raising awareness of sea-related careers, generating an enthusiasm for maritime culture and careers among young people and addressing other barriers that discourage young people from embarking on a maritime career.
	1.3 Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area	1.3.1 Developing improved multi-species modelling, fishing gear and related techniques and technologies so as to minimise carbon footprint, seabed damage, discards and by-catch
		1.3.2 Sharing information on tools that improve fisheries managers' understanding of the socio-economic and ecosystem impacts of management measures
		1.3.3 Carrying out research to improve the growth, productivity, competitiveness and environmental sustainability of aquaculture (including offshore aquaculture) and the industry's ability to respond to market needs
		1.3.4 Improving the market position of EU-sourced fisheries and aquaculture products by improving processing, labelling, traceability and certification.

Protect, secure and develop the potential of the Atlantic marine and coastal environment	<p>2.1 Improving maritime safety and security</p>	<p>2.1.1 Reinforcing the safety and security of seafarers, coastal populations, property and ecosystems through</p> <ul style="list-style-type: none"> - Evaluating and extending existing warning, reporting and response mechanisms for invasive and harmful species & foster exchange of best practice -Risk assessments, coordinated response mechanisms and equipment contributing to enhancing coordinated preparedness and response to marine threats, natural disasters, marine accidents, spills of oil and hazardous material or trafficking - Developing, testing and deploying new technologies to improve inspection of vessels and enhance the safety and security of ports and shipping by better integrating data to improve situational awareness in the maritime domain
	<p>2.2 Exploring and protecting marine waters and coastal zones</p>	<p>2.2.1 Developing a European Atlantic ocean observing and predictive capability through:</p> <ul style="list-style-type: none"> - Surveying and observing the coasts, seabed and water column - Developing new instruments and platforms for ocean observation and ecosystem monitoring - More effective stewardship, cataloguing and distribution of marine data and multi-resolution seabed maps through EMODnet - Developing a network of coastal oceanographic forecasting systems building on Copernicus marine service
		<p>2.2.2 Contributing to the development of tools and strategies to address global climate change issues, including mitigation and adaptation strategies, notably by:</p> <ul style="list-style-type: none"> - Supporting assessment of the carbon footprint of the blue economy -Developing a platform for the exchange of best practice on emissions reduction and energy efficiency -Developing cooperative partnerships to identify and monitor impacts on marine activities, ecosystems and coastal communities
		<p>2.2.3 Supporting marine environmental protection and efforts to achieve "good environmental status" of Atlantic waters by 2020:</p> <ul style="list-style-type: none"> - Build on national plans, OSPAR processes and Natura 2000 sites to develop a network of Marine Protected Areas - Encouraging further cooperation between MS
		<p>2.2.4 Assessing the social and economic value and functioning of the Atlantic's ecosystems and biodiversity in order to support decision-making.</p>
		<p>2.2.5 Contributing to Member States maritime spatial planning and integrated coastal management processes, for example by sharing best practice and facilitating cross-border coordination.</p>
	<p>2.3 Sustainable management of marine resources</p>	<p>2.3.1 Developing a better understanding of the technical feasibility, economic viability and environmental impact of mining for minerals in the Atlantic Ocean, and develop and test innovative mining technologies.</p>
		<p>2.3.2 Laying the foundations for a sustainable, high-value-added European marine biotechnology industry by:</p> <ul style="list-style-type: none"> -Exploring seafloor and assessing genetic make-up, biodiversity and potential for providing material for biotech industry - Strengthening links between research and industry to develop biobanks and identify markets for innovative marine bioproducts

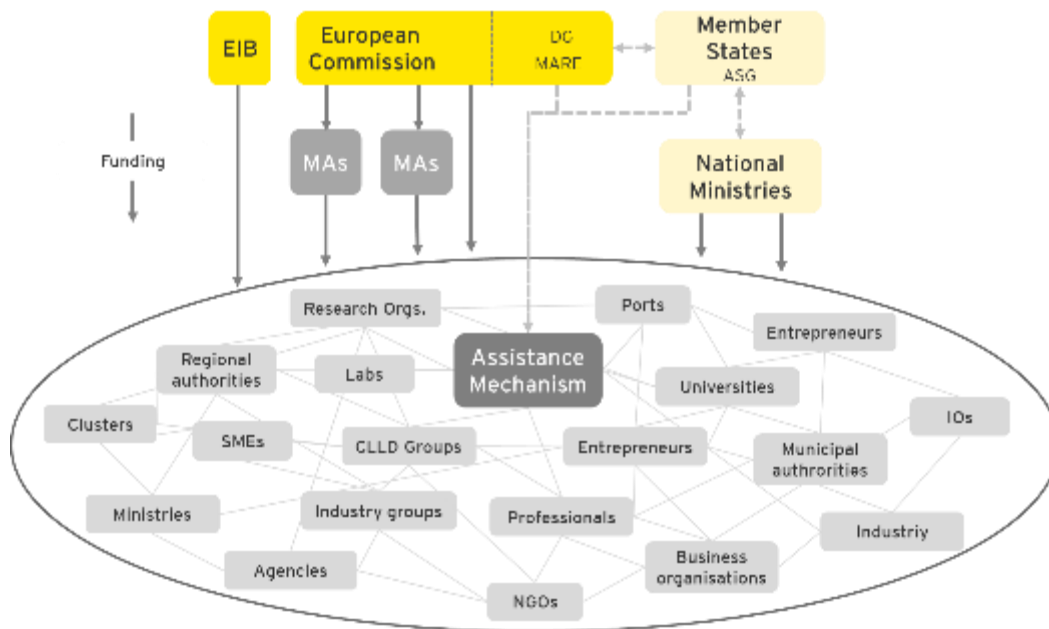
	<p>2.4 Exploitation of the renewable energy potential of the Atlantic area's marine and coastal environment</p>	<p>2.4.1 Considering ways to accelerate the deployment of sustainable offshore renewable energy</p> <ul style="list-style-type: none"> - Encouraging assessments and mapping of potential of the Atlantic's energy resource - Contribute to a European electricity transmission system allowing for the balancing of loads and better links between offshore and onshore energies - Promoting research, development and demonstration of technologies for construction and maintenance of renewable energy installations for offshore wind, wave, tidal and biomass energies - Encouraging the harnessing of special geological and oceanographic and meteorological conditions of outermost regions
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Improve accessibility and connectivity</p>	<p>3.1 Promoting cooperation between ports</p>	<p>3.1.1 Facilitating the development of ports as hubs of the blue economy by:</p> <ul style="list-style-type: none"> - Facilitating upgrades of infrastructure to improve connectivity with the hinterland, enhance intermodality and promote fast turnaround of ships - Enabling ports to diversify into new business activities - Analysing and promoting port networks and short-sea shipping routes between European ports
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Create a socially inclusive and sustainable model of regional development</p>	<p>4.1 Fostering better knowledge of social challenges in the Atlantic area</p>	<p>4.1.1 Exchanging best practice on enhancing the health, social inclusion and wellbeing of coastal populations and developing appropriate and usable marine socio-economic indicators to measure, compare and follow trends in the development of the blue economy</p>
	<p>4.2 Preserving and promoting the Atlantic's cultural heritage</p>	<p>4.1.2 Combating seasonality and improving prospects for SMEs through diversification of maritime and coastal tourism products and development of niche markets by investing in:</p> <ul style="list-style-type: none"> - Marine sports, marinas and nautical leisure activities - Port services (e.g. cruise ships) - Promoting cultural and natural attractions - Protecting and restoring tourist attractions and maritime heritage sites

In addition to these priorities and specific objectives, Section 5 of the AAP also called for the Action Plan to be used as a **platform for cooperation with other Atlantic nations**, in particular in the area of oceanographic research and observation. The Action Plan made specific reference to ongoing engagements with the US and Canada to establish a transatlantic research alliance (which would shortly thereafter evolve into the Galway Statement).

Governance and implementation

Governance and implementation mechanisms were established to monitor and facilitate the implementation of the Plan (a summarised below in Figure 10). The broad outlines of this system were developed in the Action Plan itself, but it has largely developed organically over the years.

Figure 10: Schematic presentation of the governance and implementation system



- ▶ The **Atlantic Strategy Group (ASG)** oversees the implementation of the AAP. It is comprised of representatives of each of the five Member States concerned by the Atlantic Action Plan, as well as relevant observers invited by the Member States. The group meets approximately every six weeks.
- ▶ The Directorate-General for Maritime Affairs and Fisheries (DG MARE) is the *chef de file* within the Commission for the Action Plan. It is responsible for supporting the Member States and promoting its implementation across the Commission. It also finances the Assistance Mechanism (see below).
- ▶ The **Atlantic Stakeholder Platform (ASP)** aims to facilitate networking between the different stakeholders to make valuable contacts and explore areas for cooperation, share information and good practices, promote and identify interesting project ideas as well as funding opportunities and partnerships for their projects. The platform also offers a transnational publicity opportunity to deliver Atlantic Action Plan key messaging and further gain awareness of its' achievements. Conferences are organised on an annual basis.
- ▶ The **Atlantic Assistance Mechanism (AAM)** was initiated by the European Commission in August 2014 to i) provide stakeholders with updated information on the Atlantic Action Plan, its research and investment priorities, news, interesting events and networking opportunities and ii) serve as a "match-making platform" to find potential project partners and advise stakeholders on the use of EU and national or regional financial instruments for projects implementing the Action Plan. The AAM consists of a network of National Units operating in France, Ireland, Portugal, Spain, and the United Kingdom coordinated by a central office based in Brussels.

Mobilising resources for the implementation of the Action Plan

No specific funding instrument was specifically dedicated to the Action Plan. Rather, the Action Plan seeks to ensure an enhanced coordination of existing funding mechanisms and channel existing funds to the implementation of its priorities. Many of the existing EU funding instruments offer financing opportunities for projects in line with the priorities and objectives of the Action Plan. The Action Plan document mentions specifically the European Structural and Investment Funds (ESIF) under shared management with the Member States (ERDF, ESF/YEI, EAFRD and EMFF), Interreg programmes, as well as directly managed funds (Horizon 2020, EMFF direct funds, LIFE+ and COSME). A wider mapping of instruments and programmes at the EU level conducted by

the evaluation team identified a total of 22 different funding sources of potential relevance – shared & direct management. Beyond this, there are hundreds of other possible funding sources on the national level and in the private sector. Sources of financing available to fund relevant projects in the Atlantic area can also rely on public-private partnerships in case of investments, or funding through the European Investment Bank and other public and private investment actors.

Amongst these, H2020 and ESIF are of particular relevance to the implementation of the Action Plan. While not a dedicated funding instrument in itself, H2020 earmarked significant funds for research in the Atlantic area in the framework of the implementation of the Galway Statement. As an enormous potential source of funding for issues aligned with the Action Plan, ESIF resources were also a primary target of the Commission. This notably led to the requirement in the Common Provisions (Articles 15(2) & 27(2)) for Partnership Contracts and Operational/Cooperation Programmes to spell out their contribution to the Action Plan and other relevant macro-regional strategies.

Introduction



2. Introduction

2.1 Objectives and scope of the evaluation

2.1.1 Objectives

The Atlantic Action Plan states that *the Commission will closely monitor [its], draw lessons learnt and assess progress made. It will prepare a mid-term review of the implementation of the Action Plan before the end of 2017. An independent evaluation of a sample of completed projects will feed into the review, which will be discussed with MS and other stakeholders.* In this context, DG MARE has requested an evaluation study to feed into the mid-term review of the implementation of the Atlantic Action Plan (AAP).

The objectives of the present study were to provide analyses and draw useful conclusions on the relevance, the coherence, the implementation, the effectiveness, the EU added-value and the impact and sustainability of the Action Plan. The results will be used to contribute to the identification of recommendations aimed at improving the next stage of implementation of the Action Plan, including: the alignment of national and regional strategies, an increase of the number and quality of projects, and a maximisation of their impacts and potential future benefits (social, environmental and economic). More specifically, the Terms of Reference underlined three specific objectives:

- ▶ An assessment of the extent to which national and regional strategies in the five Atlantic Member States are aligned with the priorities of the Action Plan;
- ▶ An in-depth analysis of a sample of representative and relevant projects in the form of case studies so as to illustrate quantitative and qualitative results achieved so far, as well as expected economic, social and environmental benefits and to point out implementation bottlenecks if any; and
- ▶ An extrapolation of the results measured at the project and programme-level with a view to estimating potential benefits in the Atlantic area by 2020 as a result of the Action Plan.

2.1.2 Scope

Legal scope

The scope of this evaluation covers the Action Plan, which itself should be distinguished from the Atlantic Strategy. The latter was launched by a Commission Communication dating from November 2011. It set out a number of common challenges and opportunities for the Atlantic region. The Action Plan was launched in 2014 with the purpose of operationalising the Strategy and identifying the main developmental areas for realising the growth potential of the blue economy in the Atlantic Member States. Whilst it is difficult to dissociate the two, this evaluation is primarily focused on the Action Plan.

Institutional scope: stakeholders & funding sources

By nature of the wide audience addressed by the Action Plan, a diverse range of stakeholders was considered by the evaluation. These included the direct stakeholders involved in the Action Plan governance and implementation (e.g. the Commission, five Member States and the Assistance Mechanism and its five National Units), a variety of funding sources at EU (22 identified funding sources) and national levels providing support to projects of potential relevance to the Action Plan and a wide array of stakeholders in the Atlantic area susceptible to contribute to the implementation of the Action Plan through launching specific projects or otherwise supporting its priorities. To provide an idea of the total population of stakeholders concerned, the Assistance Mechanism team has made contact with over 4 000 stakeholders to date.

Geographical scope

Finally, a geographical definition of the Atlantic area has been set out for the sake of consistency and clarity. Indeed, no precise definition has been included in the Atlantic Strategy or the Action Plan, nor has the EU or any other EU organisation promulgated a clear definition aside from the eligibility area of the Atlantic area programme. Whilst a number of approaches could be adopted, the evaluation has chosen to base the geographical definition on the NUTS system widely used for statistical analysis at the EU level, in order to facilitate the analysis of contextual indicators which shall be considered by the evaluation. However, projects of clear relevance to the Action Plan falling partly or entirely outside of the Atlantic area as it has been defined by evaluators were in no cases discarded from analysis.

This report uses four primary appellations, to be denoted by a specific set of terminology:

- ▶ The **Atlantic Member States** refers to the five Member States with a maritime façade on the Atlantic, namely Spain, France, Ireland, Portugal and the United Kingdom.
- ▶ The **Atlantic area** refers to 35 NUTS 2 level regions in the Atlantic area of Europe, including 6 in Spain, 9 in France, 2 in Ireland, 7 in Portugal and 14 in the United Kingdom. This shall be the primary scope of this evaluation.
 - Within this area, the **Atlantic Coastal Area** refers to the 98 NUTS 3 Atlantic-facing coastal regions of the Greater Atlantic Region
 - The **Outermost Atlantic Regions** refers to six NUTS 2 (12 NUTS 3 regions) part of France, Portugal and Spain (Azores, Madeira, Canary Islands, French Guiana, Martinique and Guadeloupe)

2.2 General approach and timeline

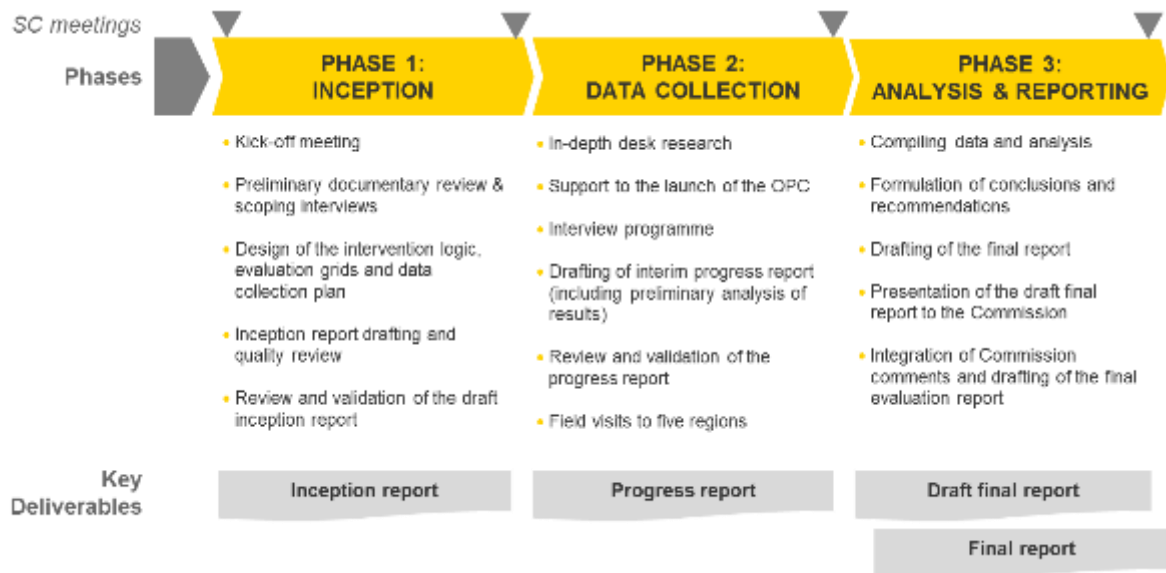
2.2.1 Overview of our approach

The evaluation was implemented between April and November 2017 in three sequential phases:

- ▶ The **inception phase** included primary documentary review and scoping interviews, as well as the design of the intervention logic, evaluation framework and data collection strategy and tools. The Inception Report, submitted 15 May (with the revised version submitted 28 May) represented the final stage of the inception phase.
- ▶ The **data collection phase** was launched upon validation of the Inception Report at the end of May 2017. It was implemented in two separate phases. The first phase consisted of documentary review and an interview programme consisting of approximately 100 interviews. On this basis, a Progress Report was drawn up, including a reporting on progress, some preliminary analysis and the proposal for a selection of five regional case studies – along with a list of ten pre-selected projects, which were subsequently examined in greater detail during the field visits. With the validation of the Progress Report and the proposal of regional case studies, the data collection was completed.
- ▶ The final phase of the evaluation (**Analysis & reporting**) consisted of the compilation and analysis of all data collected and the formulation of conclusions and recommendations. This was included in a Draft Final Report, which was discussed by the Steering Group set up for this evaluation (and also presented to the members of the Atlantic Steering Group for comments). Evaluators then carefully took into account these comments and prepared the Final Report for acceptance by the Commission.

Figure 11 below presents a comprehensive overview of the steps being followed and the key deliverables that have been and will be produced.

Figure 11: Overview of the evaluation approach



A diver is silhouetted against a bright blue background, swimming through a circular opening in a dark cave. The diver is holding a flashlight that illuminates the surrounding water. The cave walls are dark and textured, framing the central scene.

Evaluation findings

3. Evaluation findings

3.1 Relevance & coherence of the Action Plan

These two evaluation criteria focused on assessing to what extent the priorities of the Action Plan remain aligned with the needs of stakeholders in the Atlantic area. It also looked at the extent to which the Action Plan was and remained at the time of evaluation aligned with the priorities and work of other relevant actors in the Atlantic area (e.g. other IOs, third countries, etc.). These criteria was addressed through two sub-questions:

- ▶ **EQ1.1** Do the original priorities of the Atlantic Action Plan still correspond to the needs within the EU and in particular in the Atlantic Area? Should they be reconfigured?
- ▶ **EQ1.2** To what extent is the Action Plan aligned with the work and strategies of other relevant actors in the Atlantic Area?

Overview of findings

The evaluation found overall that the Action Plan was a relevant document in that it reflects the wide range of needs and challenges. Analysis and consultation of stakeholders found that the general priorities and objectives set out in the Action Plan remain very relevant today four years since its adoption. Stakeholders appreciate the inclusiveness of the document, which itself is reflective of the highly bottom up process used for its elaboration. However, some stakeholders identified the need to enlarge or clarify certain priorities or objectives to ensure that specific needs, challenges and opportunities are taken into account. This concerns primarily Priorities 3 & 4.

Considering the criteria of relevance in its wider sense, however, some issues can be identified. The architecture and internal coherence of the document can be improved in order to provide for a clearer internal logic and legibility for stakeholders. Moreover, the Action Plan document did not reflect widely accepted best practices in terms of developing operational documents. Finally, the Action Plan does not adequately prioritise specific Atlantic challenges and areas of high added value for EU cooperation.

Looking beyond the EU, the Action Plan is also generally well aligned with the strategies and priorities of other relevant organisations. While the Action Plan was adopted almost two years prior to the ratification of the Sustainable Development Goals, it is in large part aligned with them. In the area of environmental protection, it is also strongly aligned with the work of the Convention for the Protection of the Marine Environment of the North-East Atlantic.

3.1.1 EQ1.1 Do the original priorities of the Atlantic Action Plan still correspond to the needs within the EU and in particular in the Atlantic Area? Should they be reconfigured?

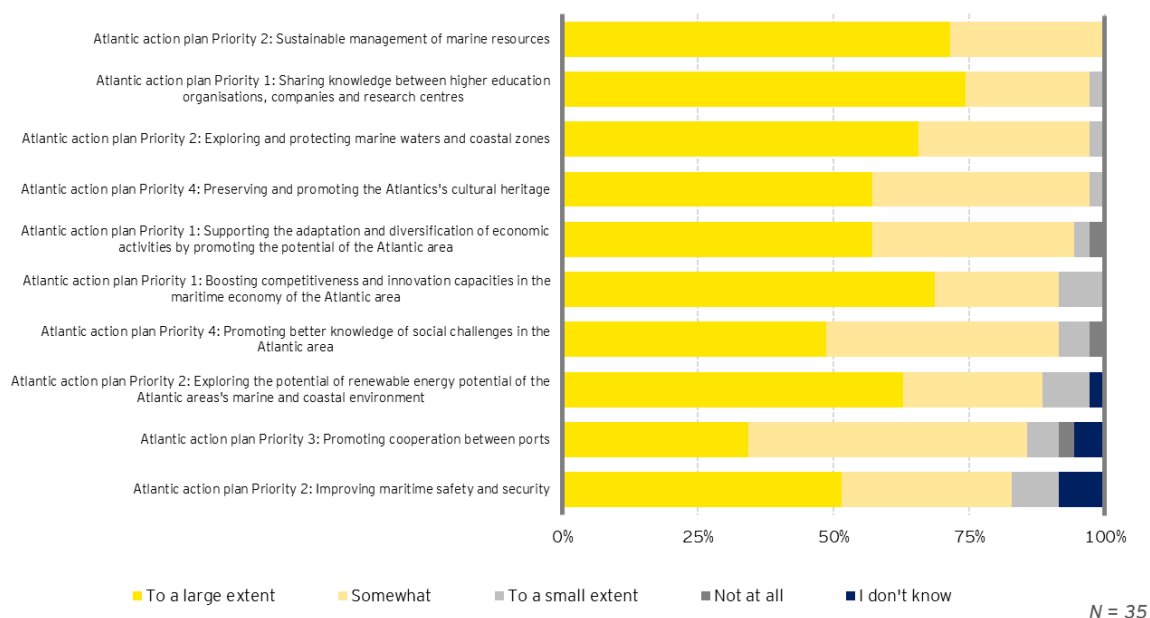
The Action Plan covers a wide range of needs and challenges that can be identified across the region.

The rich content of the Action Plan reflects the highly diverse nature of the region and its many challenges and opportunities. While the Atlantic area shares a number of common challenges and opportunities, it is characterized above all by its high level of heterogeneity. Dynamic urban hubs coexist alongside remote rural areas. The Atlantic area is home to some of the most affluent areas in Europe, but also some of the poorest. A wide range of traditional maritime industries ensure the livelihoods of coastal populations, while the economies across the Atlantic area are also turning to a diverse range of new opportunities, both turned towards the sea and not.

Considering the overview of the Atlantic area presented in Chapter 1, most of the salient issues that have been identified in EU and national level diagnostic and policy documents have been directly or

indirectly touched upon by the Action Plan. Extensive stakeholder consultation also found very few reserves with the thematic content of the Action Plan itself. Where issues were raised, these tended to be in most cases suggestions on tweaking existing priorities rather than fundamentally altering the content of the document. Finally, it is interesting to compare the Action Plan to the diagnostic assessment conducted within the framework of the Atlantic Area Interreg Programme, which covers the same region. A close convergence can be noted between the two; as noted in the programme's Cooperation Programme, *a clear coherence can be observed between the needs and challenges identified in the Action Plan and the cooperation programme.*

Figure 12: OPC - With regards to the ten specific objectives of the Atlantic Action Plan, to what extent do these still correspond to the needs in the Atlantic area?



This is also reflected in the results of the Open Public Consultation (see Figure 12 above); well over 75% of respondents believed that the ten specific objectives of the Action Plan remained 'to a very large extent' or 'somewhat' in line with the needs of the Atlantic area. Nonetheless, it can be noted that for two specific objectives, concerning promoting better knowledge of social challenges and promoting cooperation between ports, less than 50% of respondents agreed 'to a large extent'.

That said, some stakeholders did identify the need to enlarge or clarify the content of the Action Plan in specific areas. An analysis of the project monitoring database also contributed to identifying some thematic issues that, while tangentially touched upon in the Action Plan, could be better underlined by virtue of the interest expressed by actors. The issues identified related in particular to Priorities 3 & 4. A summary of the issues identified is included in the box below.

Summary of additional thematic priorities identified:

- ▶ **Better incorporating the urban perspective:** The Atlantic is characterised by medium-sized cities largely on the periphery economically and geographically speaking. At the same time, these cities have many strengths and advantages. Many urban areas are developing quickly, with their maritime character and heritage strongly shaping that development. They face many challenges with regards to sustainable urban development. Important investments have been made in this area, such as the EUR 250 million invested in sustainable urban development plans for Atlantic cities in Spain.
- ▶ **Expanding the focus of the connectivity priority:** The transport dimension is confined to ports and specifically their connection with the hinterland through major infrastructure

investments. The Action Plan does not address wider aspects of connectivity of the Atlantic Area, which can in most areas be characterized as being peripheral in the national context. Case studies in Brittany, Cornwall and Cork underlined this salience of this challenge. Major investments have recently been made in Brittany and Cornwall to improve connectivity with the rest of their respective countries – e.g. a high speed train line and roadway investments respectively. Cork's connectivity challenges are more aligned with the Action Plan, with major infrastructure investments in upgrading port infrastructure, but the quality and quantity of air connections are also seen as a weak point for the city.

While physical connectivity has historically been a key challenge for the Atlantic area, digital connectivity has also emerged as another obstacle to economic development and social inclusion. While communication technologies can open up new opportunities for entrepreneurs and companies based in rural and remote areas, high speed and affordable broadband and cellular coverage is a prerequisite.

- ▶ **Better elucidating the socio-economic challenges in rural and remote areas:** The 'social pillar' of the Action Plan is seen as very broadly defined with little detail on the operational level with the exception of maritime and coastal tourism. The review identified many common challenges (and opportunities) faced by rural areas across the Atlantic area, including fast-paced aging of the population, emigration of young talent, delivery of public services, promoting small-scale innovation and the local retention of value added, lack of rural supply chains for small-scale producers to tap into nearby urban markets, developing sustainable energy systems in remote areas, etc. Many of these challenges can be tied together under the theme of 'social innovation'.

Many stakeholders reported that they appreciate the inclusiveness of the Action Plan. The interviews found that almost all stakeholders were able to 'find themselves' in at least one of the priorities of the Action Plan to some extent. Some public authorities also underlined that they believed maintaining an inclusive Action Plan was important to secure the buy in of a wide range of stakeholders and adequately take into account the large diversity of needs and challenges in the region.

The Action Plan was developed through a robust bottom-up process within the strategic framework set out by the Atlantic Strategy document. The inclusive nature of the Action Plan and the wide ranging set of priorities identified can be connected to the process of development of the Action Plan. Over the course of 2012 – 2013, five thematic 'Atlantic Forum' workshops were organized across the region in order to facilitate debate and the emergence of priorities for the Action Plan. This was in parallel to other bilateral consultations conducted by the Commission with various stakeholders. Many stakeholders underlined that this process had contributed to building ownership and buy-in, in addition to ensuring the relevance of the document.

However, the internal coherence and quality of the Action Plan document can be improved

The architecture and internal coherence of the document can be improved in order to provide for a clearer internal logic and legibility for stakeholders. Specifically:

- ▶ **The four priorities in the document are somewhat unbalanced.** They include both very wide ranging priorities, notably the first and second priorities, as well as very narrow ones, most notably the third. This architecture puts very specific issues, such as port cooperation, on the same level as very broad, strategic issues and may engender some confusion.
- ▶ **The Action Plan does not recognize clearly the horizontal nature of some issues.** It confines some naturally transversal areas, notably blue growth or research & innovation, somewhat artificially to a specific vertical priority. The task of affecting projects between priorities can thus be challenging and the document fails to fully recognise the transversal contribution of these issues.

- ▶ **The international dimension is treated as something of an ‘after thought’.** Rather than being integrated into the main part of the Action Plan as a vertical or horizontal priority. For the casual reader, this aspect can easily be glossed over.
- ▶ **The affectation of specific objectives under different categories can create some confusion.** Issues of tourism are under what is seen by most as the ‘Social Priority’. Moreover, issues of economic diversification are placed under Priority 1, although it is a key aspect of social challenges.
- ▶ **On the ‘operational level, an eclectic mix of both specific actions and high-level transversal issues can be found** – from supporting the delivery of a major policy to launching a specific study. It is not always clear why these specific actions were selected and how they contribute to the relevant priority. These factors make it difficult to logically connect the overall objectives, to those on the specific and operational level.

Moreover, the Action Plan document did not reflect widely accepted best practices in terms of developing operational documents. The Action Plan did not set out specific and concrete objectives, or a framework for monitoring and evaluating success (e.g. indicators with baseline, milestones and target values). On the flipside, there is no indication of the relevant parties responsible for implementing the actions. While the Action Plan does include a discussion of the financial resources that may be mobilized for the implementation of its priorities and objectives, this discussion is only at the level of the Action Plan, without any specific analysis to indicate which instruments may be mobilized for each priority.

The Action Plan does not adequately prioritise specific Atlantic challenges and areas of high added value for EU cooperation

The Action Plan is in many areas redundant with the existing policy frameworks, adding little value to policies already with a vocation to cover the Atlantic area. As well illustrated by the Action Plan itself, a wide range of existing policy initiatives at the EU level are relevant to integrated maritime policy in the Atlantic. This includes policy portfolios coordinated by DG MARE, such as the Common Fisheries Policy, Blue Growth, Marine Spatial Planning, Marine Knowledge or the development of the Common Information Sharing Environment. It also includes a wide range of other areas under the auspices of DG RTD, DG GROW, DG ENV or DG MOVE amongst others. While the Action Plan explicitly identified these policies, it generally stops at ‘contributing’ to or ‘supporting’ their implementation in the Atlantic, rather than identifying challenges or obstacles that are specific to the Atlantic area. It thus offers little additionality compared with the existing policy framework.

The Action Plan does not adequately prioritise areas with the highest potential for sea-basin level cooperation. The Action Plan states that it does not intend to be exhaustive; section 2 of the document notes that *much is already being done by the Member States in question...[this] Action Plan therefore identifies areas where there is scope for additional collective work.* However, the subsequent discussion does not strongly develop rationale on this basis for the selection of the priorities and underlying objectives and, as discussed above, reiterates many pre-existing policies and activities. A majority of the stakeholders consulted felt that, while the priorities and objectives were relevant, that there is margin for greater prioritization.

Specific opportunities and challenges for the Atlantic area

Drawing on the results of the extensive stakeholder consultation conducted for this evaluation, it is possible to highlight some key opportunities and challenges for the Atlantic area. Virtually all of these issues are already covered by the Action Plan. However, they may merit specific attention or treatment in any future revision of the Action Plan. These issues include:

- ▶ Within Priority 1, place more focus on the development of innovative maritime technologies, in key sectors such as shipbuilding, offshore energy, surveillance / observation or fishing /

aquaculture.

- ▶ Under Priority 2, placing more emphasis on tackling the specific security and safety challenges of the Atlantic, namely its expanse and specific environmental stressors.
- ▶ Under Priority 2, place greater emphasis on the development of marine renewable energies (building on the strategic orientations of the Ocean Energy Forum's Roadmap), as well as offshore floating wind.
- ▶ Under Priority 3, place focus on other aspects of connectivity, such as land and air transport, in addition to ports.
- ▶ Under Priority 4, focus on cross-border tourist assets in the area of coastal tourism and achieve economies of scale through cooperation.
- ▶ Under Priority 4, introduce a focus on the sustainable urban development of Atlantic cities, in particular mid-sized 'challenger' cities often on the periphery of national economies.
- ▶ Under Priority 4, focus on social innovation to offer solutions for challenges facing coastal regions and using the sea to promote inclusion (e.g. through marine leisure activities).

The number of priorities and underlying specific and operational objectives is high, but stakeholders remain somewhat divided on the need to necessarily limit their number. As already noted, the four priorities in the Action Plan are further developed into ten specific objectives and a further 37 actions under 20 different headings. While many stakeholders consulted recognized that this number was high in absolute terms, they were more divided on the necessity to reduce the number just for the sake of reducing the number. As noted, stakeholders underlined the importance of maintaining a strategic framework inclusive of the wide variety of needs and challenges. Greater focus and prioritization thus should not necessarily entail reducing the number of issues covered by the Action Plan, but better ordering them by importance and, the case being, identifying a select few eligible for additional efforts or support.

It is worth comparing the Atlantic Action Plan to those of macro-regional strategies and other EU policies or strategies (see Table 2 below). Comparing the Atlantic Action Plan with the action plans for the Baltic Sea and Danube Strategies, one can note a similar architecture and number of objectives at the strategic and specific level, with a relatively higher number of actions identified at the operational level. According to the Commission, however, initial experience with macro-regional strategies has underlined the importance of concentrating on a limited number of well-defined objectives (e.g. SMART objectives – **S**pecific, **M**easureable, **A**chievable, **R**ealistic & **T**imely), matching particular needs for improved cooperation. Looking at other policy areas, action plans recently adopted by the Commission have been quite varied in terms of their architecture. They tend to underline on average four overarching objectives, but are more or less developed on the operational level.

Table 2: Comparison of the architecture of the Action Plan with other action plan documents

	Atlantic Action Plan	Baltic Sea Macro-Regional Strategy	Danube Macro-Regional Strategy	EU Action Plan on Drugs	Action Plan for nature, people and the economy
Strategic level	4 Priorities	3 Objectives	4 pillars	2 Policy Areas	4 Priorities
Specific level	10 Specific Objectives	12 Sub-Objectives	11 Priority Areas	3 Cross-cutting themes	
Operational level	37 Actions	14 Policy Areas 4 Horizontal Actions 72 Actions	129 Actions	54 Actions	15 Actions

3.1.2 EQ1.2 To what extent is the AAP aligned with the work and strategies of other relevant actors in the Atlantic Area?

Despite being adopted before the Sustainable Development Goals, the Action Plan is generally aligned with relevant goals

The work of the United Nations system and the international community is strongly driven by the Sustainable Development Goals (SDGs). In September 2015, the United Nations ratified 17 Sustainable Development Goals to guide the role of public, non-profit, for-profit, and voluntary sectors in global development. Goal 14 aims to conserve and sustainably use the oceans, seas and marine resources for sustainable development. In particular, ten targets have been established for SDG14 (see Table 3 below).

While the Action Plan was adopted almost two years prior to the ratification of the SDGs, it is in large part aligned with SDG 14, reflecting in part Europe's position internationally as an influential thought leader on maritime and fisheries policy. In particular, specific objectives 1.1 & 1.2 (knowledge sharing & innovation), 1.3 (supporting CFP), 2.2 (marine protection) and 2.3 (sustainable exploitation of marine resources) can be seen as contributing directly to specific targets under SDG 14.

Table 3: Comparison of the SDG 14 targets with the Action Plan

SDG 14 Targets	Action Plan
14.1 Prevent and significantly reduce marine pollution, in particular from land-based activities	SO2.2 Exploring and protecting marine waters and coastal zones <i>Actions supporting implementation of the Marine Strategy Framework Directive, OSPAR processes and Natura 2000 sites.</i>
14.2 Sustainably manage and protect marine and coastal ecosystems.	
14.3 Minimise and address the	

impacts of ocean acidification	
14.4 Regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans	SO1.3 Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area <i>Actions supporting the implementation of the CFP and sustainable development of aquaculture.</i>
14.5 Conserve at least 10 per cent of coastal and marine areas	SO2.2 Exploring and protecting marine waters and coastal zones <i>Action supporting Natura 2000 development.</i>
14.6 Prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing and eliminate subsidies that contribute to illegal, unreported and unregulated fishing	SO1.3 Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area <i>Actions supporting the implementation of the CFP and sustainable development of aquaculture.</i>
14.A Increase scientific knowledge, develop research capacity and transfer marine technology	SO1.1 Sharing knowledge between higher education organisations, companies and research centres <i>Actions supporting knowledge sharing and innovation in Atlantic area.</i> SO2.3 Sustainable management of marine resources <i>Actions supporting development of marine biotechnology.</i>
14.B Provide access for small-scale artisanal fishers to marine resources and markets	SO1.3 Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area <i>Actions supporting the implementation of the CFP.</i>
14.C Enhance the conservation and sustainable use of oceans and their resources by implementing international law	SO1.3 Fostering adaptation and diversification of economic activities by promoting the potential of the Atlantic area <i>Actions supporting the implementation of the CFP.</i> SO2.2 Exploring and protecting marine waters and coastal zones <i>Actions supporting implementation of the Marine Strategy Framework Directive & Marine Spatial Planning</i>

Beyond SDG 14, strong interlinks can also be seen with **SDG 7** on ensuring energy access and renewable energy and energy efficiency targets, and **SDG 13** on climate action. In particular, the issues of marine renewable energies (specific objective 1.4) constitutes a potentially significant contribution to the SDGs with high relevance for developing countries and small island nations. Specific objective 2.2 also includes relevant actions on understanding and anticipating the impacts of climate change on coastal communities.

While the Action Plan is generally supportive of the SDGs, any future revision may consider amendments to strengthen this alignment and better define its aspired contribution. For

example, greater emphasis may be placed on lesser developed Outermost Regions which suffer from isolation and relatively fewer economic opportunities, but hold significant potential for Blue Growth. Likewise, stronger emphasis might be placed on developing the international dimension to include the Atlantic façade of North West Africa or North East South America. Finally, greater emphasis could be placed on understanding and mitigating the impacts of climate change and the Action Plan's potential contribution to climate action through marine renewable energies.

The Action Plan is aligned with the wider work of the UN system and underlying legal framework

The **United Nations Convention on the Law of the Sea (UNCLOS)** lays down a comprehensive regime of law and order in the world's oceans and seas establishing rules governing all uses of the oceans and their resources. The 320 articles and nine annexes of the Convention go well beyond the remit of the Action Plan. On the contrary, they largely frame the legal framework in which it is implemented. Nonetheless, it can be said that the Action Plan is strongly coherent with the underlying principles enshrined in UNCLOS, notably that all problems of ocean space are closely interrelated and must be addressed as a whole. The underlying logic behind the Action Plan in the sea basin approach is that the ocean is a shared resource and Member States must cooperate together to protect it and sustainably exploit its vast resources.

The **International Seabed Authority** is an autonomous international organization established under the UNCLOS to organize, regulate and control all mineral-related activities in the international seabed area beyond the limits of national jurisdiction. The only area under exploration in the Atlantic is the Mid-Atlantic Ridge, where Russia and France hold exploration leases. Despite the marginal nature of this activity to date, the Action Plan has included a specific action under Specific Objective 2.3 supporting the development of a better understanding of deep sea mining.

The **Intergovernmental Oceanographic Commission** of UNESCO was established in 1960 as the only competent organization for marine science within the UN system. Its work is guided by four High Level Objectives focused on i) ecosystem health, ii) marine hazards, iii) climate change and iv) enhanced scientific knowledge. The IOC notably coordinates the Global Ocean Observing System (GOOS), collaborative system of sustained observations built around independently-managed and independently-funded observing elements. Priorities 1 & 2 of the Action Plan are supportive of the work of the IOC. In particular, a key action under the Specific Objective 2.2 concerns the development of a European Atlantic ocean observing and predictive capability, based on existing structures, platforms and mechanisms to support the implementation of EU policies.

The **International Maritime Organization (IMO)** is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships. Its work is currently guided by the Strategic Plan 2016 – 2021. This document lays out 13 'strategic directions'. Aside from those covering the development and maintenance of a comprehensive framework for safe, secure, efficient and environmentally sound shipping and enhancing the profile of shipping and instilling a quality culture and environmental conscience within the shipping community. Priority 2.1 of the Action Plan on improving maritime safety and security is clearly aligned with the objectives and work of the IMO. However, it can be noted that the actions listed under this specific objective (although not intended to be exhaustive), are more focused on maritime security and situational awareness. Safety aspects are focused on the development of new technologies to improve ship safety, inspection and ports.

The Action Plan is strongly aligned with the objectives and activities of OSPAR

The **Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)** is the current legislative instrument regulating international cooperation on environmental protection in the North-East Atlantic. Work carried out under the convention is managed by the OSPAR Commission, which is made up of representatives of the Governments of the 15 signatory nations, and representatives of the European Commission. OSPAR is closely interlinked with EU

efforts under the MSFD, providing a mechanism for Member States to cooperate to achieve objectives.

Work under the convention is guided by the 2010 Bergen Statement and the North East Atlantic Environment Strategy. Under this strategy, OSPAR is taking forward work related to the implementation of the Ecosystem Approach and a suite of five thematic strategies focused on specific areas, namely: i) biodiversity and ecosystem, ii) eutrophication, iii) hazardous substances, iv) offshore industry, and v) radioactive substances.

The Action Plan includes an action under Specific Objective 2.2 aiming to support OSPAR and other processes (e.g. MSFD) working towards the achievement of “good environmental status” of Atlantic waters by 2020. Beyond this, the Action Plan is also coherent with OSPAR work in areas, such as the development of marine renewable energies (and understanding the environmental impact thereof).

3.2 Effectiveness of the Action Plan

This criterion focused on assessing the extent to which the direct results of the Action Plan – e.g. the ‘Action Plan’ level of the logical framework presented in Figure 13 below– have been achieved to date. This criterion was addressed through two different evaluation questions:

- ▶ **EQ2.1** To what extent has the Action Plan been able to influence the activities and strategies of financiers, public authorities, universities, industry and other relevant stakeholders in the Atlantic Area?
- ▶ **EQ2.2** How successful has the Action Plan been in bringing together stakeholders and supporting the development of new project ideas aligned with Action Plan priorities?

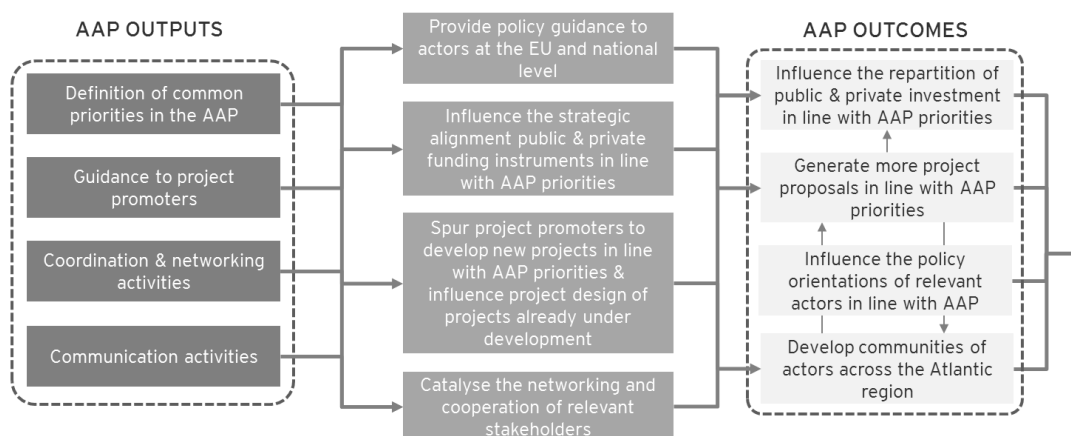
Overview of findings

With no dedicated source of funding, it is necessary to recall that the direct outcomes and results of the Action Plan are not tangible projects or actions, but rather **upstream enabling conditions** (see extract of the intervention logic in Figure 13 below).

One the one hand, the success of the Action Plan relies heavily on its ability to influence the priorities and investment decisions of funding programmes and other types of financiers to bring about better coordination and channel more resources to Action Plan priorities. Rather than creating a new financial instrument, the implementation of the Action Plan is supported through existing funding instruments at EU level, as well as public and/or private national or regional funding. Beyond pure funding decisions, the Action Plan also seeks to achieve influence more generally on the decisions of policy makers at national and EU level to seek to align policy developments in line with its priorities.

On the other hand, the Action Plan seeks to bring together actors in order to forge a stronger sense of community and develop new partnerships, to encourage new ideas and to accompany project promoters in the development of their ideas and securing of financing. To this end, the Assistance Mechanism was notably created in order to communicate on the objectives of the Action Plan, facilitate networking and partnership building and provide information and support to project promoters.

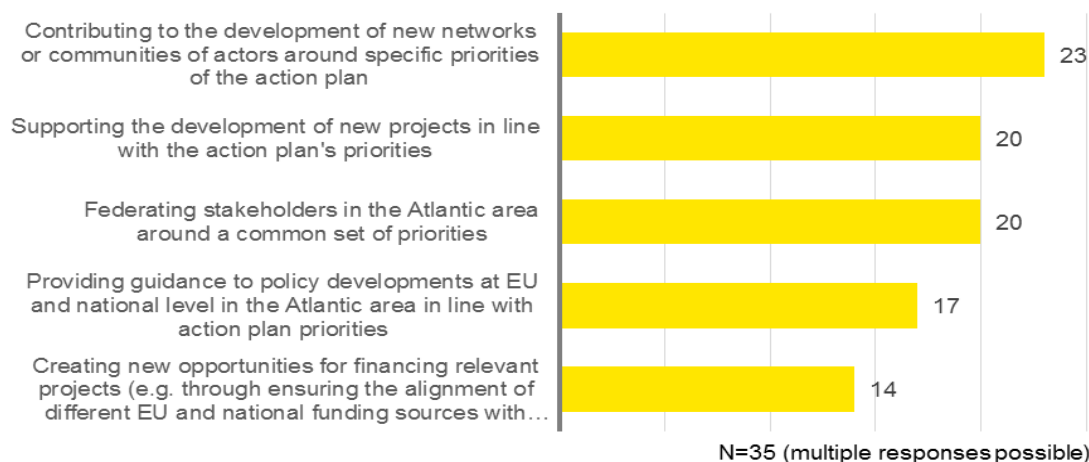
Figure 13: Extract of the ‘intervention logic’ of the Atlantic Action Plan



As developed in EQ2.1, the evaluation found that policy evolutions and funding priorities have largely been supportive of and aligned with the Action Plan. Nonetheless, the **evidence of the direct influence of the Action Plan is limited**, even if some early success stories can be identified. It thus appears that the Action Plan has in most cases not succeeded in securing greater funding or otherwise facilitated access to funding than would have been the case in its absence. Nor has the Action Plan contributed to a stronger coordination between funding sources. On the other hand, as

developed under EQ2.2, the Action Plan has **contributed to strengthening the community of actors in the Atlantic area, raising awareness and building support for a common set of priorities and providing some informational and partnering support for projects**. Nevertheless, the support provided to project promoters is not well aligned with their primary needs.

Figure 14: OPC - Has the Atlantic action plan been able to achieve any of the following results?



The results of the Open Public Consultation (see figure Figure 14 above) appear largely in line with the findings of the evaluation, even if they are more positive overall. Respondents generally felt that the Action Plan has been most effective to date in terms of contributing to the development of new networks or communities of actors around specific priorities of the Action Plan, supporting the development of new projects and federating stakeholders around common priorities. On the other hand, respondents appeared less convinced that the Action Plan has meaningfully contributed to proving guidance on policy developments at EU or national level or creating new opportunities for financing relevant projects.

3.2.1 EQ2.1 To what extent has the Action Plan been able to influence the activities and strategies of financiers, public authorities, universities, industry and other relevant stakeholders in the Atlantic Area?

On the EU level, policy initiatives are being taken in line with the Action Plan, but they have in most cases not been influenced by the Action Plan.

A stock-taking of policy developments and initiatives across policy domains of relevance to the Action Plan found that these were largely in line with its priorities and objectives (see section 3.4 for a detailed presentation by priority). With the exception of research & innovation, however, the Action Plan does not appear to have played an important role in influencing these developments. In other words, these developments would have in all likelihood occurred in absence of the Action Plan. This can be attributed to the Action Plan's very general priorities and objectives and the fact that the Action Plan largely identified existing policy initiatives already underway or programmed to be launched. The document offered few details on how it could contribute to supporting initiatives or how it hopes to influence the development of these initiatives to take into account specificities of the Atlantic area.

Interviews conducted with stakeholders across the Commission confirmed largely that the Action Plan had no influence on policy developments. Commission officials outside DG MARE, DG RTD and DG REGIO were not extensively (or not at all) knowledgeable of the Action Plan. Those who were aware of the Action Plan and its contents confirmed that it had not played a role in policy developments, in terms of providing further impetus or influencing the nature of their development. Some officials noted that the very broad and general nature of the priorities and objectives, even

those on an operational level, made it difficult to understand what the Action Plan sought to do aside from signal further political support for their policy area. Some Commission officials had been contacted by DG MARE in the framework of the Action Plan, but these were typically one off contacts and did not result in any ongoing dialogue or follow up.

One important exception to this general observation has been research & innovation policy.

The Action Plan highlighted in section 5 the prospects of forging an international agreement on oceanographic research in the Atlantic. The political process leading to the signing of what would become known as the Galway Statement was initiated independently of the Atlantic Strategy / Action. However, the timing allowed them to provide an additional political impetus to this initiative according to stakeholders in the Commission involved in this process. The success of the Galway Statement has subsequently led to the replication of this approach for the South Atlantic, with the signing of the Belem Agreement in July 2017.

The proliferation of maritime strategies at national and regional has clearly been influenced by policy dialogue on the EU level, but it is difficult to attribute these meaningfully to solely the Action Plan

National and regional maritime policy strategies have increasingly been put in place across the Atlantic area. Ireland (2012) and Portugal (2013) have developed integrated maritime strategies, while France is currently in the process. In the UK, maritime strategy development has been more concentrated on the regional level, with several devolved regional and county governments putting in place maritime strategies (e.g. Scotland, Wales, Cornwall). Spain has addressed issues covered through the Action Plan through a number of different strategies and action plans at national and regional level, covering issues such as aquaculture, maritime spatial planning, climate change and environmental protection amongst others.

Analysis conducted by evaluators found that Europe's imprint on these strategy developments is clear (see Annex 5.3). Almost all strategy documents reviewed reflect well the relevant EU policy frameworks, such as Blue Growth, Marine Knowledge, CFP or MSP or MSFD amongst others. This reflects the fact that new EU legislation has spurred Member States to take important initiatives in recent years, notably in areas of maritime spatial planning and marine environment.

However, the direct impact of the Action Plan on these strategies is much harder to discern.

Only one document reviewed made explicit mention of the Atlantic Strategy (the Irish 'Harnessing Our Ocean Wealth') and only one mentioned specifically the Action Plan (the Irish Marine & Innovation Strategy). Although, it can be noted that many of the documents reviewed date from prior to 2014. Nonetheless, these documents are largely aligned with the Action Plan, due to the fact that the latter made explicit extensive references to different thematic policy frameworks.

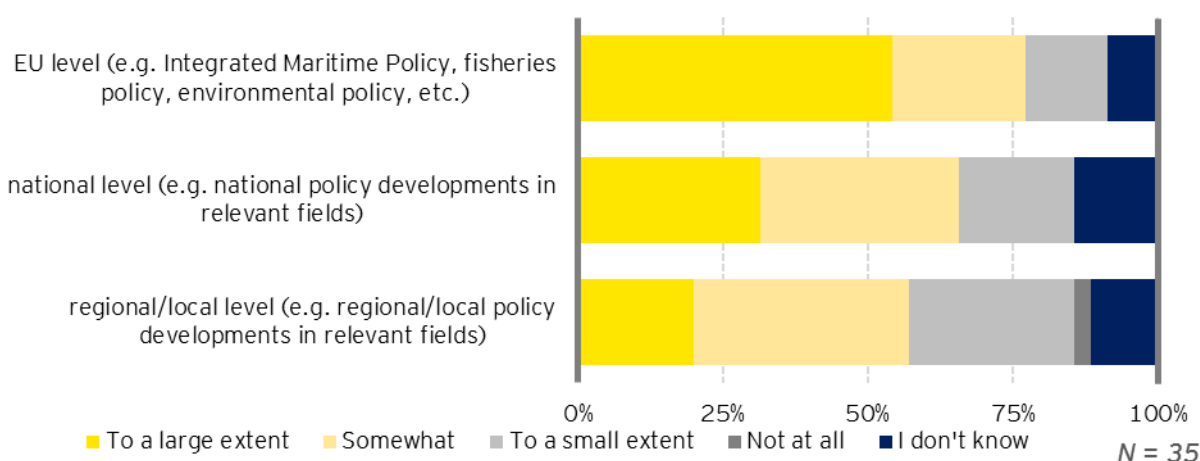
REGIONAL CASE STUDIES

Interviews with policymakers during the regional field visits largely reflected these findings. In Cornwall, where the 2012 Maritime Strategy is currently being updated, public authorities noted that the strong alignment between the documents was more of a coincidence than a result of its influence. However, it was underlined that the alignment indicated that the Action Plan was representative of the needs, challenges and opportunities in the region. Other regional decision-makers interviewed across the Atlantic area pointed to the strong influence of the EU integrated maritime policy in structuring their strategic approach (at national or regional level). This was particularly the case in Brittany (France) and in Ireland. To the extent that the Action Plan forms part of the wider policy framework in the maritime domain, some indirect influence could thus be attributed. However, it can be noted that stakeholders were much more familiar with policy agendas, such as Blue Growth, CFP, MSP or MSFD than with the Action Plan itself.

Stakeholders were generally more positive about the impact achieved on policy development

The results of the Open Public Consultation, summarised in Figure 15 below, demonstrate a more positive perception amongst stakeholders. Over 75% of respondents believed that the Action Plan had influenced policy developments on EU level to a large extent or somewhat. This positive perception may be explained by the strong alignment of policy developments with the Action Plan that can be observed, even if attributing causality from the evaluative perspective is difficult. However, stakeholders were significantly less confident that the Action Plan had influenced policy developments on the national, regional and local levels.

Figure 15: OPC – To what extent has the action plan influenced policy developments in line with its priorities at...?



With the exception of Horizon 2020, the Action Plan has struggled to influence funding priorities in a meaningful way at EU level

Overall, the evaluation found that the Action Plan had a limited impact on directly managed EU instruments in terms of priorities, funding allocation or treatment of projects aligned with the Action Plan. Evaluators reviewed the strategy and programming documents for the most relevant instruments and conducted interviews with stakeholders responsible for the implementation of key funding programmes.

Only one instrument was identified that published calls specifically aimed at supporting the implementation of the Action Plan: Horizon 2020. To back up the political commitment behind the Galway Statement, dedicated H2020 calls were published in 2014 – 2015 to support research in the Atlantic area in priority areas. These calls contributed directly to the ‘international dimension’ of the Action Plan, as well as Priority 1 & 2 objectives.

As previously noted, consultation of Commission stakeholders found that the level of knowledge of the Action Plan across the Commission was low. Those who were aware of the Action Plan and its contents confirmed that it had not played a role in influencing funding priorities. Some interviewees had cooperated with DG MARE to present their programmes at various Action Plan events, but they had never been engaged on a strategic level to discuss how their programmes may contribute to the Action Plan. The low level of influence can also be attributed to the Action Plan’s very general priorities and objectives and the fact that it largely identified existing policy initiatives already underway or programmed to be launched. Many Commission officials had trouble understanding what concrete implications the Action Plans had for their programmes, considering they were already more or less aligned.

While the Action Plan did not in most cases contribute to influencing priorities of funding programmes, the programmes were nonetheless very well aligned with its objectives on a strategic level. Almost all components of H2020 are of potential relevance to the Action Plan,

including Excellent Science, Industrial Leadership and Societal Challenges. Under the Societal Challenges heading, biannual calls are launched for research in the agri-food, aquatic resources and marine sectors. LIFE finances traditional projects through two sub-programmes for the environment and climate action. These calls are well aligned with priorities of the Action Plan, notably Specific Objectives 2.1 and 2.2. The COSME instrument supports through different tools access to finance (through intermediary financial institutions), access to markets (notably through the Enterprise Europe Network), and improving business conditions and entrepreneurship. Specific calls have been launched under the heading 'Framework Conditions for Enterprises' supporting the diversification of the EU's tourism offer, with specific reference to maritime tourism (Specific Objective 4.2). More generally, COSME directly supports implementation of Priority 1 of the Action Plan. Directly managed EMFF funds have been used to finance specific calls for highly relevant issues, such as the Blue Technology, Blue Labs and Blue Careers calls in 2016, measures supporting the development of integrated maritime surveillance, maritime tourism and heritage or marine special planning amongst others.

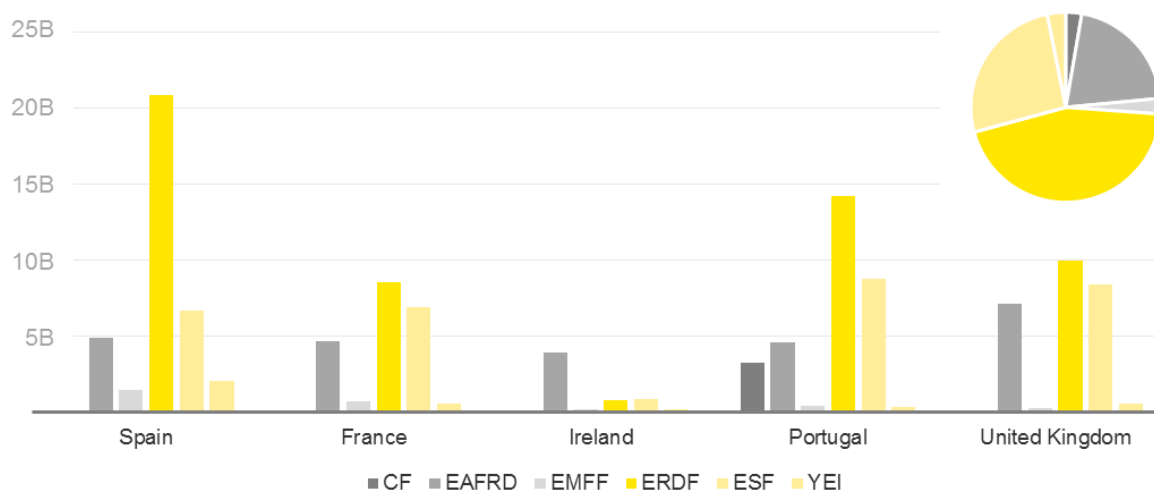
An important identified source of funding, the Action Plan had a limited impact on the ESIF programming process

The ESIF, including the ERDF (which finances Investment for Jobs and Growth, as well as European Territorial Cooperation/Interreg programmes), the ESF, the EAFRD and the EMFF, were seen from the outset as an important 'target' source of funding for the Action Plan by virtue of the size of the overall envelope. Indeed, the launch of the Action Plan was purposely planned to coincide with the programming process for the 2014 – 2020 MFF. Successful lobbying by the CPMR notably obtained equal treatment of macro-regional strategies and sea basin strategies in the Common Provisions. Under these, Partnership Agreements and Operational / Cooperation Programmes⁴ were required to 'take into account, where appropriate' sea basin strategies. In parallel, high profile discussions held across the region within the framework of the Atlantic Forum sought to contribute to reflection on future priorities during the programming process.

As mentioned above, the available funding through ESIF makes it a critical source of support for the implementation of the Action Plan. As summarised in Figure 16 below, counting regional Operational Programmes with a maritime façade on the Atlantic, relevant Interreg Cooperation Programmes and relevant national Operational Programmes across all Funds, the total available envelope comes to EUR 121,8 billion for 2014 – 2020. This represents approximately 19% of the overall ESIF envelope for the current MFF – EUR 638,5 billion. ERDF makes up the largest portion of this envelope at EUR 54 billion (45%), followed by ESF / YEI at 29%. The largest portion of funding benefits Spain and Portugal, which together make up 56%. In addition to this, one can add the envelope of money reserved for European Territorial Cooperation programmes of relevance to the Atlantic area (EUR 908 million).

⁴ The nomenclature for ESIF programmes is as follows: Operational Programme (under Investment for Growth and Jobs) and Cooperation Programme (under Interreg) objectives

Figure 16: Distribution of ESIF resources (planned) by Member State and Fund in the Atlantic area (including Atlantic regional OPs and national programmes, excluding TA)



**Figures downloaded from the ESIF Open Data Portal July 2017.*

Despite the abovementioned efforts and the high relevance of ESIF priorities to the Action Plan, the Action Plan has generally not been successful in obtaining specific financial measures to support its implementation or otherwise specific prioritization of the Action Plan. Nor has the Action Plan contributed significantly to greater coordination between programmes. The evaluation did not find any instances of Operational / Cooperation Programmes earmarking funds for the implementation of the Action Plan, giving any preference to projects supporting implementation of the Action Plan or otherwise prioritizing the Action Plan. More generally, there was limited specific earmarking of funding for marine and maritime priorities. This observation is reflected in the Commission’s 2017 report on Blue Growth, which noted that *relatively little funding has been specifically earmarked for the priorities of the Atlantic Strategy in the different operational programmes of these funds.*

The requirement in the Common Provisions appears to have been effective in raising awareness of the document, but much less so in terms of spurring Managing Authorities to take concrete steps to support the Action Plan. Many Managing Authorities reported that they learned about the Atlantic Strategy and / or Action Plan during the programming process for the current MFF, either through the requirement in the Common Provisions or, to a lesser extent, participation in the Atlantic Forum process. However, compliance with the provisions was largely administrative rather than strategic in nature, with most Managing Authorities treating it as a reporting obligation rather than a requirement to take proactive steps to align their Operational / Cooperation Programmes with the Action Plan. The answers of Managing Authorities tend to represent more ex post assessment than strategic reflection on how the OP can contribute actively to implementation.

A review of the relevant sections of Operational / Cooperation Programmes was undertaken by evaluators. Among 124 Programmes reviewed, 48 do not mention the Atlantic Strategy or Action Plan, in the part dealing with the contribution of planned interventions towards macro-regional and sea basin strategies. 24 of these are related to Rural Development Programmes funded by the EAFRD, which almost systematically considered the Atlantic Strategy and Action Plan were not of relevance. The remaining 24 consider this part as “non-applicable” to their programme. This includes many national programmes and some surprising regional programmes, such as ERDF programmes in Cantabria (Spain) and Northern France (Hauts-de-France), as well as a large part of the regional ESF programmes in Spain and the UK.

Concerning the 55 remaining Programmes (covering 77 programmes), 25 provide analysis on which

specific objectives / priorities of the programme would contribute to the priorities of the Atlantic Strategy or Atlantic Action Plan. ERDF programmes in France, Ireland and Portugal, as well as some Interreg programmes, tended to have the strongest analysis. The remaining 30 Programmes do present analysis on the specific links between the priorities supported by the programme and those included in the Strategy or Action Plan, generally only describing in vague terms some alignment or simply recognizing the existence of the Strategy and / or Action Plan.

In addition, a number of Managing Authorities make additional commitments, such as tracking projects aligned with the Strategy and Action Plan or helping to communicate information to stakeholders. It is notably worth mentioning the commitment by Spanish and Portuguese Managing Authorities to track investments in line with the Action Plan through the use of a 'Blue' ITI. These commitments, while modest, represent some of the most tangible impacts of the Action Plan to date in this area and a starting point for stronger cooperation with Managing Authorities in the future.

Atlantic Area Programme

The Atlantic Area Programme recognised in its Cooperation Programme that it played an important role in the implementation of the Atlantic Strategy and Action Plan. The document noted that the Strategy and Action Plan had provided guidance in to the development of the programme and that a clear coherence can be observed between the needs and challenges identified in the Strategy and the cooperation programme.

Examination of the Priority Axes of the programme finds indeed a strong coherence between the Atlantic Area programme and the Strategy and Action Plan in all areas except port cooperation (Priority 3). PA1 (Stimulating Innovation & Competitiveness) is clearly aligned with Priority 1 of the Action Plan, whereas PA2 (Fostering Resource Efficiency) and PA3 (Strengthening the Territory's Resilience to Risks of Natural, Climate and Human Origin) support Priority 2, in particular Specific Objectives 2.1, 2.2 and 2.4. PA3 also supports some aspects corresponding to Specific Objective 4.1 of the action plan on social issues. Finally, PA4 (Enhancing Biodiversity and the Natural and Cultural Assets) supports Priorities 2 & 4, in particular Specific Objectives 2.2 and 4.2.

In order to ensure the complementarity and the contribution of the programme to the Atlantic Strategy and Action Plan, a series of mechanisms are set out, including: i) special reporting on the part of project promoters implementing projects supporting the implementation of the Strategy and Action Plan, ii) specific annual reporting on the contribution of the programme to the Strategy and Action Plan, iii) cooperation with other relevant Interreg programmes in the Atlantic Area and iv) close cooperation with DG MARE, DG REGIO and Action Plan stakeholders.

'Softer' measures implemented to influence the programming process do not appear to have had much more success. While the Atlantic Forum workshops attracted a high level of participation by national, regional and local decision-makers, this did not translate into strong commitments to support the Action Plan through the Operational / Cooperation Programmes. Consultation with stakeholders would suggest that staff from Managing Authorities did not participate extensively in events. In the questionnaires received from Managing Authorities, only two indicated that they were directly involved and four additional Managing Authorities noted they had contributed to the elaboration of the Action Plan through their Operational Programmes. Others noted indirect involvement through the CPMR, and one indicated that colleagues in another department had taken part. Interviews with Managing Authorities likewise did not find a strong recollection of the process or point to much impact in decision making.

A final point detracting from the influence of the Action Plan on the programming process was the very broad nature of its objectives. As discussed below, many Operational / Cooperation Programmes are well aligned on a strategic level with the priorities in the Action Plan, even if there are not specific measures deployed to support it. This can largely be attributed to the very general and wide ranging nature of the priorities and objectives in the Action Plan and Strategy. Many Managing

Authorities interviewed felt that they had little to do to ensure alignment with the Action Plan as their Programmes were already very much aligned, at least on the level of strategic objectives. The case of the EMFF in particular can be mentioned in this context. While authorities paid special attention to the Action Plan, the latter was largely reflecting the objectives of the EMFF already, providing little substance for strategic reflection on how national programmes could any further contribute.

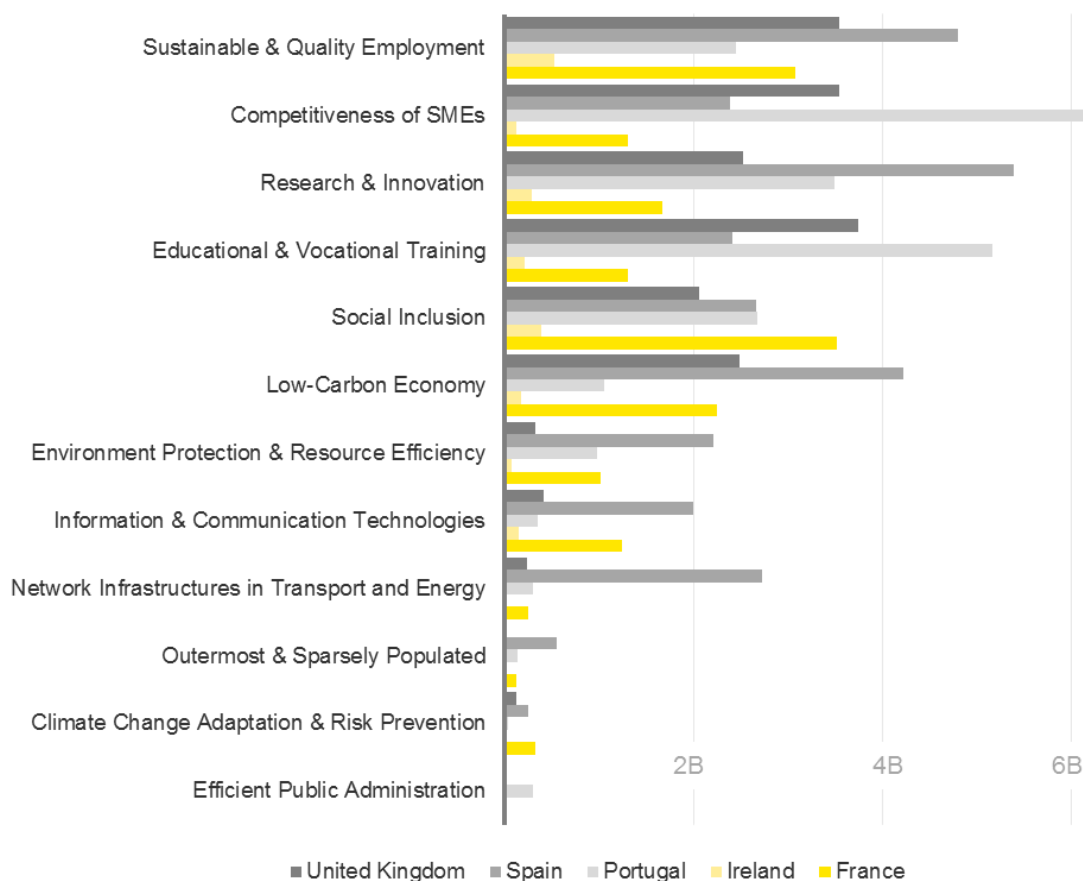
The Action Plan did not contribute to greater cooperation or coordination between ESIF programmes

Although the Action Plan aims to foster cooperation across borders and promote initiatives on a transnational level, most projects remain implemented on a national level. Only around 30% of all projects were transnational in character, involving more than one European country. This corresponds entirely to projects funded by existing EU mechanisms involving collaborative transnational projects (notably ERDF-Interreg and H2020). The evaluation did not find any evidence of coordination between ESIF programmes in view of supporting Action Plan implementation. However, it can be noted that Spain, Portugal and France have taken steps to improve cooperation between Managing Authorities. As discussed further below, these first efforts may lay the groundwork towards more ambitious cooperation in the future.

Even if the Action Plan did not secure specific treatment by Managing Authorities, many openings exist in Operational / Cooperation Programmes for projects supporting the Action Plan

While the Action Plan did not have a strong influence on decision-making during the programming process, projects in this domain nonetheless have ample ‘openings’ to compete for funding within the more general framework of priorities defined by the Operational / Cooperation Programmes. Looking at the planned commitments by thematic objectives for the ERDF and ESF / YEI (summarised in Figure 17 below), one can observe a very significant level of resources supporting objectives of high relevance to Priority 1 and Priority 4 of the Action Plan on innovation & entrepreneurship and sustainable & inclusive development respectively. Specifically, ERDF Operational / Cooperation Programmes have placed strong emphasis on supporting the competitiveness of SMEs and research and innovation. The ESF has concentrated support on issues of employment, training and social inclusion. It can also be noted that strong emphasis is placed within the ESF on entrepreneurship in addition to more traditional employment support measures. While relatively fewer resources have been devoted to issues such as the environment, energy or (maritime) transport infrastructure, these figures nonetheless represent significant investments. Investments in research & innovation and SME competitiveness can also be as relevant to environmental protection or sustainable exploitation of marine resources as specifically earmarked funds.

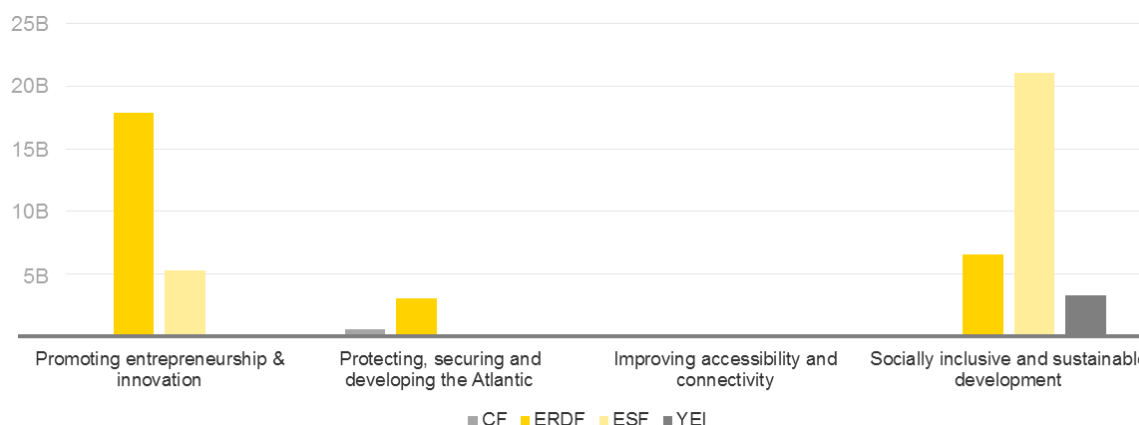
Figure 17: Distribution of planned ERDF & ESF commitments by Thematic Objective in the Atlantic Area (including Atlantic regional Operational Programmes, national programmes and Interreg Cooperation Programmes)



While this high level picture provides a good perspective of the potential funding opportunities, it hides a plethora of different sectors and activities. Using the ‘intervention fields’ to analyse the planned financial commitments under the ERDF and ESF/YEI can provide a somewhat more granular picture. Intervention fields are a set of codes for the actions and activities financed by the ERDF and ESF in order to allow for analysis and monitoring on a detailed thematic and sectoral level. The 123 intervention fields were reviewed and affected to one or more of the Action Plan priorities.

This analysis provides a similar picture to the overall analysis. Relevant funding opportunities under ESIF are highly concentrated under Priorities 1 and 4 as can be seen in Figure 18 below. The large majority of funding relevant to support entrepreneurship and innovation is available through the ERDF. Funding relevant for supporting inclusive and sustainable growth is mainly available through the ESF, with the YEI component providing significant support for young people. As previously noted, the ESF also has a notable entrepreneurial component of relevance to Priority 1, whereas ERDF funding can have clear relevance to Priority 4. Relatively insignificant relevant funding can be observed for Priorities 2 & 3 through ERDF & ESF, notwithstanding the fact that the amounts observed are significant in absolute terms. As discussed above, a number of directly managed EU instruments make relevant funding opportunities available to these two Priorities.

Figure 18: Distribution of relevant planned ERDF & ESF commitments by Action Plan priority (based on evaluator analysis of intervention fields)



The EMFF implemented through shared management deserves special attention as it (along with the centrally managed part described above) can be considered to contribute to the Action Plan at a level of practically 100% of funds flowing into the Atlantic area. The envelope allocated to the five Atlantic Member States represents EUR 2,5 billion. However, it should be noted that the EMFF is implemented through national programmes only at national level (e.g. no regional programmes), making it difficult to pinpoint the share allocated to the Atlantic area, notably for France, Spain and the United Kingdom.

As stated in the Regulation, the objectives of the EMFF are to:

- ▶ promoting competitive, environmentally sustainable, economically viable and socially responsible **fisheries and aquaculture**;
- ▶ fostering the **implementation of the CFP**;
- ▶ promoting a **balanced and inclusive territorial development** of fisheries and aquaculture areas; and
- ▶ fostering the development and implementation of the Union's **Integrated Maritime Policy** in a manner complementary to cohesion policy and to the CFP.

As can be observed, these objectives are almost identical to those that can be found in the Action Plan. In particular, Specific Objective 1.2 is almost a restatement of the first two high level objectives of the Action Plan. The third objective is directly relevant to Priority 4 promoting inclusive and sustainable growth, while the fourth objective supports directly several aspects of Priority 2, which includes a number of key components of the EU's Integrated Maritime Policy, such as maritime surveillance or marine spatial planning.

On the national and regional levels, no evidence was found of the Action Plan contributing to influencing investment priorities

Consultation with programme stakeholders and documentary review did not find that the Action Plan had achieved significant influence on national (or regional level) funding sources.

While it can again be observed that many national funding programmes and instruments are well aligned with the Action Plan, no specific financing was dedicated to its implementation, nor was there evidence that the Action Plan had encouraged more spending on maritime issues. Although few national funding programme stakeholders were consulted, those that were generally had low knowledge of the Action Plan and did not consider that it had played an important role in setting priorities or deciding funding allocation. However, some stakeholders did note that EU level policy developments, notably Blue Growth, had contributed to raising the profile of marine and maritime

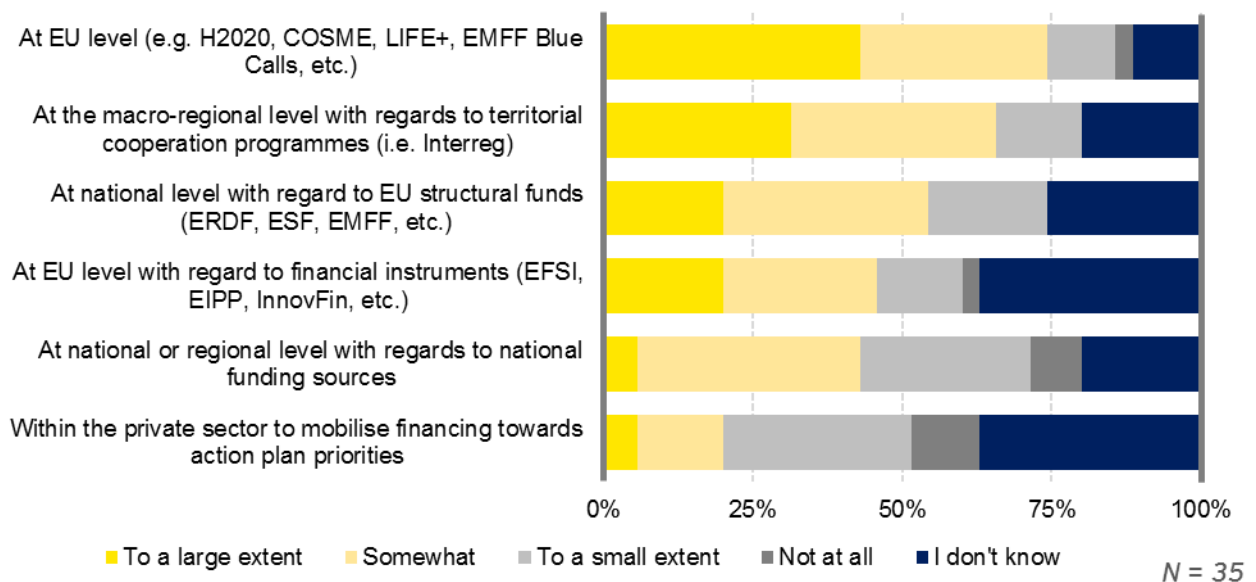
funding. This can notably be underlined in Ireland.

Considering the private sector, the consultation conducted by the evaluation did not cover any large companies, although some SMEs and relevant organisations such as clusters or agencies funding innovation in the private sector were interviewed. As discussed in section 3.2.2, knowledge of the Action Plan in the private sector was generally found to be low to non-existent. While a number of large, privately funded projects can be noted across the region, it can be assumed that the Action Plan did not play a consequential role in their creation or funding.

Respondents to the Open Public Consultation saw more influence at EU than national level, with very little influence on the private sector

Although somewhat more positive, the results of the Open Public Consultation reflect those of the evaluation. As can be seen in Figure 19 below, respondents saw the most direct influence of the Action Plan at EU level. This can be attributed to some notable success, such as dedicated H2020 calls, as well as the strong alignment of EU instruments with the Action Plan priorities. Less influence was detected with regards to structural funds, with less than 25% saying priorities were influenced ‘to a large extent’. Respondents were not optimistic that significant influence had been achieved at national level. Finally, within the private sector, less than 25% of respondents felt that the Action Plan had achieved influence ‘to a large extent’ or even ‘somewhat’.

Figure 19: OPC - To what extent has the action plan had an influence on the priorities of different funding sources (so as to create new funding opportunities for Atlantic priorities)?



Efforts in the first years have laid the ground work for better coordination in the future with policy makers and funders, in particular MAs.

While it is tempting to see the influence achieved by the Action Plan in the first three years of its implementation in negative light, this would miss highly positive achievement that have taken place. Since 2014, the first steps have been taken towards developing a better awareness of how the ESIF are being deployed in the maritime context. Virtually all relevant Managing Authorities are aware of the Action Plan and have some basic knowledge of its contents. While only a small number participated actively in its elaboration, the Commission, with the strong support of DG REGIO is continuing to engage with Managing Authorities and implicate them in the implementation of the Action Plan. This is in addition to efforts organised as national level to bring together relevant Managing Authorities and promote awareness and cooperation. Spain and Portugal have used Integrated Territorial Investment (ITI) tools in order to create an ‘accounting’ of ESIF investments aligned with the Action Plan. While it is limited in the extent to which it is actually being used to direct

investments, it has had the merit of helping to take stock of what is being done in line with the Action Plan, raise awareness and promote networking. The central administration France has put in place the possibility for Managing Authorities (voluntarily) to flag investments in line with the AAP and has set up a work group of relevant Managing Authorities. Finally, some Managing Authorities have made individual commitments to supporting the implementation of the Action Plan, mainly through cooperating with the Assistance Mechanism, supporting communication and / or providing reporting.

3.2.2 EQ2.2 How successful has the Action Plan been in bringing together stakeholders and supporting the development of new project ideas aligned with Action Plan priorities?

The Action Plan has contributed to building a stronger community of stakeholders in the Atlantic area and building buy in around common priorities

The inclusive, bottom up process for elaborating the Action Plan has contributed to raising awareness and securing buy in. As previously noted, the development of the Action Plan following the approval of the Atlantic Strategy in 2011 was driven by a robust, bottom-up process implicating hundreds of stakeholders across the Atlantic area and from across different sectors. The 'Atlantic Forum' process was supported by EUR 1,2 million approved by the European Parliament and notably included five thematic workshops organised in each of the Atlantic Member States. Consultation of stakeholders found that this process in and of itself contributed to creating a good level of awareness, strong buy-in and a good deal of momentum prior even to the launch of the Action Plan. Stakeholders appreciated the opportunity to contribute to the development of the document and reported having useful exchanges and developing new contacts at the Atlantic Forum events.

At the same time, this large upfront investment in the process of elaborating the Action Plan has also contributed to a feeling of disappointment amongst many in the Community. Many stakeholder reported that they saw the seriousness with which the process was handled and the investment in organisation as a strong signal that the Action Plan would lead to tangible financial results, notably in terms of greater and earmarked funding for Action Plan priorities and/or schemes to provide preference or other benefit to projects supporting the Action Plan. The fact that this has largely failed to materialize outside of funding for research (see section 3.2.1), has contributed to a perception in the community that the Action Plan has 'fizzled out'.

Since the launch of the Action Plan, the organisation of regular events by the Assistance Mechanism has supported continued exchanges and networking (see box below for more information). Events have largely been qualified as high quality by stakeholders, with attendance at EU and national events in line with expectations. The Annual Stakeholder Platform events, for example, have regularly attracted over 200 attendees from a diversity of sectors and geographies. The events have provided a forum for formal and informal networking activities, information dissemination and discussions on issues of relevance to the Action Plan through workshops. The Assistance Mechanism can also be commended for the close cooperation with national, regional and local authorities in the organisation of events. Indeed, the financial resources available to the Assistance Mechanism would not have supported the quality and size of events organised if not for this cooperation.

Action Plan events organised by the Assistance Mechanism

The Assistance Mechanism organizes three types of events on an annual basis:

- ▶ The **Atlantic Stakeholder Platform Conference** is an annual conference intended to be the central hub for stakeholders to meet, greet, seek ways of cooperation, share information and identify funding. The location of the conference rotates every year between the five Atlantic Area Member States.
- ▶ **National events** are organised in each Member State concerned to increase awareness of the

Action Plan, promote cooperation projects and, exchange experiences and good practices.

- ▶ A yearly **roadshow event** is organised in each Atlantic Member State raise awareness and increase visibility of the Action Plan, disseminate information, in particular on the regional / local level.

Overall, 25 events have been organised by the Assistance Mechanism since 2015. Monitoring data on the number of attendees was not adequate to provide a full picture, but available data attests to at least 2 000 attendees at events on the EU and national level since 2015. The Stakeholder Platform Conferences have attracted over 200 attendees in general, whereas national events attract between 50 – 100 persons. Roadshows by their nature are designed to be smaller events of less than 50 people.

However, the Action Plan events have struggled to build on the momentum of the Atlantic Forum and widen the community of stakeholders. While over 25 events have been organised, the Assistance Mechanism has struggled to significantly expand the community of Atlantic stakeholders, notably reaching out to stakeholder with little experience cooperating at the EU level. According to stakeholders organizing and participating in events, attendance has for the large part been confined to a core group of stakeholders already active on the EU level and with resources to attend events. This naturally raises the question of to what extent the events are adding value in terms of contributing to the formation of new partnerships and dissemination of information to stakeholders not already aware of the Action Plan.

This may partly due to the lack of adequate territorial coverage of events in certain Member States. Although the Terms of Reference for the Assistance Mechanism attempt to ensure good regional coverage, notably through the roadshows, this has not always been the case in practice. In Ireland, all events have been held in either Galway (where the National Unit is based) or Dublin. In the UK, all events have been organised to date in London and Liverpool. British stakeholders interviewed expressed particular disbelief that *two* Atlantic themes events would be organised in London. However, it can be noted that the upcoming 2017 Stakeholder Conference will be organised in Glasgow, Scotland. On the other hand, events in Spain, Portugal and France have achieved a much larger coverage of relevant regions.

Knowledge of the Action Plan ‘on the ground’ varies significantly by type of stakeholder and sector

Since the launch of the Action Plan, the Atlantic Assistance Mechanism has been the primary actor responsible for communication (see description of activities in the box below), in cooperation with key intermediary bodies such as national authorities, Managing Authorities, clusters, networks, etc. Communication activities are implemented through the regular organisation of events at EU and national level, participation in third party events and electronic communications through email and social media. These activities are broadly focused on the end users and beneficiaries of the Action Plan itself, namely a wide array of stakeholders across the Atlantic susceptible to contribute to the implementation of the Action Plan.

Communication activities of the assistance Mechanism

In addition to organizing dedicated events, which play an important role in communicating and raising awareness, the Assistance Mechanism has deployed a number of different communication tools. These include:

- ▶ The **Action Plan** website, which includes information on the Action Plan, a library of relevant policy material a calendar of events, information on funding opportunities, a database of relevant organisations, a functionality to post and search for project ideas / opportunities and contact information.

- ▶ Extensive **presence on social media**, including Twitter, Facebook and LinkedIn. The Assistance Mechanism team has maintained a particularly active presence on Twitter, with a cumulative number of over 18 500 tweets and over 3 600 followers. Accounts on Facebook and LinkedIn have been maintained and are active, although with relatively smaller followings – 236 ‘likes’ and 324 ‘members’ respectively.
- ▶ Participation in **third party events** across the Atlantic area. The National Units have participated in over 200 third party events since 2014 to raise awareness of the Action Plan and build the network of stakeholders and partners.
- ▶ **Production of multimedia content**, notably six short videos that have been shared on the YouTube channel of the Assistance mechanism and viewed a cumulative total of 246 times. The Assistance Mechanism has also developed and printed brochures, which are disseminated at various events.
- ▶ The dissemination of **Newsletters** and **Electronic Flash Reports**, which are disseminated to the database of contacts.
- ▶ **Outreach and partnership-building activities** with relevant organisations to support communication and awareness raising efforts.

Overall, knowledge of the Action Plan and its contents remains inconsistent across different stakeholder groups. For the purpose of analysis, stakeholders can be divided into three broad groups on the basis of their level of knowledge of the Action Plan and sense of ownership.

There exists a strong core of stakeholders with a general to detailed knowledge of the Action Plan. This includes in particular universities and research centres with a strong interest in marine and maritime issues, as well as clusters and other intermediary organisations working with members to mobilise EU funds. These stakeholders have in common an extensive record of cooperation at the EU level and participation in EU financed projects. They generally have strong international cooperation of EU affairs staff (or even whole departments) that have strong experience in developing project proposals, good networks across the EU and good knowledge of relevant policy developments. Many also participated in the elaboration of the Action Plan during the Atlantic Forum process.

Beyond this core group, a second group can be identified with a much more varied level of knowledge. This group includes mainly national, regional and local authorities (including Managing Authorities), as well as officials at the EU level (Commission Services, EU agencies, etc.). Within this group, many stakeholders know of the existence of the Atlantic Action Plan and/or Strategy, but in most cases do not have a deep knowledge of the contents or implementation mechanisms and do not feel that they are personally involved in its implementation in a meaningful way. Nevertheless, a significant minority of stakeholders within this group had a higher level of knowledge and appropriation of the Action Plan comparable with those described above. For instance, while the level of knowledge across the Commission was generally limited, relevant teams within DG RTD had extensive knowledge of and involvement in the Action Plan. On the regional and local levels, a number of regions and cities stand out by virtue of the level of knowledge of the Action Plan amongst stakeholders.

REGIONAL CASE STUDIES

The findings of the regional case studies provided a close look at the enormous disparity in knowledge of the Action Plan between regions across the Atlantic Area. While all regions had in common a very dynamic marine and maritime sector and ambitious strategies and policies, the level of knowledge of the Action Plan varied drastically. In Brittany, public authorities at the regional and local level and the Managing Authority for the regional ERDF-ESF programme had a strong knowledge of the Action Plan and displayed a strong sense of ownership, having participated in its

elaboration. They actively contributed to communication efforts and had strong connections with the locally based 'National Unit' of the Assistance Mechanism. Across the channel in Cornwall, however, few actors outside the research community had more than a very basic level of knowledge of the existence of the Action Plan.

There were not any variables identified that appear to clearly explain why some stakeholders in this group had a much better knowledge than the general population. Variations could be noted by region, meaning that stakeholders with a better knowledge of the Action Plan tended to be concentrated in the same regions rather than equally spread across the Atlantic Area. This suggests that the quality of regional cooperation mechanisms in the maritime domain and the buy in of key maritime stakeholders with strong local influence likely plays an important role in determining the level of knowledge and buy-in in a given region.

Finally, a third group of stakeholders was identified with generally little to no knowledge of the Action Plan or Atlantic Strategy. This includes a wide array of relevant actors, including businesses, ports, NGOs in areas such as environmental conservation and defence, fishing and aquaculture operators, maritime security actors (coast guard, navy...) and relevant industry or sectoral representation groups amongst others. Many of these actors had limited involvement in EU affairs and projects in the past. Many discovered the Action Plan upon being contacted by the evaluators. These organisations often viewed EU financing as too difficult or costly to access given the requirements and complexities. As a result of this lack of knowledge, it was difficult to engage with these stakeholders during the evaluation process. This judgement thus relies in large part on reporting by intermediary organisations such as clusters, Managing Authorities or public authorities, who have contacts with these stakeholders.

One can also consider the level of knowledge by sector in addition to the type of actors. From this perspective, research & innovation actors tend to be the most knowledgeable of the Action Plan and display the highest level of ownership. This can be linked in part to strong efforts on the EU level to push Blue Growth and Marine Knowledge, as well as dedicated funding made available through Horizon 2020. In other sectors, one can note a relatively lower level of general awareness. This includes some surprising communities that were strongly targeted by the Action Plan, such as fishing & aquaculture, marine renewable energies, environmental conservation & protection, maritime safety and security or tourism.

The Action Plan has not contributed significantly to generating new projects or otherwise influencing them...

The Action Plan has not contributed significantly to facilitating the development of new projects, or otherwise influencing projects of their development. Nearly 50 interviews were conducted with project promoters implementing or seeking financing for their projects, as well as organisations regularly implementing projects in areas covered by the Action Plan. No stakeholders reported that they had been directly influenced by the Action Plan in terms of the decision to pursue a project idea. In other words, the project promoters would have taken forward their projects in absence of the Action Plan.

Moreover, no stakeholders indicated that they had been meaningfully influenced by the Action Plan in the development of their project. The expectations and selection criteria of funding instruments were more important in consideration when developing project proposals. Moreover, the very general nature of the priorities and objectives in the Action Plan do not provide very concrete guidance on the project-level.

However, stakeholders noted that the Action Plan could provide a means of publicizing the added value of their project or legitimizing their project proposal in order to 'sell' it to financiers. Nonetheless, it was not clear to project promoters to what extent this provided an added value to their project proposal. As discussed in the previous section, the Action Plan has limited

success in terms of securing dedicated funding or obtaining preferential treatment of projects aligned with the Action Plan. In addition, a number of project promoters seeking financing for their projects reported that the fact that their project was aligned with the Action Plan provided moral support for them in pursuing their efforts.

While the Action Plan does not offer dedicated funding, it provides support to project promoters through the work of the Assistance Mechanism (see box below). This 'guidance' role has been an important part of the work of the Assistance Mechanism. The Assistance Mechanism keeps a database of project ideas identified and supported in one way or another by the team. In July 2017, this database had 169 project ideas.

Support to project promoters

Providing guidance and support to project promoters is a central part of the Assistance Mechanism's mandate. Its value proposition to project promoters includes:

- ▶ The website of the Assistance Mechanism includes a listing of relevant funding opportunities on the national and EU level. Sessions on funding opportunities are also organised during events. National Units can also provide advice on funding opportunities on an individual basis. Project promoters can also post their project ideas on a dedicated section of the website for prospective financiers (or partners).
- ▶ The Assistance Mechanism acts as a "match-making platform" to bring potential project partners together. It does this through providing database of relevant organisations in the Atlantic area on its website and organising events with formal networking components. The National Units can also support the identification of partners for individual projects.
- ▶ The Assistance Mechanism provides a library of relevant policy documents useful for developing project proposals. The website also features a 'best practices' repository.

The Assistance Mechanism has done its best to support project promoters, but its service offering and resources are limited. Project promoters recognized the efforts of the members of the National Units and felt that they did their best to support them. The primary type of support received from the six project promoters interviewed that had been support by the Assistance Mechanism was advice on identifying relevant sources of funding and securing project partners (through events or members of the National Units). However, both project promoters and members of the Assistance Mechanism underlined that significant resources are not available to support project promoters directly. Most of the service offering thus revolves around facilitating access to information and partners through the website and events. The Assistance Mechanism cannot provide direct support to developing project proposals.

Interviews with these stakeholders and other project promoters pointed to the fact that the Assistance Mechanism's 'value proposition' is not aligned with needs. Identifying funding sources and securing partners is not the primary difficulty faced by project promoters. Stakeholders pointed out that, while useful to have funding information in one spot, it is widely available and generally not challenging to identify relevant opportunities. Likewise, many reported that they already had good connections with partner organisations across the Atlantic area. Rather, investing the necessary resources in developing project proposals and obtaining 'insider insight' into successful EU project proposal development are identified as the main challenges. Indeed, many large organisations have specialized employees dealing with EU projects or outsource work to niche consultancies. For smaller organisations or those with less experience with EU projects, it can be hard to make a business case for pursuing EU investments due to this up-front investment or simply too daunting to attempt. As noted, the Assistance Mechanism does not have the resources or mandate to directly support project proposal development and its National units, for the most part, do not have extensive experience bidding for project funding or in depth knowledge of relevant tools beyond publicly

available information.

It can also be noted that the role of the Assistance Mechanism duplicates existing resources available to project promoters at EU level (see box below). The Assistance Mechanism works in a complex ecosystem of existing resources at the availability of project promoters. During consultations, a number of stakeholders pointed out that these resources are not listed on the website Assistance Mechanism or that the Assistance Mechanism did not seem to be aware of them. One can thus question to what extent these existing resources have been fully leveraged, or to what extent they may be being duplicated by the Assistance Mechanism.

Examples of resources available to project promoters

- ▶ Numerous websites provide general **information on EU funding opportunities** and current calls. These include general sites, as well as specialized sectoral sites. A number of funding guides have also been published by different organisation. DG MARE, for example, recently published a funding guide for coastal tourism. That said, no other sites were identified that curate lists of funding opportunities in the maritime domain (in the Atlantic or more generally).
- ▶ Many EU funding programmes are supported by a network of **National Contact Points** on national level. This is the case, for example, for H2020, LIFE and COSME. Interreg programmes also systematically have national contact points in all areas covered by the particular programme.
- ▶ Many **match-making platforms** already exist. CORDIS has a database of 6133 partner profiles with 4861 open partnership requests as of August 2017. The European Enterprise Network has a partner search function for business and research collaboration opportunities across the EU and beyond. The European Investment Project Portal provides a platform for project promoters with project of at least EUR 1 million to publish their ideas and seek support. The Atlantic Area Programme also has a partner search function, as well as a section where project promoters can post project ideas and solicit partners. With well over 100 project ideas posted since 2016, it can be qualified as much more active than the similar forum on the website of the Assistance Mechanism.

Interestingly, nearly 60% of respondents to the Open Public Consultation reported that they believed that there were, in addition to the Assistance Mechanism, other cooperation mechanisms in the region contributing to the implementation of the Action Plan. When asked to specify which cooperation mechanisms were supporting the Action Plan, the most widely indicated was the Atlantic Arc Commission. In addition, many EU mechanisms and projects such as MSDF, MARNET and NECSTouR, as well as international bodies such as OSPAR, AORA and ILO were named. Furthermore, research networks, the Irish Sea Forum, and fisheries certification to facilitate sustainable fishery were listed. While the Assistance Mechanism team has conducted some partnership building activities, the evidence does not suggest that this has led to significant concrete results.

3.3 Implementation & efficiency of the Action Plan

This criterion focused on assessing the extent to which the supporting structures have facilitated effective and efficient implementation. These notably included the ASG and the Assistance Mechanism, as well as the role played by the Commission. The evaluation sought to understand how these structures have contributed to (or detracted from) the success of the Action Plan and determine what adjustments could be made in consequence. This criterion was addressed through a single evaluation question:

- ▶ **EQ3** To what extent are the current governance and management structures supporting the Action Plan effectively? Which bottlenecks can be identified?

3.3.1 EQ3 To what extent are the current governance and management structures supporting the AAP effectively? Which bottlenecks can be identified?

Overview of findings

The lack of dedicated funding is almost universally underlined as an impediment for implementation by stakeholders. Many underlined that only a small envelope of funding would have disproportionately positive effects for the Action Plan. While it is clear that it may enhance implementation, this also misses somewhat the original rationale of the Action Plan and moves focus away from what it can accomplish even without dedicated funding.

The roles and responsibilities are not clearly spelled out in the Action Plan document itself. In practice, they have developed organically over time. There is thus scope for greater formalization of the roles of different actors, in line with the practice of macro-regional strategies, and in particular a clearer role for regional, local, civil society and private sector stakeholders.

Member State participation in the **ASG** has demonstrated continued commitment to the Action Plan. This group has met regularly, providing strategic oversight to the Assistance Mechanism and undertaking a number of different initiatives. However, a number of limitations can be highlighted, such as a lack of formalization of its role and the limited time and resources of its members. While strong commitment has been demonstrated by Member States, the lack of high level political participation in the governance can be regretted.

The **Commission** has made positive contributions to the Action Plan. DG MARE has focused in the first years of the Action Plan on building strong cooperation with DG RTD and DG REGIO. However, Strong coordination and cooperation with other Commission Services has been relatively slower to develop.

As the only budget line dedicated to the implementation of the Action Plan, the Assistance Mechanism has been an extremely valuable tool. It has satisfactorily performed its designated activities in line with its Terms of Reference. However, the evaluation noted that the Assistance Mechanism was not equipped with adequate resources to fully achieve its objectives. Secondly, the objectives and tasks do not appear to be fully aligned with the needs identified at different levels. While some redundancies and low added value can be observed for some tasks, other needs appear to be unserved that could be addressed by the Assistance Mechanism.

The results of the Open Public Consultation point to the perception of a large variety of bottlenecks impacting Action Plan implementation. These are presented in Figure 20 below. Analysing the qualitative responses, respondents underlined a lack of visibility of impacts and insufficient information, as well as too broad of a scope and redundancy with other programs. It was also criticized that it is difficult for SME's to partake in the process and that political, business or national interests hinder sustainable fishery management.

Figure 20: OPC – In your opinion, what are the main bottlenecks regarding the implementation of the Action Plan?



Stakeholders almost universally point to a lack of dedicated funding as a bottleneck for implementation

The lack of dedicated funding is almost universally underlined as an impediment for implementation by stakeholders. Indeed, funding has a powerful effect in terms of generating awareness and influencing the development and design of projects. The evidence collected by evaluators would support that the lack of funding has tended to undermine raising awareness of the Action Plan and achieving influence on the ‘project level’. Moreover, where the Action Plan has had success in objectively creating more opportunity for project promoters to finance their projects (e.g. H2020), stakeholders have rightly pointed out that the project promoters are often not aware and do not consider that their project is specifically a part of the Action Plan, even if it is aligned with its objectives.

Many stakeholders have underlined that only a small envelope of funding would have disproportionately positive effects for the Action Plan, either used to fund a small number of flagship projects or to give a small amount of support to a larger number of projects (‘seed funding’). The ASG strongly lobbied the Commission to secure funding for a small call for projects dedicated to the Action Plan; however, these attempts were unsuccessful.

While the evaluation cannot refute these findings, it can be noted that they to some extent fail to recognise the *raison d’être* of the Action Plan itself. If not explicitly stated as such in the Action Plan, the Commission sought above all to use the Action Plan as a tool to enhance coordination of existing funding sources and policy frameworks and, where possible, direct more funding to areas prioritised by the Action Plan. Indeed, this is the same motivation that has largely driven the development of the macro-regional strategies in the reigning political environment of no new EU legislation, funding or institutions.

Nonetheless, it is clear that the strategic deployment of a small envelope of funding may be considered as an instrument for enhancing implementation, but it should not be considered as a deficiency of the Action Plan itself. Indeed, the macro-regional strategies have made documented positive contributions to enhanced planning and policy-making, as well as coordinating existing funds to achieve greater impact, either through greater coordination and/or concentration in priority fields. The Action Plan can aspire to do as much in absence of dedicated funding.

The Action Plan does not explicitly set out roles and responsibilities of different actors

The Action Plan does not explicitly set out the roles and responsibilities of different stakeholders in the implementation of the Action Plan. The role of the Member States (through the ASG), the Commission, the Assistance Mechanism or other stakeholders is not mentioned explicitly in the Action Plan document, but developed elsewhere or follows informally established practice. The role of the ASG has developed through past practice out of the framework set up by the Atlantic Forum, whereas the role of the Assistance Mechanism is defined in the Terms of Reference for the contractor developed by the Commission. Finally, the role of the Commission has been developed informally over time. While the roles of these bodies have been described to varying extents in other places, it is a high level vision of how each contributes and works together that lacks the most.

The governance systems of other sea basin and macro-regional strategies have been more clearly defined compared with the Atlantic Action Plan. The foundational documents for other strategies have systematically included a section on governance and implementation. The 2017 Action Plan for the Baltic Sea, for example, includes a detailed overview of the tasks of the Commission, the High Level Group, the Member States, various coordinator and focal point roles and bodies in charge of implementing programmes and financial instruments. This is similar to the governance system that has been set up for other macro-regional strategies.

Regional, local and civil society stakeholders are not strongly involved in the governance of the Action Plan. The role of stakeholders 'on the ground' is largely seen as developing and implementing projects, with little scope for participation in the governance of Action Plan implementation. The Stakeholder Platform provides a forum for networking, communication and exchange, but does not constitute participation in governance. Governance is thus largely restricted to national-level authorities, despite the fact that three of the five Atlantic Member States have devolved significant policy-making powers and budgets to the regional level. This approach contrasts with the multi-level governance found in macro-regional strategies. According to the Commission, experience from the implementation of macro-regional strategies has shown that a key factor of success has been the integrated and coordinated governance with a strong role for regional and local authorities and civil society. Beyond sub-national authorities and civil society, avenues for greater engagement of the private sector may also be envisaged. This aspect has been underlined by respondents to the Open Public Consultation (see Figure 20 above) as one of the bottlenecks for implementation.

The ASG is a useful governance body, but a number of limitations can be highlighted

The Atlantic Strategy Group (ASG) format, with its rotating chairmanship, provides for Member State ownership of the Atlantic Action Plan. It brings together relevant national authorities, as well as other stakeholders in regular meetings. Member States have embraced the ASG and done their best to participate actively and make the most of their chairmanship. However, a number of constraints can be identified that limit the contribution of this body to effective implementation of the Action Plan. In particular, the body's remit has been largely focused to date on overseeing the work of the AAM and its members

Reflecting a broader lack of definition of the governance system, the role and objectives of the ASG are not formalised. Interviews with the members of the ASG found slightly differing viewpoints on the role and ambitions of the ASG. In practice, the ASG has generally been focused on monitoring and steering the work of the Assistance Mechanism, with little relatively less discussion of strategy, coordination or projects. This is notwithstanding some more 'strategic' initiatives that have emanated from the ASG under the different presidencies. This narrow focus is mainly a result of a lack of substance to broaden the scope of discussions. Initiatives such as the preparation of succinct background documents by the Assistance Mechanism on issues of interest, widening the membership of the group or the regular ad hoc participation of actors of relevance from across the region could

contribute to stimulating more qualitative and strategic discussion around the implementation of the Action Plan.

ASG members generally have limited time and resources to devote to Action Plan matters. Representatives underlined that work for the ASG and Action Plan is often in addition to their normal workloads, rather than an integral part of it. Attendance at the meetings can be challenging and, outside of the ASG meetings, they have few resources and no strong mandate to actively coordinate or support implementation of the Action plan in addition to their normal responsibilities, even if the two can often be complementary. Moreover, two of the representatives currently sitting on the ASG are based in Brussels, limiting their presence 'on the ground' at national level.

The wide range of priorities covered by the Action Plan makes it challenging for ASG representatives to effectively cover all issues. Due to the varying architectures of national administrations and the wide range of areas covered by the Action Plan, the ASG representatives do not always have strong connections on the national and regional level with all relevant stakeholders or in-depth knowledge of all thematic areas. This limits the extent to which they can coordinate and make decisions on different issues at the level of the ASG. It can be noted that it is common practice in macro-regional strategies to establish distinct governance structures for individual priorities – e.g. priority coordinators and working groups. This allows to implicate a larger range of stakeholders from national level in the governance.

While the ASG brings together relevant stakeholders with deep knowledge and experience, a lack of participation of high level authorities in the governance can be noted. During the Atlantic Forum process, participation of high level civil servants and politicians was secured. However, this process did not carry over during implementation. Reflecting the lack of formalisation of the role and objective of the ASG, stronger political direction could also be seen as useful to strengthening governance of the Action Plan and enhancing the work of the ASG.

The Commission has made positive contributions to the Action Plan, but initial success should be further leveraged and replicated

As noted above, the role of the Commission has not been clearly defined and has developed informally over the years. Unit A.3 of DG MARE serves as *chef de file* for the Atlantic Action Plan, assuming ultimate ownership of the file within the Commission. In practice, the role of DG MARE has been focused on supporting the Member States in the ASG, overseeing the implementation of the contract for the Assistance Mechanism (EASME), participating in various events and coordinating with relevant Commission services.

DG MARE has focused in the first years of the Action Plan on building strong cooperation with DG RTD and DG REGIO. As discussed in the previous section, a major success story of the first four years of the Action Plan has been the strong cooperation with DG RTD. This notably enabled the launching of H2020 calls with earmarked funds for Atlantic marine research. The two Services have also closely coordinated around different events organised across the Atlantic area. While these successes have been the fruit of close collaboration, an important enabling factor has also been a strong alignment of interests between the two DGs.

Likewise, DG MARE has developed a close working relationship with DG REGIO. As the Action Plan sought in particular to leverage ESIF for its implementation, the close collaboration with DG REGIO has been essential in seeking to influence the programming process for 2014 – 2020 and engage with Managing Authorities across the region. DG RTD also appears as a key partner in the implementation of the Action Plan due to its experience with macro-regional strategies, including two covering sea basins. The relationship has thus allowed for valuable knowledge sharing with DG MARE.

Strong coordination and cooperation with other Commission Services has been relatively slower to develop. While excellent cooperation can be noted with DG RTD and DG REGIO, relatively little collaboration has been observed with other relevant Services, such as DG ENV, DG

MOVE or DG GROW amongst others. Due to the strong alignment of interests with DG RTD and the valuable experience and contacts held by DG REGIO, these two services appear as the most logical partnerships to build in priority as implementation of the Action Plan got underway. As the Action Plan matures, however, there appears to be ample opportunities to replicate these early successes with other DGs. Early experiences would point towards the value of identifying concrete areas of mutual interest, even if small, and building the cooperation from that.

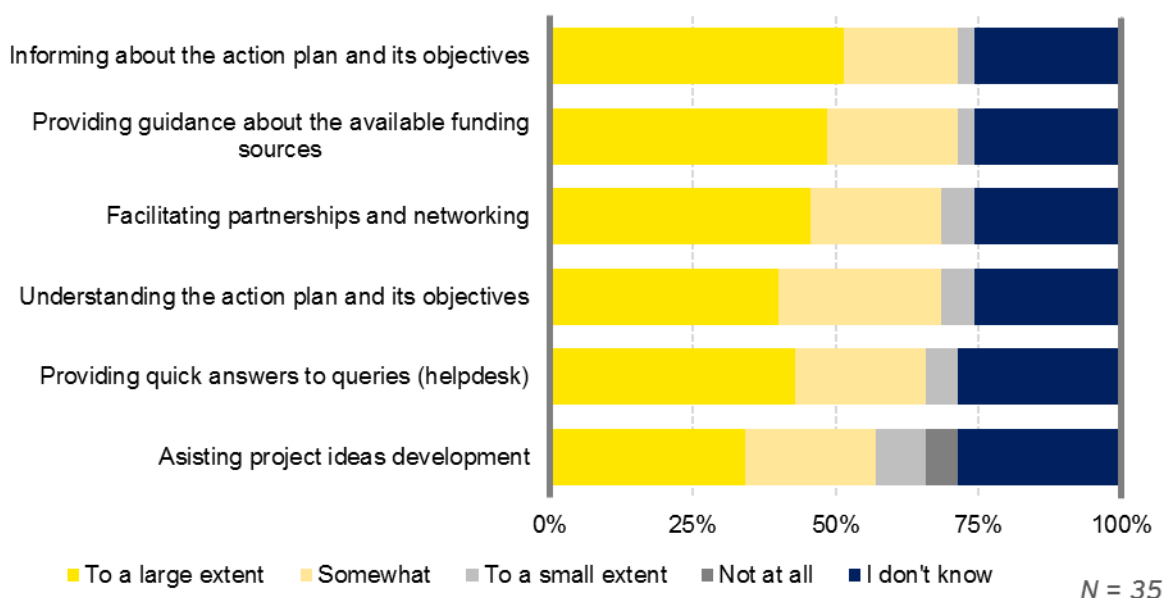
Overall, the Commission’s role has added value and positively impacted implementation of the Action Plan to date; however, some issues had impacted its effectiveness. The Atlantic Action Plan dossier within DG MARE has seen a high rate of turnover since 2014. This has not favoured the accumulation of knowledge and building of durable relationships across Commission services. A low level of implication from the senior management level can also be noted.

The Assistance Mechanism is a valuable tool, but its resources are limited compared to its ambitions and its objectives and tasks are not entirely aligned with needs

As the only budget line dedicated to the implementation of the Action Plan, the assistance mechanism has been an extremely valuable tool. As presented in section 3.2.2, the Assistance Mechanism is responsible for dissemination information on the Action Plan to raise awareness and supporting the development of projects aligned with the Action Plan through providing information and advice on funding sources and serving as a ‘match making platform’. The existence of National Units in each of the five Member States ensures close proximity with stakeholders on the ground.

The Assistance Mechanism has satisfactorily performed its designated activities in line with its Terms of Reference. The performance of the contractor has been entirely satisfactory compared with the specific tasks and performance targets set out in the Terms of Reference. Regular reporting on contract implementation is provided to EASME, which has responsibility for overseeing implementation of the contract. This general level of satisfaction is reflected in the results of the Open Public Consultation summarised below in Figure 21. The only area where the Assistance Mechanism received somewhat negative marks concerned assisting project ideas development.

Figure 21: OPC - How useful is the Atlantic assistance mechanism for the implementation of the action plan in terms of...?



Despite its best efforts, the evaluation noted that the Assistance Mechanism was not equipped with adequate resources to fully achieve its (ambitious) objectives. In particular, the wide ranging set of priorities in the Action Plan contributes to scattering limited available resources across

an extremely diverse range of stakeholders. In the context of limited resources, the objectives and tasks may thus need to be better focused more narrowly. This can include both a stronger focus on specific tasks, but also in terms of the thematic priorities supported.

Secondly, the objectives and tasks do not appear to be fully aligned with the needs identified at different levels. As noted in section 3.2.2, the added value of events organised to date can be questioned. While they have been well organised, it has been challenging to use them as a tool to widen engagement in the Action Plan. Rather, they serve as a platform for networking and discussion for actors to a large extent already well embedded in EU level networks. The services provided to project promoters are also ultimately of limited added value. Where the Assistance Mechanism can provide the largest added value (communicating funding opportunities and providing partnering activities), this is generally not what project promoters report needing most. Finally, redundancies can be noted with other support resources already existing for project promoters.

While some redundancies and low added value can be observed for some tasks, other needs appear to be unserved. In particular, the Assistance Mechanism's Terms of Reference do not appear to place adequate resources on monitoring and reporting of Action Plan implementation. This could in particular strengthen communication activities, by enriching them with 'stories of implementation', as well as providing input to the ASG to support more substantive strategic discussion. A particular lack of resources can also be noted in the area of engaging with funding programmes and policy makers. Assistance Mechanism resources may thus be diverted in part from events targeted at the 'general public' to more focused events designed to engage with policy makers and financiers across the Atlantic Area. Such events may provide greater return on investment by bringing together stakeholders that are not regularly cooperating or communicating.

3.4 Impact & sustainability of the Action Plan

This criterion aimed to measure the ultimate impact that can be attributed to the Action Plan – e.g. the ‘Atlantic Area’ level of the logical framework presented in annex 5.1. This criterion was addressed through three different evaluation questions:

- ▶ **EQ4.1** What have been the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the Action Plan?
- ▶ **EQ4.2** What are the expected wider socioeconomic and environmental benefits of the Action Plan? Specifically, to what extent has the Action Plan contributed to:
 - Promoting entrepreneurship & innovation in the Atlantic Area;
 - Protecting, securing and developing the potential of the Atlantic marine and coastal environment;
 - Improving accessibility and connectivity; and
 - Creating a socially inclusive and sustainable model of regional development?

3.4.1 EQ4.1 What have been the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the Action Plan?

The achievements of the Action Plan to date have been more qualitative than quantitative

Considering the direct impact of the Action Plan to date, the achievement has been more qualitative than quantitative. As developed under EQ2, the Action Plan has had a limited impact to date on opening up new funding opportunities (and encouraging coordination between them) for projects supporting its implementation, influencing the development of policy at EU and national level and encouraging the development of new projects ideas and supporting their development. In this context, it is difficult to directly attribute the downstream impact of projects and developments aligned with its priorities to the Action Plan itself. In other words, the picture that can be observed today in terms of policy developments and projects being implemented across the Atlantic area would likely have been very similar in the absence of the Action Plan.

However, the efforts during the elaboration of the Action Plan and the first years of its implementation have clearly contributed to laying the groundwork for achieving greater downstream impact in the future in terms of driving policy development, directing investment and shaping cooperation patterns across the Atlantic area. In many ways, the first years have been a necessary step towards more ambitious action.

Efforts to date have contributed to developing the community of stakeholders across the Atlantic area and breaking down barriers between groups that have historically operated in relative isolation (see section 3.2.2). They have brought together actors to define a common set of priorities and create sense of ownership and buy in. While the Action Plan has been more descriptive than prescriptive on the political level, it has for the first time allowed to tie together in a coherent framework for the Atlantic area the many policy developments that are shaping its future.

The first efforts to open up more opportunities for relevant projects in the Atlantic area have contributed to building awareness of the Action Plan and its objectives. They have also helped to put in place networks of policymakers and funding programmes that will continue to be strengthened in the future and leveraged to channel more resources to Action Plan priorities and better coordinate existing investment. Within the Commission, the Action Plan has contributed to strengthening the implementation of integrated maritime policy in the Atlantic by bringing together relevant Services around the table. The success of early collaboration between DG MARE with DG RTD and DG REGIO can be replicated with other services, such as DG ENV, DG MOVE or DG GROW amongst other to improve the coordination of EU action in the future.

Finally, the Action Plan has contributed to developing a more comprehensive picture of what is happening across the Atlantic. Having developed a common strategic framework, many actors have committed to monitoring how investments and initiatives are contributing to its implementation. This includes the use of the ITI tool in Spain and Portugal, as well as similar initiatives in France. On the EU level, the Assistance Mechanism has also contributed to monitoring projects whose objectives are aligned with the Action Plan. This information can be fed into strategic decision-making in the future to improve implementation of the Action Plan and notably ensure greater coordination between actions being undertaken across the region.

Nonetheless, some results at project level can be indirectly attributed to the Action Plan. In particular, the signing of the Galway (then Belem) Agreement and its inclusion under the international dimension of the Action Plan has contributed to strengthening the level of resources available for research in the Atlantic area, as well as strengthening cooperation with third country partners. The results and impacts of these projects can thus be attached indirectly to the Action Plan.

A stock-taking of relevant projects implemented across the Atlantic region points to a dynamic community with huge potential.

While it is difficult to directly attribute the existence (and ultimate impact) of most ongoing projects across the region to the Action Plan, it is nonetheless interesting to take stock of projects that are contributing to its implementation. In addition, a wide range of policy developments at EU and national level have contributed to realising the priorities and objectives of the Action Plan.

Overall, 1 216 unique projects supporting the implementation of the Action Plan were identified in the project monitoring database across the Atlantic area at national and EU level. Together, these projects represented EUR 6 billion in investment. While the database cannot be considered to be exhaustive (see limitations in Annex 5.3), this provides nonetheless a reasonably comprehensive stock-taking of relevant projects and an interesting look at the diversity of different projects being implemented across the region. As illustrated in Figure 22 & Figure 23, below, the most 'active' Specific Objectives concerned those supporting entrepreneurship & innovation (1.1 – 1.2) and protecting and exploring the marine environment (2.2). In terms of the volume of investment, the connectivity priority of the Action Plan (Specific Objective 3.1) is by far the largest thanks to a number of mega-investments in port development supported by EIB loans and the CEF, followed by marine renewable energies (Specific Objective 2.4). Notable levels of investment can also be noted in the areas of entrepreneurship & innovation (Specific Objectives 1.1 & 1.2) and protecting and exploring the marine environment (Specific Objective 2.2).

Figure 22: Distribution of the number of projects by Specific Objective

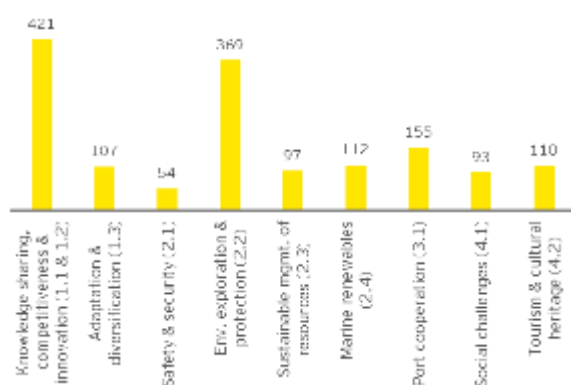
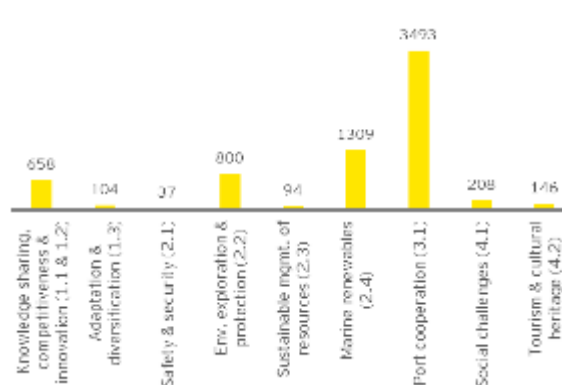


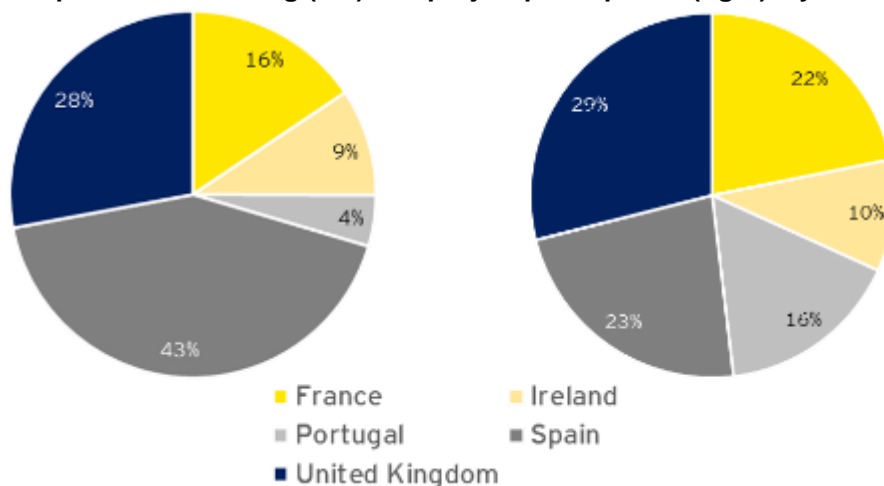
Figure 23: Distribution of investment (M of EUR) by Specific objective



Considering the repartition of spending by Member State (see Figure 24 below), the largest sums were invested in Spain and the UK. This is in large part due to a small number of large investments (notably through the EIB). For example, the EIB supported a EUR 1,2 billion framework

loan for investment in Spanish port development. Likewise, a EUR 800 million investment through the EIB was made in the development of the West of Duddon offshore Windfarm in the Celtic Sea. Discounting these big ticket investments, the repartition of funding across the Atlantic Member States is generally in line with their size. Considering the number of projects in which east Member State participated, one can note a somewhat more equal distribution considering the relative size of Member States. While Spanish actors benefited from the largest amount of funds, they only represented 23% of project participants in all projects. The UK on the other hand displays a higher degree of participation, as does France. While Portuguese beneficiaries only accounted for 4% of overall investment, they represent nonetheless 10% of all participants in projects.

Figure 24: Repartition of funding (left) and project participation (right)⁵ by Member State



Although the Atlantic Action Plan aims to foster cooperation across borders and promote initiatives on a transregional and transnational level, most projects remain implemented on a national level. Only around 30% of all projects were transnational in character, involving more than one Member State. When looking at the different priorities however, this trend is not necessarily reflected, as there are some extreme differences depending on the Priority / Specific Objective. Priority 1 has the highest percentage of transnational projects, with around 42% of projects being implemented across borders. Priority 2 reflects the average with 31% of projects being implemented on a transnational basis. Under Priority 3, only around 12% of projects were transnational, while under Priority 4, around 20% of projects were implemented across borders.

The following sub-sections provide a more detailed overview of the relevant policy developments and specific projects aligned with the priorities of the Action Plan.

3.4.1.1 Priority 1: Promoting entrepreneurship and innovation

Blue entrepreneurship & innovation (Specific Objectives 1.1 – 1.2)

Policy evolutions and initiatives at EU and national level have been highly aligned with the priorities and objectives set out in the Action Plan. The European Research Area (ERA) reform agenda is supporting more effective and efficient collaborative research and knowledge transfer across the board in Europe. A key initiative of the latter, Joint Programming has been deployed with success in the marine domain. Member State and EU support for research funding has provided significant resources supporting projects in line with the Action Plan and the Galway and Belem

⁵ The number of project participants from each Member State as a proportion of the entire population of participants in the project monitoring database.

Agreements have given particular impetus to research in the Atlantic. The EU and Member States have rolled out a number of initiatives supporting innovation and entrepreneurship. Increasing emphasis has been placed on SMEs since the economic crisis, as drivers of job creation and disruptive innovation. In the maritime domain specifically, the Blue Growth Agenda has been strongly aligned with the Action Plan's priorities, as well as specific sectors and enablers identified by the Action Plan. Particular focus has been placed in recent years on strengthening the Blue workforce across Europe as an enabler of Blue growth amongst others.

Launched in 2012, the ERA seeks to create a significant improvement in Europe's research performance to promote growth and job creation. ERA reform agenda implementation has focused on five key priorities, including notably optimal transnational cooperation and competition and optimal circulation and transfer of scientific knowledge. It has thus been strongly aligned with the objective of the Action Plan to strengthen collaboration and transfer scientific knowledge.

Within the context of the implementation of the ERA agenda, the Commission has notably supported Joint Programming Initiatives, including the JPI Healthy and Productive Seas and Oceans (JPI Oceans). JPI Oceans aims to avoid fragmentation and unnecessary duplication, implement common initiatives, facilitate cooperation and establish mechanisms for interaction and knowledge transfer between the scientific community, industry & services, and policy makers. It is important to note that Joint Programming initiatives are primarily focused on coordinating *national* research budgets. The joint strategy of JPI Oceans' members is defined by its Strategic Research and Innovation Agenda (SRIA) which was published in May 2015. The SRIA includes research supporting AAP priorities across all priority areas.

MarTERA is an ERA-NET Cofund scheme of Horizon 2020 of the European Commission. The overall goal of the ERA-NET Cofund MarTERA is to strengthen the ERA in maritime and marine technologies as well as Blue Growth. MarTERA consortium, consisting of 16 collaborating countries, will organise and co-fund, together with the EU one joint call for transnational research projects on different thematic areas in 2017. Furthermore, additional joint activities that go beyond this co-funded call are planned, in order to contribute to the national priorities as well as to the SRA of JPI Oceans.

At EU level, Horizon 2020 is the main financial instrument supporting the implementation of EU research & innovation policy, with a budget of nearly EUR 80 billion for the current MFF. Under the Societal Challenges heading, biannual calls are launched for research in the agri-food, aquatic resources and marine sectors. To back up the political commitment behind the Galway Statement, dedicated calls were published to support research in the Atlantic area in priority areas such as ocean literacy, aquaculture, ecosystem approach, seabed mapping and others. In line with the AAP, these investments have contributed to strengthening maritime industries and developing economic activity from as of yet untapped resources. However, EU research funding has provided support critical to implementing other priority areas under the Action Plan, notably Priority 2.

On the national level, research budgets devote considerable resources to marine and maritime research & innovation topics, although it is difficult to conduct a full accounting. In France, for example, the main budget line for basic marine research represented over EUR 450 million in 2015 allocated to six main actors, notably Ifremer, CNRS-IRD and SHOM. Some Member States have put in place national level strategies to frame R&D&I efforts in the marine and maritime domains. Ireland, for example, has established a National Marine Research Strategy. Other Member States address this area through their general research strategies, complemented by the organisational strategies of key research & innovation actors. On the regional level, the Smart Specialisation Strategies (S3) are also key guiding documents for R&D&I in the maritime domain, in particular for EU funds. Virtually all Atlantic regions have included R&D&I topics relevant to the Action Plan in their S3 documents.

To support innovation across the economy, the Commission and Member States have also

launched initiatives in the past four years targeting issues such as the development of clusters, design for innovation or demand-side innovation policies. Although not specifically targeting the maritime field, all these instruments and initiatives provide support for innovation & competitiveness across the Atlantic area. The EU has also developed a suite of policies supporting the development of entrepreneurship, complementing the Action Plan. The Commission has implemented an Entrepreneurship Action Plan in January 2013. On the national level, important reforms have been put in place to support entrepreneurship / self-employment in recent years, notably aiming to remove obstacles on the administrative level (e.g. the Spanish *Strategy for Entrepreneurship and Youth Employment* adopted in 2013). The Commission supports entrepreneurship education, co-funds the exchange programme Erasmus for young entrepreneurs and manages support networks. The COSME instrument also funds the Enterprise Europe Network that helps SMEs find business and technology partners, and understand EU legislation.

Funding priorities have placed increasing emphasis on SMEs as the primary engines of innovation and job creation in Europe. Through H2020, the Commission offers facilities providing access to risk finance and supporting innovation to SMEs. The European Research Council supports frontier research, cross disciplinary proposals and pioneering ideas in new and emerging fields. The Future and Emerging Technologies programme funds projects to initiate radically new lines of technology through unexplored collaborations. COSME also supports innovation and development of SMEs. It aims in particular to improve access to finance for SMEs through two financial instruments available since 2014. These EU-level tools complement Member State instruments, such as Innovate UK's innovation loans for SMEs involved in late-stage innovation projects.

In 2012, the European Commission formulated its Blue Growth strategy to harness the potential of Europe's oceans, seas and coasts for growth and jobs. In particular, the Commission has pushed for sustainable growth in the maritime economy in five sectors: energy, aquaculture, tourism, biotechnology and marine mineral resources. For each sector, the EU has launched numerous targeted actions since 2012 to support their development. This has been underpinned by investing in key enablers such as spatial planning, marine data, skills, environmental protection and maritime surveillance. Each of these has also been backed up by specific initiatives and/or legislation. Implementation of this agenda has thus been strongly in line with the priorities identified in the Action Plan, both in terms of the different thematic priorities and specific sectors and enablers prioritised. On the national level, Ireland's maritime strategy in particular has put the issue of Blue Growth at its core, recognising similar enablers to be addressed.

The 2014 Communication on innovation in the Blue Economy underlined that the shortage of a skilled workforce, able to apply the latest technologies, notably in engineering is one of the main obstacles to the further development of the blue economy. On a general level, the EU has developed several instruments to support the transparency and recognition of knowledge, skills, and competences to make it easier to work anywhere in Europe. This has been complemented by initiatives in recent years to address the mismatch between available skills and the needs of the labour market, such as the Agenda for new skills and jobs, the European Alliance for Apprenticeships, or the Youth Employment Initiative. The ESF provides critical support across the region to improving training and skills, including in the maritime domain.

In the maritime area, DG MARE has launched specific initiatives to bring industry and education/training providers together to promote and support the development of career opportunities in the blue economy through training and awareness actions. In particular, the Blue Careers call was launched in 2016 providing almost EUR 3,5 million contributing to strengthening link between education and training organisations and the maritime industry, developing new training offerings, improving employability, facilitating career development and job mobility and raising awareness for blue careers. On the national level, training programmes and schemes are working closely with industry to support these efforts. In Spain, for example, the *Instituto social de la marina* is the primary responsible for developing and delivering life-long professional training to sea workers.

421 projects related to Specific Objectives 1.1 & 1.2 received around EUR 650 million in funding.

In total, Specific Objectives 1.1 & 1.2 accounted for around 28% of all projects identified contributing to the Action Plan. Regarding funding, however, these projects represented only approximately 10% of the total investment represented by these projects, pointing to a large number of projects with a relatively small amount of funding.

It should also be noted that much of the investment funnelled through general support instruments for competitiveness, growth and innovation could not be detected in the database. Much of this investment is implemented through intermediary implementing bodies and exact spend in the marine and maritime sectors is not possible to detect for all instruments. With some exceptions, such as the i-Marine and SEACAMS2 projects, it was rare for support facilities for competitiveness & innovation to be focused solely on the marine sector. The total level of investment is thus likely to be significantly higher.

In terms of financial volume, the three most important projects⁶ under Specific Objectives 1.1 & 1.2 are the presented in Table 4 below. This includes the two funds mentioned above focused on innovation in the maritime sector, as well as a major investment in broadband connectivity in maritime regions in Scotland. The average funds allocated per project is around EUR 1.5 million Euros.

Table 4: Overview of largest projects supporting Specific Objectives 1.1 & 1.2

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	Connectivity investments for rural maritime regions	48 788 230	ERDF	Provision of (mobile) broadband connectivity in rural and remote rural areas of Scotland's Highland and Islands region.
2	SEACAMS 2	18 491 940	ERDF	SEACAMS 2 will boost investment in renewable energy and sustainable resource sectors in Wales by facilitating the translation of research to business activity, meeting burgeoning demand for coordinated information, data and modelling of coastal/marine processes
3	Marine-i	10 062 531	ERDF	Exeter University will deliver business-led and market driven RD&I in marine technology through the creation of a Marine Technology Hub delivering a programme of business-focused initiatives. The project offers good national VFM.

Specific Objective 1.1 aimed to enhance strengthen research institution and knowledge sharing, while Specific Objective 1.2 aimed to increase competitiveness. In reality, the two goals often overlapped and were thus considered together. A broad typology of projects can be identified:

- ▶ **Enablers of competitiveness and innovation:** Large infrastructure projects were identified in rural and remote coastal areas focused on improving connectivity in areas. These investments

⁶ Excludes some larger projects of more peripheral relevance to these Specific objectives

are seen as a pre-condition for economic development of these areas. Under this heading one can also include large investments in public research infrastructure supporting research & innovation in the marine and maritime domains.

The **Oceanic Platform of the Canary Islands** (PLOCAN) is a multipurpose technical-scientific Research Infrastructure located in the Canary Islands. The main feature of PLOCAN is the fixed offshore platform that will underpin national research and technological development capacities. PLOCAN also possesses a 400m² onshore testing facility, a harbour testing facility, offshore test site, an electrical and communications grid infrastructure and a fleet of unmanned marine vehicles. PLOCAN has participated in just a few years in 27 EU funded research projects. The construction of PLOCAN was 85% funded by the EU (through the ERDF) during the last programming period, and EU funding continues to support its development and research activities during the current financial perspective.

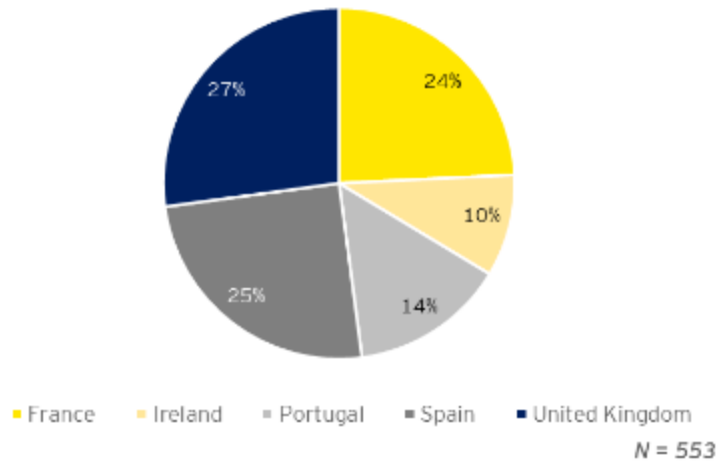
- ▶ **Supporting innovation & competitiveness in marine & maritime sectors:** While few projects supporting general competitiveness & innovation in the marine and maritime sectors in particular can be identified, a number of notable examples can be cited. These projects provide targeted support to organisations on a competitive basis through funding or access to expertise and collaborations.

The EUR 60 million **MarTERA Cofund** aims to strengthen the European Research Area in maritime and marine technologies and Blue Growth. The proposing consortium will organise and co-fund together with the EU a joint call for trans-national research projects on different thematic areas of Blue Growth. **SEACAMS** is a EUR 18,5 million project to integrate research and business opportunities in the marine sector in Wales. The EUR 10 million **Marine-i** project in Cornwall aims to deliver business-led and market driven RD&I in marine technology through the creation of a Marine Challenge Fund. Also in Cornwall, the **Propel** project aims to create a culture of innovation and collaboration within Marine SMEs through financing targeted support from a network of experts. As a final example, the **SAFER** project supported by the Atlantic Area Interreg Programme will support the enhancement of competitiveness and innovation capacities in the maritime economy of the Atlantic area

- ▶ **Supporting the development of specific innovations:** While few general projects were identified supporting innovation & competitiveness generally in the marine or maritime sectors, many organisations (including SMEs) benefited from funding for the development of specific innovative technologies. These projects supported in particular the development of innovative technologies in the area of marine renewables, aquaculture and shipping.
- ▶ **Strengthening cooperation:** Projects to strengthen cooperation were funded on many levels, ranging from cooperation between companies and research facilities in an area to transregional and even transnational cooperation. A significant amount of projects aim to increase research cooperation in various fields. Projects such as SeaDataCloud and JERICO-NEXT intend to increase collaboration and knowledge sharing on environmental issues and ocean data between marine research centres and other stakeholders spread across Europe. Other projects have more specific targets, such as PlaMatSu, which aims to train researchers and promote research cooperation on modern polymeric materials.

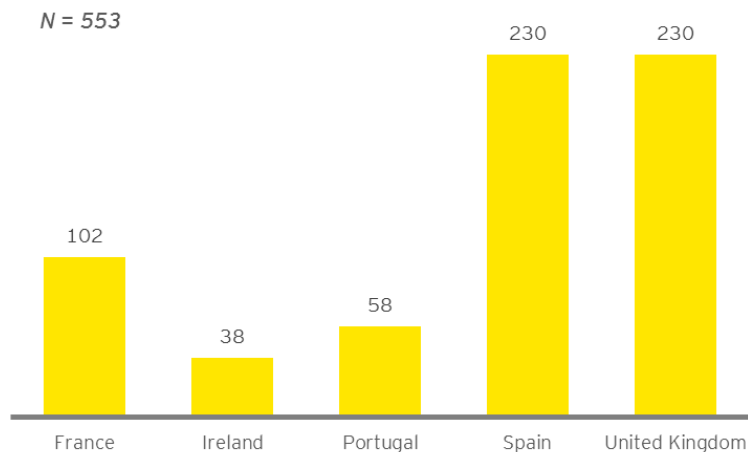
As presented in Figure 25 below, projects supporting Specific Objectives 1.1 & 1.2 were split fairly evenly according to the size of Atlantic Member States, with France, Spain and the United Kingdom each accounting for around a quarter of total projects. The two smaller Member States, Portugal and Ireland, accounted for 14% and 10% of projects respectively.

Figure 25: Breakdown of projects related to Specific Objective 1.1/1.2 by country



Regarding funding, Spain and the United Kingdom were the largest beneficiaries of investments supporting Specific Objectives 1 & 2 with EUR 230 million each (see Figure 26 below). France, despite having a similar number of overall projects, received less than half of that. This suggests that projects in France were mainly smaller scale projects, a notion confirmed when looking at the three largest projects under these Specific Objectives. Portugal and Ireland benefited from EUR 58 million and EUR 38 million respectively.

Figure 26: Distribution of total expenditures related to Specific Objective 1.1 & 1.2 (M of EUR)



As illustrated in Figure 28, most projects supporting Specific Objectives 1.1 & 1.2 were financed through structural funds, with 55% drawing their funding from ESIF programmes. H2020 is the second most important instrument with 28% of projects, followed by Innovate UK, COSME and the Science Foundation Ireland. In terms of the volume of funding (Figure 27), the picture stays similar, with the share of ESIF and H2020 shares slightly increasing. National programs such as Innovate UK and the SFI seem to mainly finance smaller projects, as their share of total funding drops in relation to total projects financed. Overall, projects on a European level were larger in terms of funding than national level projects.

Figure 28: Breakdown of Specific Objectives 1.1 & 1.2 projects by source of funding (number of projects financed)

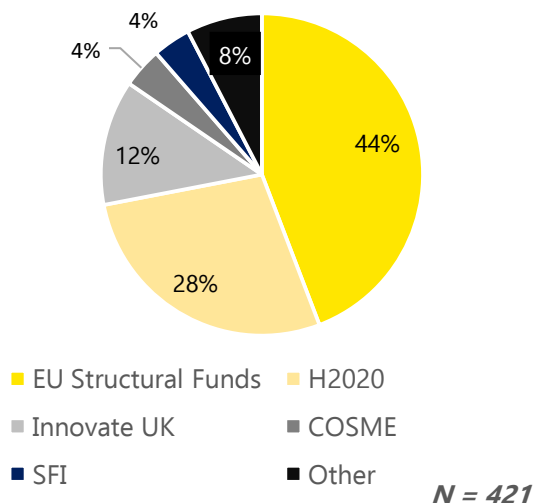
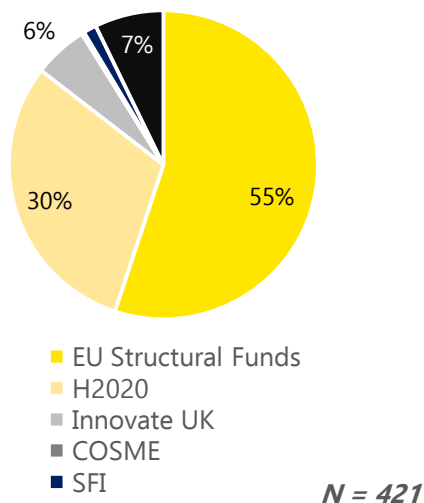


Figure 27: Breakdown of Specific Objectives 1.1 & 1.2 projects by source of funding (budget invested)



Specific Objectives 1.1 & 1.2 had an above average number of transnational projects with around 37% of projects being implemented across borders. Being one of the few Specific Objectives with above average values, the large amount of projects helped drive the overall average. Nonetheless, the focus on sharing knowledge between institutions raises expectations of a higher value.

Fostering adaptation and diversification of economic activities (Specific Objective 1.3)

Under the heading of economic adaptation and diversification, this Specific Objective was focused on supporting the reform of the Common Fisheries Policy (CFP). While the CFP is focused on securing fish stocks, it also has a strong socio-economic dimension, explaining its inclusion under Priority 1 of the Action Plan. The Action Plan thus anticipated the implementation of the reformed CFP, which took effect in January 2014 following the Commission's reform proposal dating from 2011. Subsequent developments in the context of the implementation of the new CFP have, not surprisingly, been largely in line with the Action Plan.

Since 1 January 2014, the CFP has been progressively rolled out. The "landing obligation" put in place to end the wasteful practice of discarding marketable fish back into the sea, for example, has been introduced starting from 1 January 2015. National regulators consulted are focused on enforcing new rules, although they underline that this can be challenging. Since the end of 2014, consumers in the EU have also had access to better information when buying fishery and aquaculture products. Mandatory labels or markings for retail sale of seafood must, in particular, include information on both the commercial and the scientific names of the species, whether it has been fished or farmed, the catch area or country of production, and the fishing gear used.

In the area of Aquaculture, the Commission published Strategic Guidelines presenting common priorities and general objectives at EU level in 2013. Atlantic Member States have developed multiannual plans to promote aquaculture. Within the framework of these plans, they are implementing measures to unlock the potential of aquaculture, such as the simplification of administrative procedures, coordinated spatial planning and improving the competitiveness of producers. In addition, the Commission has launched a number of campaigns to support the exchange of best practice and promote sustainable aquaculture in the EU. On the national level, these efforts complement often pre-existing initiatives to develop this key sector. Spain and the

French region of Brittany, for example, have put in place specific action plans in this area.

107 projects supporting Specific Objective 1.3 received around EUR 100 million in funding

In total, projects aligned with Specific Objective 1.3 accounted for around 7% of all projects identified as contributing to Action Plan implementation, while at the same time receiving around 1.5% of all funding. It is thus one of the Specific Objectives for which the least amount of relevant projects were identified.

While this may seem a relatively small portion of projects, it should be called that the project monitoring database did not take into account projects implemented through the EMFF national programmes due to data limitations. Indeed, the EMFF is one of the primary funding sources supporting the implementation of the Action Plan in this area. According to the Commission, EUR 260 million had been committed and EUR 68.8 million disbursed as of August 2017 under the EMFF in the five Atlantic Member States. While it is not possible to tell what portion of that has benefited the Atlantic area in Member States with coastlines on other sea basins, one can reasonably conclude that the EMFF contribution would easily allow to double the amount of funding supporting projects aligned with this Specific Objective.

In terms of financial volume, the three largest projects supporting Specific Objective 1.3 are the presented in Table 5 below. Two of these were focused on aquaculture, while the third was aimed at sustainable fisheries. The average amount of funding per project supporting this Specific Objective is around EUR 1 million.

Table 5: Overview of largest projects supporting Specific Objective 1.3

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	GENIALG	6 729 061	H2020	The GENIALG project aims to boost the Blue Biotechnology Economy (BBE) by increasing the production and sustainable exploitation of two high-yielding species of the EU seaweed biomass. GENIALG will demonstrate the economic feasibility and environmental sustainability of cultivating and refining seaweed biomass in multiple use demanded products of marine renewable origin.
2	SABANA	4 806 956	H2020	SABANA aims at developing a large-scale integrated microalgae-based biorefinery for the production of biostimulants, biopesticides and feed additives, in addition to biofertilizers and aquafeed, using only marine water and nutrients from wastewaters (sewage, centrate and pig manure). The objective is to achieve a zero-waste process at a demonstration scales up to 5 ha sustainable both environmentally and economically.
3	NorFish	2 499 265	H2020	NorFish aims to understand the restructuring of the North Atlantic fisheries, fish markets and fishery-dependent communities in the late medieval and early modern world. The project exploits a multi-disciplinary, humanities-led approach to marine environmental history, assessing and synthesizing the dynamics and significance of the North Atlantic fish revolution.

Projects related to SO 1.3 were focused on two main areas:

- ▶ **Sustainable fisheries:** These projects intended to increase competitiveness and ensure sustainability of existing fishery industries. While some focused on supporting local fisheries in transitioning into a more globalized market, others explored new technologies and ways to ensure sustainability.

The EUR 2,4 million **FishKOSM**, implemented by the Marine Institute in Ireland, is developing new ways to achieve sustainable yields from fisheries that can also deliver better ecosystem, economic and social outcomes. It will use genetics, ecosystem modelling and risk assessment methods to do this, and work with stakeholders to this end. It will provide fisheries management approaches based on this research. This project will aim to develop sustainable yield targets by taking into account a variety of carefully researched factors such as predator-prey interactions, changes in fish biology and changes in fishing technology and provide a hub of expertise by involving both research and industry stakeholders in Ireland.

The **LIFE iSEAS** project (supported by the LIFE programme) aims to promote more sustainable fisheries practices through improving know-how about new approaches to managing discard biomass. This will be achieved through testing new technology (which builds on outcomes from the previous LIFE FAROS project) for automatically monitoring and recording discard material on-board deep-sea and other commercial fishing vessels.

- ▶ **Innovation in aquaculture:** A significant number of projects, in particular research projects, were focused on supporting the development of the aquaculture sector. These projects focused on issues such as gaining a better understanding of diseases affecting farmed fish or managing the environmental impacts of aquaculture, supporting collaboration of aquaculture research actors and removing obstacles to the development of aquaculture amongst other themes. Interestingly, a number of large projects were related to the rapidly growing and innovative field of cultivating algae ('algaculture'). These were either related to novel types of nutrition or using algae as a biomass.

The H2020 project **AQUAEXCEL2020** aims to integrate top class European aquaculture research facilities of very diverse nature, covering all relevant scientific fields for research and innovation in aquaculture, from genetics to technology through pathology, physiology and nutrition. It is putting in place a user-friendly one-stop access to high-quality services and resources from 39 installations covering both established and new aquaculture species, all types of experimental systems as well as sequencing facilities. This project accounts for EUR 4,4 million in funding for partners in the Atlantic area.

The H2020 project **AquaSpace** project is using a case study approach in order to identify constraints to aquaculture in a wide range of contexts, scales and production types. Case studies in the Atlantic area are being carried out in Argyll (Scotland), Carlingford Lough (Ireland), Normand Cancale (France), Basque Country (Spain) and Algarve Coast (Portugal). Outcomes from the case studies will lead to a set of evaluated tools for facilitating the aquaculture planning process by overcoming present constraints. These tools will directly benefit policy-makers, planners, industry and society. This project accounts for EUR 1,8 million in funding for partners in the Atlantic area.

Projects supporting Specific Objective 1.3 were split fairly evenly between the five Member States, with the larger three each accounting for slightly more than one fifth. 24% of all projects involved Spanish partners, while France and the United Kingdom each account for around 22%. Portugal and Ireland follow with 17% and 15% respectively. The statistics on funding mirror those of the total number of projects. Spain, the United Kingdom and France each benefited from around a quarter of the total funds invested under these projects.

Regarding the financing instrument, 43% of projects supporting Specific Objective 1.3 were

financed through H2020; this is followed by ESIF with 38%. When looking at total amounts of budget invested, the share of H2020 increases to more than half. The fact the H2020 provided a substantial amount of financing is mirrored in the fact that the three largest projects are H2020 projects. Finally, it can be noted that Specific Objective 1.3 has the highest amount of cross-border cooperation, with almost 60% of projects being transnational. It is furthermore the only Specific Objective with a majority of transnational projects.

3.4.1.2 Priority 2: Protecting, securing and developing the potential of the Atlantic marine and coastal environment

Maritime safety and security (Specific Objective 2.1)

Developments in the area of maritime safety and security have been highly aligned with the priorities and objectives of the Action Plan. Indeed, the Action Plan reflected in large part the strategic priorities set out on the European level in documents such as the 2014 EU Maritime Security Strategy, as well as relevant national level documents. However, many developments in this area have been driven by migratory pressures, which has not had a major impact in the Atlantic area. While attention since 2014 has largely been focused on the Mediterranean, the Atlantic area continues to represent a security and, in particular, safety challenge. Reflecting these challenges, two EU Agencies with responsibility for maritime security and safety have seen their roles and responsibilities significantly strengthened in recent years. The driving force behind these developments has been the promotion of stronger cooperation between Member States on an operational level, as well as enhanced information sharing.

In 2006, the **European Border and Coast Guard Agency** (Frontex) mounted its first major operation at sea. Joint Operation Hera was the response to an enormous surge in irregular immigration from West Africa to Spain's Canary Islands in the Atlantic Ocean. Since 2007, migratory flows on the Western African Route in the Atlantic have largely subsided (to 671 illegal border crossings in 2016), but the Agency continues to support coordinated operational activities in the Atlantic in order to control irregular migration flows towards the territory of the Member States and tackle cross-border crime. Beyond its operational activities in the Atlantic, Frontex provides access to information collected from satellites and other surveillance tools at the European level so that Member States can improve their situational awareness (**Eurosur Fusion Services**).

The **Maritime Analysis and Operations Centre – Narcotics** (MAOC (N)) is an initiative by 7 EU Member Countries: France, Ireland, Italy, Spain, Netherlands, Portugal and the UK based in Lisbon and co-funded by the Internal Security Fund. The headquarters is staffed by Country Liaison Officers representing the police, customs, military and maritime authorities of the participating European nations, as well as by a permanent observer from the United States through the Drug Enforcement Administration, Lisbon Country Office, and the Joint Interagency Task Force South.

The **European Maritime Safety Agency** (EMSA) is the EU Agency charged with reducing the risk of maritime accidents, marine pollution from ships and the loss of human lives at sea. The Agency assists the Commission in the effective implementation of EU legislation on maritime safety and maritime security. It also organises training activities, develops technical solutions, provides technical assistance, supports investigations of maritime accidents and provides data on maritime safety and pollution.

EMSA facilitates technical cooperation between Member States and the Commission for the exchange of EU vessel traffic information (SafeSeaNet), the long-range identification and tracking of vessels (LRIT), and to support EU operational reporting services. EMSA has also developed a service based on Remotely Piloted Aircraft Systems to assist in maritime surveillance operations to support authorities involved in Coast Guard functions, such as maritime pollution monitoring, detection of illegal activities or search and rescue operations. Vessel traffic and other maritime information is combined with data from Earth Observation satellites and disseminated to users of EMSA's Integrated Maritime Services.

EMSA also offers a range of services to help coastal States around Europe respond quickly, effectively and efficiently to oil or chemical marine pollution incidents from ships and oil and gas installations. This 'toolbox' includes a satellite based oil spill monitoring service (CleanSeaNet), a

network of stand-by oil spill response vessels through contracts with commercial vessel operators and stockpiles of stand-alone oil pollution response equipment.

The **Common Information Sharing Environment for the EU maritime domain** englobes the above information-sharing systems and more in an effort to ensure effective data exchange between maritime authorities across sectors and across borders so that information is available for their missions at sea. In 2014, the Commission published a Communication on the next steps for the development of CISE. By 2018, the Commission will notably launch a review process to assess the implementation of a Maritime CISE and the need for further action. Member States, notably Spain, have partaken in national pilot projects to operationalise this concept.

55 projects related to Specific Objective 2.1 received around EUR 40 million in funding

Among all Specific Objectives, 2.1 accounted for least amount in the project monitoring database, with only 3.6% of projects relating to its topic and receiving only around 0.6% of all funds. Within Priority 2, projects supporting Specific Objective 2.1 accounted for around 9% of all projects and around 1.7% of all funds. It can be noted that the data were not available to feed the project monitoring database from the Internal Security Fund (under shared management), which promotes the implementation of the Internal Security Strategy, law enforcement cooperation and the management of the Union's external borders. It can be expected that some relevant projects are funded under this programme.

In terms of financial volume, two significant projects under Specific Objective 2.1 are the presented in Table 6 below. The average size of projects supporting Specific Objective 2.1 was EUR 700K.

Table 6: Overview of largest projects supporting Specific Objective 2.1

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures (€)</i>	<i>Financing Instrument</i>	<i>Description</i>
1	LIFECROAA	3 430 179	H2020	LIFECROAA aims to combat the ongoing invasion of two species, the American bullfrog and the African clawed frog, who pose a major threat two indigenous wetlands.
3	RANGER	2 703 937	H2020	RANGER aims at re-enforcing EU by combining innovative Radar technologies with novel technological solutions for early warning, in view of delivering a surveillance platform offering detection, recognition, identification and tracking of suspicious vessels.

Projects supporting Specific Objective 2.1 dealt with two very different types of security and safety:

- ▶ **Maritime safety & security:** These projects focused on protecting man-made structures both on land and on water. Some projects worked to increase safety measures regarding shipping and the marine industry, as well as combatting potential security threats. Others however aimed to increase security measures of the population on land in light of the increasing occurrence of natural disasters in recent years.

Building upon the results of previous EU supported initiatives, such as Monalisa 2.0, the EUR 3,8 million **PICASSO** project (CEF) addresses wider benefits by studying and testing effective ICT solutions formative solutions and therefore addressing the human element in maritime safety. The EUR 10 million **LYNCEUS2MARKET** project supported by H2020 aims to develop an innovative people localisation system for safe evacuation of large passenger ships. The EMFF is supporting the development of the **Spanish Maritime Information Sharing System** to support the exchange of maritime surveillance information among national authorities and provide an interoperable

interface to exchange information with European maritime authorities through CISE.

- ▶ **Alien Invasive Species:** These safety measures focused on the safety of the biological environment. Through the increasing globalization of the shipping industries and the rapidly changing climate, severe environmental damages through alien species have become more common, a trend various projects aimed to counteract.

The **Algae-to-Market Lab Ideas** project is focused on the Iberian North West Coast and aims to develop new products and services to address invasive alien species (invasive macroalgae) ensuring a sustainable exploitation of resources for food, health and industrial applications. The LIFE instrument financed a number of projects aiming to combat invasive species, such as the **LIFE IAP – RISK** and **LIFE CROAA** projects.

French project promoters and partners accounted for one third of all projects / participants in projects supporting Specific Objective 2.1. The United Kingdom and Spain each have a share of one fourth, followed by Portugal with 13% and Ireland with 5%. Regarding funding, France alone received about the same amount as Spain and the United Kingdom together, around EUR 16 million. Portugal received around EUR 4 million in funding, while Ireland received less than half a million.

Most projects supporting Specific Objective 2.1 were either financed by ESIF or H2020, which together funded 63% of all projects. This share increases slightly to 70% when looking at the amount of budget invested. Other major instruments used include Innovate UK and LIFE. Under Specific Objective 2.1, one third of projects were transnational. Despite being the Specific Objective with the least amount of projects, the overall transnationality reflects the average – 30%. The relatively low value is nonetheless surprising in light of the focus on marine safety and security, an area that is prone to high levels of cooperation.

Exploration and protection of the marine environment (Specific Objective 2.2)

Policy developments at EU and national level have been highly aligned with the objectives set out by the Action Plan under Specific Objective 2.2. In particular, the Action Plan makes specific mention of continued development of a European Atlantic ocean observing and predictive capability, the Marine Strategy Framework Directive, integrated maritime spatial planning and coastal management and climate change adaptation and mitigation. In all these areas, mature policy frameworks and legislation existed at EU level prior to the Action Plan and have continued to develop since 2013.

Data about the state of the Atlantic is collected by a number of means and by a multitude of actors on the national level. EU and national funding have continued to support the development of a framework for cooperating to produce and aggregate this wealth of data. The EU has also continued to provide support to initiatives such the **Copernicus Marine Environment Monitoring Service** (providing space data and oceanographic forecasts), the **European Marine Observation and Data Network** (supporting the assembly, processing and distribution of marine data) or **SeaDataNet** (a pan-European infrastructure to access marine data). The AtlantOS project acts as an integrating project building on these past initiatives and aiming to establish an integrated Atlantic ocean observing system (see following sub-section). The Blue Growth agenda, launched in 2012, has also helped to push efforts to integrate and 'open up' access to marine data to support research, innovation and economic growth.

The **Marine Strategy Framework Directive** was adopted in June 2008 with the aim of achieving Good Environmental Status (GES) of the EU's marine waters by 2020. The Directive notably requires each Member State to develop a strategy for its marine waters and ensure close cooperation with Member States sharing the same marine waters. Since strategies were adopted in 2012, Member States in the Atlantic area have been working toward GES according to their national objectives. Sea basin cooperation mechanisms, such as OSPAR in the Atlantic, have played a key role in facilitating

regional cooperation.

In the field of **marine spatial planning**, a new directive was adopted in 2014, which sought to create a framework to help Member States develop plans to better coordinate the various activities that take place at sea, ensuring they are as efficient and sustainable as possible. The deadline for the transposition and designation of competent authorities was 2016. By 2021, Member States will be required to establish maritime spatial plans. The Cork Harbour area in Ireland, for example, has been a pilot area for MSP in the country and informed reflection on the national level on this matter. The EU is supporting on-going efforts on a national level through initiatives such as the European MSP Platform, as well as facilitating cross-border cooperation (see following sub-section).

In the area of **climate change adaptation and mitigation**, actors at national and EU level have invested in better understanding the impacts of climate change and orchestrating a collective response to mitigate the expected results. Concerning the former, the aforementioned investments in an enhanced and integrated ocean observation capacity in the Atlantic have been critical to improving the understanding of the current and expected impacts. Concerning the latter, a number of strategies and action plans have been adopted at EU and national level. Portugal's first national adaptation strategy, for example, dates back to 2010 and was updated in 2015. The autonomous regions of Azores and Madeira have also each adopted their own strategy given their unique challenges as islands. In April 2013, the Commission adopted an EU strategy on adaptation to climate change with the aim to make Europe more climate-resilient. Marine strategies defined under the MSFD in some coastal areas have also identified ways of adapting to the effects of global warming and to reduce the vulnerability of natural and human systems to climate change effects.

369 projects supporting Specific Objective 2.2 received around EUR 800 million in funding

With respect to the total number of projects, **Specific Objective 2.2 ranks second overall, accounting for 24% of all projects** and trailing only to Specific Objectives 1.1 & 1.2 (considered together do to their similarity). However, despite the large amount of projects, they only represent around 12% of all investment under the projects in the project monitoring database.

In terms of financial volume, the three most significant projects supporting Specific Objective 2.2 are presented in Table 7 below. The average funds allocated per project is around EUR 2 million.

Table 7: Overview of largest projects supporting Specific Objective 2.2

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	Waste water purification	317 773 491	ERDF	A multitude of projects in different regions of Spain aiming to construct and enhance waste water management facilities.
2	LIFE-Shad Severn	44 447 978	LIFE	The objective of this project is to undertake work on two major rivers to secure a development towards favourable conservation status of the population of twaite shad in the Severn Estuary SAC by significantly improving access for the population of twaite shad to quality spawning and nursery habitat and re-establishing access to 253 km of the former natural range of the species in the rivers Severn and Teme will be a step towards "favourable" conservation status.
3	MoorLIFE2	16 046 116	LIFE	The aim of the MoorLIFE2020 project is to conserve

	020			and protect the priority active blanket bog habitat within the South Pennine Moors' Natura 2000 site and the ecosystem services it provides. It will protect the integrity of around 9 500 ha of the target habitat.
--	-----	--	--	--

Projects supporting Specific Objective 2.2 can be broadly categorised into three main areas:

- ▶ **Exploration / observation of the marine environment:** These projects are often related to exploring the deep sea and penetrating environments that are not well known to mankind. This can range from building novel technology to monitor the maritime environment, such as with the project EMSODEV, to exploring deep sea vents and ecosystems.

The **MyOcean** project, supported by H2020, operated an Ocean Monitoring and Forecasting component of the pre-operational Copernicus Marine Service delivering ocean physical state and ecosystem information to intermediate and downstream users in the areas of marine safety, marine resources, marine and coastal environment and weather, climate and seasonal forecasting. The **SeaDataCloud** project (H2020) is working to enhance SeaDataNet services and increasing their usage, adopting cloud and HPC technology for better performance.

- ▶ **Climate change:** A number of projects were identified supporting a better understanding of climate change, in particular the associated risks for maritime environments and coastal areas, and developing adaptation and risk mitigation efforts. In particular, a number of projects have looked at the impact of climate change on sustainable fisheries.

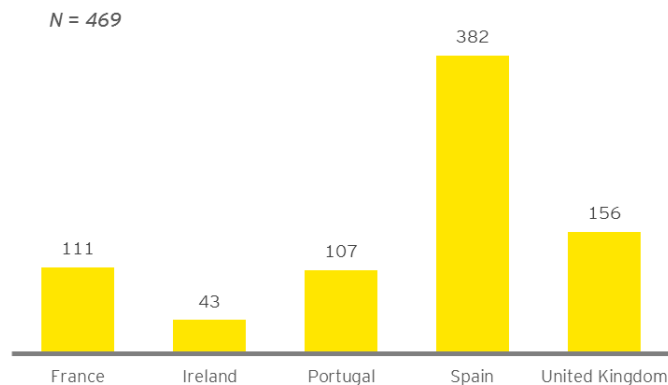
The **Blue-Action** project is providing empirically-grounded, executable science that quantifies and explains the role of a changing Arctic in increasing predictive capability of weather and climate of the Northern Hemisphere. The **Bluefish** project (Interreg Ireland-Wales Cooperation Programme) is developing knowledge and understanding of the marine resources of the Irish Sea and Celtic Seas by addressing knowledge gaps regarding the effects on and potential vulnerability of selected commercial fish and shellfish from predicted climate change.

- ▶ **Environmental protection:** These projects ranged from decreasing the environmental impact of humans, such as the enhancing waste water management facilities to conservation and protection of habitats of certain species. Furthermore, many projects focused on combatting climate change, such as EPURE, which aims to minimize climatic disturbances of the fishing industry.

The **LIFE LEMA** (Intelligent marine LittEr removal and Management for local Authorities) project aims to define a management service for local authorities to select sustainable approaches for tackling the problem of floating marine litter before it arrives at shore areas with difficult access, or it sinks. The LIFE instrument has also funded a number of conservation projects targeted at protecting and/or enhancing specific site across the Atlantic, such as the **MoorLIFE2020** project (bog habitat in the South Pennine Moors' Natura 2000 site) or the **LIFE-Shad Severn** project (Twaite shad in the Severn Estuary Special Area of Conservation). Other projects supported by the LIFE programme have supported conservation efforts concerning specific endangered marine species or developing new knowledge useful for projecting the marine environment.

France had the largest concentration of projects at 27%, followed by Portugal with 22%. Spain, the United Kingdom and Ireland each have a similar amount of projects. When looking at spending, presented in Figure 29 below, Spain accounts for almost half of the funds invested. This is driven by major initiatives funded by EU Structural Funds to clean and purify wastewater in Spain. These projects, spread over various regions in Spain, together account for around EUR 320 million. Behind Spain the United Kingdom received around EUR 150 million, while France and Portugal each received around EUR 110 million.

Figure 29: Distribution of total expenditures supporting Specific Objective 2.2 (M of EUR)



Both by number of projects financed as well as by total budget invested, the EU structural funds account for the majority of projects supporting this Specific Objective. This is once again driven by the waste water purification projects in Spain mentioned above. H2020 as well as LIFE each represented a significant amount of funding as well. It is interesting to note many small projects supporting Specific Objective 2.2 were funded by a multitude of smaller, national instruments. This is reflected in the large share of “other” projects, which diminishes significantly when looking at overall budget.

Despite its focus on marine exploration, which provides a welcome opportunity for transnational cooperation, only 27% of projects supporting Specific Objective 2.2 were implemented across borders. This ranges slightly below the overall average of 30%.

Sustainable management of marine resources (Specific Objective 2.3)

Implementation of Specific Objective 2.3 of the Action Plan has been strongly supported by the EU’s Blue Growth agenda. As previously mentioned, this strategy launched originally in 2012 has focused in particular on five sectors with a high potential for creating Blue Growth. Specifically, the two sectors explicitly mentioned by the Action Plan have been named as focus sectors under the Blue Growth strategy, namely deep sea mining and marine biotechnologies.

On the national level, a number of regions have chosen to invest heavily in the key sectors mentioned by the Action Plan, notably marine biotech. Brittany (FR), Lower Normandy (FR), the Canary Islands (ES) and the Lisbon Metropolitan Region (PT) all references blue biotech in their S3 documents. Patterns emerging from the project monitoring database would also suggest that many other regions display a strong interest in this topic. Concerning deep sea mining, Portugal has been the most involved Member State due to the geographical proximity of the Mid-Atlantic ridge system to the Azores. France has also been at the forefront of deep seabed research and exploration in the Atlantic around the world since the 1980s, in particular through the research organisation Ifremer.

97 projects supporting Specific Objective 2.3 received around EUR 94 million in funding

Projects supporting Specific Objective 2.3 account for around 6% of overall projects and around 15% of projects within Priority 2. In terms of funding, these projects represented around 1.4% of the total funds invested and around 4% of funds for projects supporting Priority 2. This makes it one of the lesser funded categories.

In terms of financial volume, three significant projects under SO 2.3 are the presented in Table 8 below. The average funds allocated per project supporting Specific Objective 2.3 is slightly less than EUR 1 million.

Table 8: Overview of largest projects supporting Specific Objective 2.3

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	INNOVMAR	4 269 257	ERDF	Develop and consolidate the main research lines of the Interdisciplinary Centre of Marine and Environmental Research (CIIMAR) at the University of Porto through the implementation of three strategic projects, including notably novel marine products with biotechnological applications.
2	Exploring marine derived biomaterials	3 866 571	ERDF	Accelerating tissue engineering and personalized medicine discoveries by the integration of key enabling nanotechnologies, marine-derived biomaterials and stem cells.
3	TASCMAR	2 642 181	H2020	The project aspires to develop new tools and strategies in order to overcome existing bottlenecks in the biodiscovery and industrial exploitation of novel marine derived biomolecules (secondary metabolites and enzymes) with applications in the pharmaceuticals, nutraceuticals, cosmeceuticals and fine chemicals industries.

Projects supporting this Specific Objectives focused on developing new technologies in the fields of marine biotechnology, as well as deep sea mining, with the latter representing the large majority of projects:

- ▶ **Marine Biotechnology:** Focusing on the potential of algae and other microscopic organisms as well as larger species found in marine environment, projects ranged from exploring new applications to medicine and nutrition to building research networks and innovation hubs in this field. Marine biotechnology projects represented the large majority of projects supporting Specific Objective 2.3.

The **MACBIOBLUE** project (Interreg Madeira-Azores-Canaries) is a demonstration and technology transfer project helping companies develop new products and processes in the field of Macaronesia Blue Biotechnology. The **GHANA** project (H2020) aims to explore and characterize a new marine bioresource, for blue biotechnology applications in aquaculture, cosmetics and possibly food and health industry. The project will determine the biological and chemical diversity of *Haslea* diatoms to develop mass-scale production for viable industrial applications by maximising biomass production and associated high-value compound production

- ▶ **Deep Sea Mining:** The focus of these projects was on developing new technologies to access resources found in the deep sea while at the same time ensuring they were safe, sustainable and did not harm the environment. Projects ranged from developing innovative AUVs to assessing long term environmental impacts.

The JPI Oceans project **MiningImpact** aims at assessing the long-term impacts of polymetallic nodule mining on the deep-sea environment. Built around three research operations The findings will further our understanding of deep sea mining by exploring its potential benefits as well as adverse impacts. The project also aims to build a network of expertise by bringing together experts from different countries.

Amongst the projects supporting Specific Objective 2.3, both the number of projects and funds were distributed relatively evenly across Member States. 25% of projects were in the United Kingdom, followed by Spain and Portugal with 21% each. France and Ireland account for 17% and 16% of projects respectively. France received the most investments under these projects, despite only participating in a relatively limited number of projects. The United Kingdom; which accounts for the most projects benefited from EUR 23 million and ranks just behind France. Portugal and Spain received EUR 19 million and EUR 17 million respectively, while Ireland received EUR 10 million.

H2020 was most the most frequently used instrument for projects supporting Specific Objective 2.3, funding 38% of projects and accounting for 56% of funds. This shows that H2020 funded a few larger scale projects, such as the TASCAMAR project or the GENIALG project also supporting Specific Objective 1.3. It is followed by the EU Structural funds, which funded 31% of projects and represented 25% of funds invested. As was the case for other Specific Objectives, projects supporting Specific Objective 2.3 also included many projects funded by various national instruments, but only equipped with a limited budget.

Specific Objective 2.3 has the second highest amount of cross-border projects, with almost 50% of projects being transnational. Amongst the other Specific Objectives under Priority 2, it is the only that has a percentage significantly higher than the average.

Harnessing the Atlantic's renewable energy potential (Specific Objective 2.4)

Marine energy renewables (also known as ocean energy) present significant potential to respond to the future demand for energy in Europe in a sustainable manner. This umbrella term includes five distinct technologies, namely: wave energy, tidal stream, tidal range, ocean thermal energy conversion, and salinity gradient. Studies have found that up to 10% of the EU's electricity demand could reasonably be met collectively by these technologies by 2050. Moreover, ocean energy is by its nature highly complementary to other renewable energy sources, meaning that it could help to balance out the output of other renewable energy sources. In the EU, the highest potential for the development of ocean energy is largely concentrated on the Atlantic seaboard, as well as in the Atlantic Outermost Regions. Unsurprisingly, Atlantic Member States, notably the UK, France and Portugal, have been at the forefront of developments going back to the 1970s.

By mid-2016, 17MW of tidal stream and 12MW of wave energy had been deployed, bringing cumulative deployed capacity to 252MW (excluding machines that have been decommissioned). Current development of ocean energy technologies is concentrated almost exclusively in the Atlantic area and predominantly focused on utility scale electricity production, due to the predictable nature of ocean energy resources and economies of scale. However, other markets exist for ocean energy in off-grid and micro-grid generation – e.g. remote areas of the Atlantic area. Over the past ten years the ocean energy industry has invested an estimated EUR 1 billion in private capital.

The Commission published in 2014 a watershed Communication on action needed to deliver on the potential of ocean energy in European seas and oceans by 2020 and beyond – which references in particular the Action Plan. The Communication took stock of the many actions on the EU level that have been targeted at supporting the development of marine renewable energies. A joint programme for ocean energy has been set up within the European Energy Research Alliance. Three ocean energy projects have been awarded under the first round of the NER300 programme. The EU has also funded various projects under Research Framework Programmes. ESIF, through national and transnational cooperation programmes, has also played an important role in supporting the development of ocean energies.

This support has been complemented by support schemes at national level (e.g. Feed-In Tariffs), supported by guidance issued by the Commission on best practice for renewable energy support schemes. Efforts at national level have also been strongly supported by national and regional actors. In Ireland, the Cork area has emerged as an epicentre of ocean energy expertise and research through the now defunct IMERC initiative. In the UK, the County Council in Cornwall and regional governments in Wales and Scotland have also strongly supported the development of the industry. Strong cooperation has also developed outside the framework of the EU, such as the CPMR Atlantic

Arc's working group on marine renewable energies, as well as strong cooperation amongst industry actors through organisations such as Ocean Energy Europe.

Looking forward, the 2014 Communication called for the creation of an Ocean Energy Forum to develop a shared understanding of the problems at hand and to collectively devise workable solutions. Subsequently organized over the course of 2014 – 2016, the main output of the Forum, the Strategic Roadmap, was presented to the Commission in November 2016. The Roadmap proposed six actions to facilitate the emergence of a market for ocean energy in Europe, namely: i) to create an EU-wide phase-gate approach for technology development, ii) identify the most suitable sites for early deployments and support pre-commercial farms there, iii) create a packaged approach for financing farms, iv) create an EU insurance fund to underwrite project risks, v) increase collaboration to reduce costs and plan deployments, and vi) create an integrated consenting programme.

These policy developments have been highly aligned with Specific Objective 2.4 of the Action Plan and provide concrete measures that may continue to be supported in the future.

112 projects related to special objective 2.4 received around EUR 1.3 billion in funding

In total, projects supporting Specific Objective 2.4 accounted for around 7% of all projects identified as contributing to the Action Plan. Regarding funding, these projects represented approximately 19% of all funds distributed. Within Priority 2, this Specific Objective accounted for around 18% of all projects, while at the same time accounting for around 58% of all funding. This can be attributed to major investments related to offshore wind parks in particular. However, significant capital investments were also directed to other offshore renewable technologies, namely wave and tidal energy.

In terms of financial volume, the three most important projects under SO 2.4 are the presented in Table 9 below. Together, these three projects represent around 77% of the total amount of projects identified in the database supporting this Specific Objective. Indeed, excluding the large EIB investment in offshore wind in the Celtic Sea, the average size of projects supporting Specific Objective 2.4 was around EUR 3 million.

Table 9: Overview of largest projects supporting Specific Objective 2.4

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	West of Duddon Sands Offshore Windfarm	797 000 000	EIB	The Project comprises the development, construction, operation and maintenance of a 389 MW offshore wind farm in the Irish Sea. It is located 14 kilometres southwest of Barrow-in-Furness in the Northwest of England, where the water depth ranges between 17 and 24 meters. The Project's grid connection assets will be transferred to an independent operator (OFTO) after construction. The Project is a 389 MW offshore windfarm in the Irish Sea (Northwest England), comprising 108 turbines on monopile foundations.
2	Ports Normands Associes	150 000 000	EIB	Extension and renovation of the port facilities of Cherbourg and Caen to facilitate future developments, especially related to marine renewable energies.
3	Création d'un quai Energies	42 328 080	ERDF	Creation of a dock in the port of Brest dedicated to supporting efforts of establishing marine

	Marines Renouvelables au port de Brest			renewable energies in the surrounding areas.
--	---	--	--	--

The majority of the investments were related to three types of marine renewable energies:

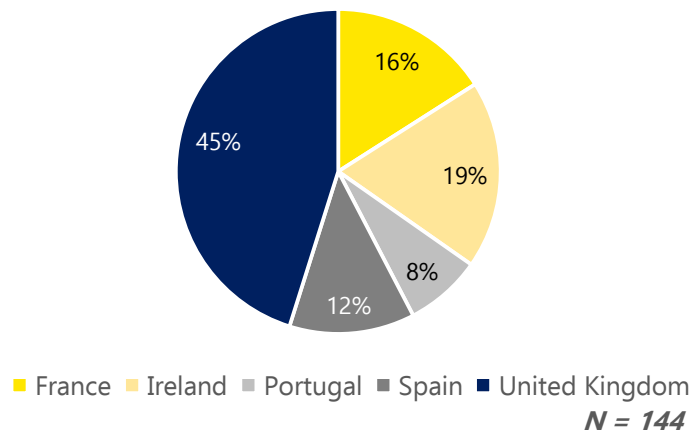
- ▶ **Offshore Wind Parks:** As this form of marine renewable energies is already a mature technology, these projects were mainly related to construction of new capacity. This requires big investments and explains why the relatively few projects related to offshore wind account for a lion's share of the funds. These offshore wind parks need to be constructed in shallow waters, and can be found primarily in the UK. Some smaller projects from Spain explored the possibility of floating wind parks in deeper waters.
- ▶ **Wave Energy and Tidal Energy:** Both wave and tidal energy are significantly less explored than offshore wind. Due to this, a lot of projects were related to building knowledge and innovation rather than actual construction. Some projects focused on developing new components for the industry, such as SEAMETEC, which aims to develop new types of tidal turbine blades or RCRM, which plans to test high tech mooring lines. Other projects, such as LOGiC, aim to establish low carbon energy supply in remote communities using these novel technologies. Still other projects, such as the Bryden Centre for Advanced Marine & Bio-Energy Research focus on building research hubs and improving cross border knowledge transfer.

The EUR 9,7 million **Bryden Centre for Advanced Marine & Bio-Energy Research** project has created a 'virtual centre of competence' that is supporting cross-border research into biomass and marine-based renewable energy sources. The Bryden Centre will recruit 45 PhD students and six post-doctoral research associates to produce industry relevant research that has the potential for strong commercial benefit across the region. The project will thus contribute to Developing new technologies by exploring the use of tidal power on existing offshore wind parks off the coast of Scotland and building a network of expertise.

The **CETO 6** project is supporting the design, construction, installation and operation of a single 1 megawatt (MW) grid-connected CETO 6 wave energy converter device. This represents stage 1 of a planned 2-phase scheme, the second phase of which (planned for 2020/21) will deliver a subsequent 15MW commercial array at the same site, offering a commercial return on investment.

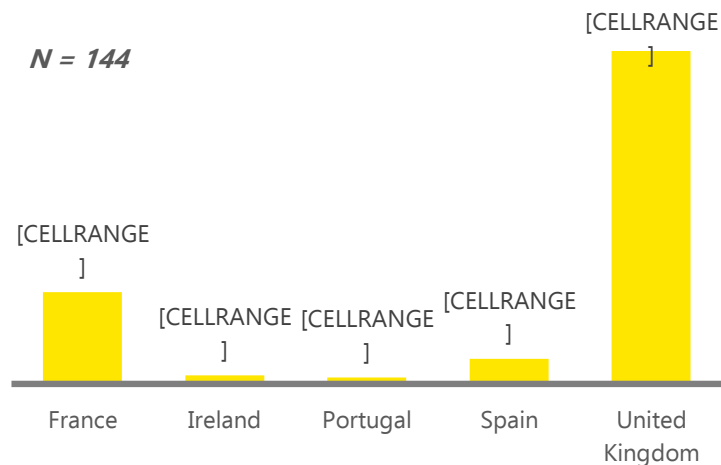
As can be seen in Figure 30 below, the UK accounts for almost half the projects related to Specific Objective 2.4. With regards to total number of projects, Ireland comes second with 19%, followed by France with 16% and Spain with 12%. Portugal accounts for a mere 8% of projects.

Figure 30: Breakdown of projects supporting Specific Objective 2.4 by country



The analysis with regards to funding, presented in Figure 31 below, shows even greater differences between the countries. The United Kingdom receives nearly EUR 1 billion in funding, which is mainly due to the large offshore wind park project. France is second with EUR 258 million. Spain received around EUR 70 million while both Ireland and Portugal each received around EUR 20 million. While Portugal is last in both categories, there is a drastic change for Ireland, falling from second to fourth place.

Figure 31: Distribution of total expenditures supporting Specific Objective 2.4 (M of EUR)



In terms of projects financed supporting Specific Objective 2.4, ESIF accounts for the largest part, with 43% of all projects financed mainly from ERDF programs (see Figure 33 below). In terms of funding however, the structural funds only account for 18% (see Figure 32). This is due to the fact that the two largest projects by funds are funded by the EIB, which only is involved in three projects in total. H2020 funded 15% of the projects, mainly related to testing and developing new technologies, while accounting for 4% of total funding. A significant number of projects were funded by national actors such as Innovate UK or Science Foundation Ireland. In terms of total amounts, however, these actors each only account for around 1%. Overall one can observe that projects funded on a European level were larger in terms of funding than national level projects.

Figure 33: Breakdown of Specific Objective 2.4 projects by source of funding (number of projects financed)

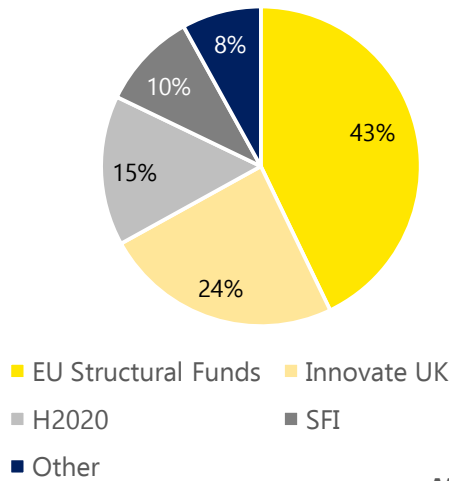
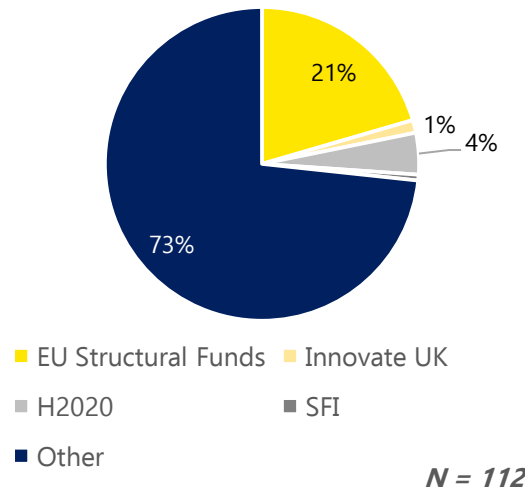


Figure 32: Breakdown of Specific Objective 2.4 projects by source of funding (budget invested)



With 28% of projects being transnational, Specific Objective 2.4 ranks slightly below average. The focus on renewable energies could explain the low percentage of cross-border cooperation, as energy generation is still primarily a national matter.

3.4.1.3 Priority 3: Improving accessibility and connectivity

Only limited policy developments have taken place in this policy area. However, the EU's continued support of Trans-European Networks includes specific focus on port infrastructure and remains highly aligned with the objective of the Action Plan. Port development has also been a key priority on national level, in particular in Spain where a massive investment programme has been put in place with support financing from the EIB (see following section).

The main policy evolution in ports policy has been a major push to 'level the playing field' for ports, with potential major implications for Atlantic ports. Regulation (EU) 2017/352 aims to level the playing field in the sector, protect port operators against uncertainties and create a climate more conducive to efficient public and private investments. The Regulation defines the conditions under which the freedom to provide port services applies, for instance the type of minimum requirements that can be imposed for safety or environmental purposes, the circumstances in which the number of operators can be limited and the procedure to select the operators in such cases. It introduces common rules on the transparency of public funding and of charging for the use of port infrastructure and port services, notably by making sure that the port users are consulted.

150 projects have been identified in line with the objectives of Priority 3, representing EUR 3 billion

Amongst the projects identified supporting the Action Plan, 150 projects are related to Priority 3, representing about 11% of the total number of projects. The total amount of the budget invested in these 150 projects is about EUR 3 billion. While the Priority 3 projects represent only 11% of the total number of projects identified in the database, they are ranked first in terms of overall budget invested. This significant financial weight can be partly explained by the fact that financing port infrastructure (construction, replacement or upgrade) is always particularly costly and requires important investments from public structures (notably the European Investment Bank) In terms of financial volume, the three most important projects related to Priority 3 are presented in Table 10 below.

Table 10: Overview of largest project supporting Priority 3

Rank	Name of the project	Total expenditures	Financing Instrument	Description
1	Spanish state fund for ports accessibility	1 200 000 000	EIB	The project consists of a framework loan to fund rail and road access investments in state-owned ports in Spain through a State Fund - "PAF" (Port Accessibility Fund). The project will help to improve land connectivity in key ports all located in the TEN-T Network.
2	Dublin Port Alexandra Basin Redevelopment	221 185 000	EIB	The Alexandra Basin Redevelopment involves the construction of approximately 3km of quay walls , deepening of the harbour basin and channel to accommodate larger sea going vessels as well as works associated with the conservation of the port's Victorian industrial heritage.
3	Dublin Port Development	200 000 000	EIB	The main objective of the project is to improve operations and increase capacity for roll-on-roll-off freight traffic in the port of Dublin in response to market demand. The project will adapt existing port infrastructure approaching the end of its useful life.

A large portion of investment has one to upgrading infrastructure, but other types of projects can also be identified. Specifically, the Priority 3 projects identified in the database are mostly focused on the three following key topics:

- ▶ **Developing and upgrading port infrastructures** : These projects aim at strengthening ports capacities in order to accommodate future growth by improving connectivity with the hinterland and enhance intermodality (ex : Dublin Port Alexandra Basin Redevelopment, Dublin Port Development, Bilbao port new quay and expansion...)
- ▶ **Diversifying port into new business activities**: These projects aim at developing activities like tourism or the maintenance of offshore renewable energy installations by offering adapted facilities for the manufacturing, assembly and installation of ocean energy infrastructures. (ex: Brest Port, Cherbourg project...)

The **Port of Brest** is Brittany's leading port, and is now the focus of an ambitious development programme. Development works totalling EUR 42 million are underway to allow the port to cater for industrial activity relating to Marine Renewable Energy and provide ideal conditions for industrial firms to set up at the port in the future, for production, storage, loading/ unloading, and the handling of outsize and/or heavy structures. The development initiative has a twofold aim :

- ▶ Expanding the commercial port's historic business by improving shipping access to the bulk and multimodal terminals
- ▶ Developing new industrial activities at the commercial port by creating a new port terminal suitable for heavy consignments, in particular those involved in the Marine Renewable Energy industry

- ▶ **Promoting port networks and short-sea shipping routes between European ports**. These projects aim at strengthening links between European ports by eliminating barriers to uninterrupted network access (ex : *Spanish state fund for ports accessibility*)

France concentrates 58% of the projects supporting this priority. Then comes Spain with 32% of projects, Ireland with 5% of projects and, finally, the United Kingdom and Portugal with respectively

3% and 2% of the projects selected for the study. However, the analysis of the distribution of total expenditures of projects linked to the Priority 3 by country modifies this ranking. Spain is ranked first (EUR 1,9 billion), mainly due to the financial weight of its emblematic project “*Spanish state fund for ports accessibility*” valued at EUR 1,2 billion, ahead of France (EUR 520 million), Ireland (EUR 513 million), UK (EUR 60 million) and Portugal (EUR 38 million).

In terms of the number of projects, ERDF is the first source of funding of the Priority 3 projects (by number of projects). Indeed, as underlined in the following chart, 72% of the projects identified benefited from ERDF programmes, 16% from CEF, 4% from H2020, 3% from the European Investment Bank and 2% from national. However, in terms of value, the amount invested by the European Investment Bank are the most important. They represent 57% of the total amount invested in the projects identified as linked to this Priority, ahead of the CEF (24% of total amount) and ERDF (9% of total amount). Priority 3 has the lowest percentage of transnational projects, with a mere 12% of projects involving cross-border cooperation. This is hardly surprising, as the focus on port development requires in large infrastructure projects focused on a specific area.

3.4.1.4 Priority 4: Create a socially inclusive and sustainable model of regional development

Fostering better knowledge of social challenges in the Atlantic area (Specific Objective 4.1)

Policy developments in this area have generally been in line with Specific Objective 4.1. Due to the nature of socio-economic challenges (and opportunities), many of the relevant policy developments have already been mentioned in other sections, such as the socio-economic aspects of the CFP (maintaining employment in the fishing industry, economic diversification...) and efforts to promote innovation and entrepreneurship in particular. More generally, other relevant policy developments can also be said to be in line with this Specific Objective. For example, the EU and Member States have placed increasing emphasis on issues such as sustainable urban development or demographic change. Due to the very wide nature of this Specific Objective, it is difficult to directly pin down all of the relevant policy areas of relevance.

94 projects supporting Specific Objective 4.1 represented EUR 310 million in funding

Projects supporting Specific Objective 4.1 account for around 6% of overall projects, with only Specific Objective 2.1 capturing fewer projects. In terms of funding, projects supporting Specific Objective 4.1 represent only around 4% of all investment, more than four other Specific Objectives. This is largely driven by the big Spanish EDUSI initiative, which focusses on developing sustainable urban development plans in various cities along Spain’s Atlantic coast.

It should be noted that much of the ‘social investment’ in the Atlantic area goes undetected by the project monitoring database. This is because much of it is channelled through general national programmes that may touch upon a wide range of geographies and sectors. Identifying which expenditure can be considered to support the Action Plan specifically is very difficult. For example, socio-economic inclusion actions (e.g. training, employability, job seeking support...) supported by the ESF and other sources of funding may support people in Coastal areas in taking advantage of maritime opportunities to sustain them and their families, or in many areas not covered by the Action Plan. Likewise, programmes are often national or regional with no data available for how much funding supports coastal areas in particular. Although not considered as such, many projects under Priority 1 supporting entrepreneurship, innovation and economic diversification can be considered as supporting this Specific Objective in some sense.

In terms of financial volume, the three largest projects supporting Specific Objective 4.1 are the presented in Table 11 below. The average funds allocated per project is approximately EUR 3 million. Excluding the EDUSI projects however, this average drops to around EUR 770K.

Table 11: Overview of largest projects supporting Specific Objective 4.1

Rank	Name of the project	Total expenditures	Financing Instrument	Description
1	EDUSI	256 479 185	ERDF	Active in various regions of Spain, EDUSI aims to promote sustainable urban development and improve social, economic and environmental conditions.
2	ECME	8 361 966	ERDF-Interreg	The ECME project will create a cross-border centre of research excellence within the field of cardiovascular medicine, with a particular focus on medical grade wearables and associated remote monitoring systems to support older people in terms of 'aging in place' within their own home and community safely, independently and comfortably.
3	Blue Health Consortium	974 438	H2020	The BlueHealth Consortium brings together a multi-disciplinary team of experts reaching across all 28 European Union countries. The proposed 4.5 year BlueHealth Project takes an international, interdisciplinary and multi-sector approach to health promotion and disease prevention by investigating the relationship between the EU's 'blue infrastructure' and the health and well-being of its citizens.

Excluding EDUSI, most projects under SO 4.1 focused on two topics:

- ▶ **Sustainable urban development:** While somewhat indirectly related to this Specific Objective, the Spanish Managing Authority classified investments in sustainable urban development plans in this Specific Priority. The 'EDUSI plans', which benefited 23 Spanish cities on its Atlantic coast, comprise a system of interlinked actions which seeks to bring about a lasting improvement in the economic, physical, social and environmental conditions of a city.
- ▶ **Tackling demographic challenges and providing public services in remote areas:** Many coastal areas (particularly remote regions) face serious challenges with demographic change. As populations age, public health (and other) systems must be able to meet the evolving needs of the population. Communities are also interested in helping citizens get the most of their elderly years by staying healthy and active. More generally, delivering public services effectively and efficiently in remote and rural areas is an important challenge. A number of projects with distinct coastal aspects or entirely implemented in coastal regions were identified that are tackling these challenges.

The **Institute of Bioengineering in Network for Healthy Aging** project (POCTEP Interreg) is promoting research and innovation of excellence in the Euroregion (Norte-Galicia) that contributes with its results to improve the quality of life and health of the population, with a special focus on the diseases associated with aging, generating at the same time new niches Market and stable employment. The **RemoAge** project (Northern Periphery & Arctic Interreg) is tackling the challenge of supporting people with dementia and other frail older people to age in places in remote and sparsely populated areas of the northern periphery of Europe, with long distances and limited resource to meet the challenge. It will build on and roll out tested and evaluated service packages that will meet this challenge.

- ▶ **Socio-economic inclusion:** While most socio-economic inclusion actions did not have a distinct maritime character (and were thus not included in the project monitoring database) a number of actions were nonetheless identified.

France accounts for 37% of projects, followed by Spain with 34%. Portugal, the United Kingdom and Ireland receive 12%, 11% and 6% respectively. Despite accounting for the most projects, France only

receives around EUR 11 million in funding. With EUR 270 million, Spain receives by far the most funding. This is once again explained by the EDUSI projects, which alone account for around EUR 256 million. The United Kingdom receives slightly more than France and Portugal slightly less, followed by Ireland with EUR 5 million.

The vast majority of projects were supported through the EU Structural Funds, accounting for 84% of all projects financed and 96% of all funds invested. This is again largely driven by the Spanish EDUSI projects. A significant number of projects was financed by various small national instruments. This explains the fact that although 9% of the projects were financed through “other” instruments, the total amount of financing is less than 1%. Under Specific Objective 4.1, only around 22% of projects had a transnational character. This reflects the overall low amount of transnational projects under Priority 4, and is in line with the focus on addressing region-specific social issues.

Preserving and promoting the Atlantic's cultural heritage (Specific Objective 4.2)

The coastal tourism industry is by far the largest employer in the blue economy. Some southerly zones of the Atlantic area benefit from traditional coastal tourism assets – e.g. pristine beaches and sun. To compete with traditional tourist destinations in southern Europe, more northerly areas of the Atlantic region have developed a variety of novel tourist offerings, such as nautical tourism, which is providing small ports and marinas with precious sources of new income, cruise shipping or even underwater cultural heritage (e.g. ship wrecks or settlements). Reflecting the importance of this industry, coastal and maritime tourism was selected as one of the five focus areas under the Commission’s Blue Growth agenda, providing invaluable support to the implementation of this Specific Objective.

The EU Commission adopted a Communication on a European Strategy for more Growth and Jobs in Coastal and Maritime Tourism in February 2014. This document notably includes 14 actions to help the sector grow sustainably and provide added impetus to Europe's coastal regions. Amongst other initiatives, the Commission developed an online guide to the main funding opportunities available for the sector, encouraged the development of clusters and transnational partnerships, organised various events for industry and policy makers and launched a pan-European dialogue between cruise operators, ports and coastal tourism stakeholders.

On the national and regional levels, virtually all tourism strategies have underlined the importance of developing the coastal and maritime tourism economy in the Atlantic. While most parts of the region do not have natural assets traditionally associated with tourism (‘beaches and sun’), they have focused on developing high added value niche tourism markets, relying on the rich natural and cultural heritage of the region. For example, the highly successful motoring route ‘Wild Atlantic Way’ stretches along the west coast of Ireland 2 600 kilometres from the Inishowen Peninsula in County Donegal down to County Cork. One year after launching this initiative in 2014, Ireland saw an uptick in visitors of 11%. This initiative also has the advantage of bringing in a steady flow of tourists to highly isolated regions that may otherwise struggle to attract visitors.

110 projects supporting Specific Objective 4.2 received around EUR 146 million in funding

In total, projects supporting Specific Objective 4.2 accounted for around 7% of all projects identified in the project monitoring database to date, while at the same time receiving around 2% of total funding. The discrepancy in budget once again tells of a number of smaller projects being financed under 4.2 as opposed to larger infrastructure investments. Nevertheless, a number of large investments were noted in the area of tourism infrastructure (see table below).

This priority has also been strongly supported by the EMFF under Community-Led Local Development (CLLD) (‘Fisheries Local Action Groups’ (FLAG)). According to the Commission, coastal tourism projects represent a substantial part of the EUR 500 million available for CLLD during the current MFF. Pescatourism or fishing tourism in particular a key area for many FLAGs who have

helped local fishermen with the investments needed to take tourists on board. Another key area is the promotion of the local catches in restaurants and hotels. Due to the fact that data on these projects are not yet available, they have not been included in the project monitoring database.

In terms of financial volume, the three largest projects supporting Specific Objective 4.2 are the presented in Table 12 below. The average funds allocated per project is around EUR 1.3 million.

Table 12: Overview of largest projects supporting Specific Objective 4.2

<i>Rank</i>	<i>Name of the project</i>	<i>Total expenditures</i>	<i>Financing Instrument</i>	<i>Description</i>
1	Tourism Attractor Destinations	55 292 394	ERDF	This project aims to deliver a small number of regionally prioritized strategic tourism infrastructure projects that will help raise the quality and perception of destinations in Wales and encourage business investment and employment growth within the tourism sector in the region.
2	Promotion of Destination Azores	22 485 413	ERDF-Interreg	This project aims to promote the Azores as a touristic population to a wider audiences. It financed campaigns across the Atlantic in the United States and Canada.
3	Water Sports Center Saint Francois	4 700 000	H2020	This project financed the demolition and reconstruction of a Water Sports Center on Guadeloupe to promote Tourism within the area.

Projects identified supporting this Specific Objective in the database had a variety of objectives. As illustrated above, a number of projects were identified supporting large tourism infrastructure. This Tourism Attractor Destinations project in Wales can notably be mentioned. Other projects aimed to develop touristic capabilities in regions where little tourist activity has taken place to date. This included building new facilities, educating and training local stakeholders, or tapping in to unique niche markets. One project supported by the Northern Periphery and Arctic Interreg Programme supported the development of the underwater heritage and ecology in the North East Atlantic as a tourism asset. Finally, some regions that are already rather well developed regarding tourism implemented projects that aimed to test novel tourist strategies on sustainable travel. This often focused on reducing the impact on the climate and the local environment.

The **Cool Route** (Cruising Oceans On Latitudes above 51° North) project supported by the Northern Periphery and Arctic Interreg Programme is investigating all aspects of the practical logistics and business potential to establish a bi-directional yacht cruising route along the offshore areas of the Northern Periphery Area, stretching from the South of Ireland, to the UK (Northern Ireland and Western Scotland) on onwards to Norway. The **FishTrail** project supported by the COSME instrument is seeking to boost the competitiveness and integration of transnational Angling tourism in Europe and support and develop a network of sustainable angling tourism.

Two fifths of all projects identified supporting Specific Objective 4.2 were developed in Portugal. This is due primarily to a large number of small projects supporting the development of tourism businesses in Madeira. Portugal is followed by the United Kingdom and Spain, which account for 18% of projects each. 15% of projects were developed in France while Irelands share stands at 9%.

Although Portugal accounted for the largest number of projects, the United Kingdom received the largest amount of funding at EUR 65 million. This points to a number of larger investment projects being financed in the UK, such as the Tourism Attractor project in Wales, while Portugal, receiving around EUR 47 million, implemented smaller scale projects. France, Spain and Ireland together received less funding than Portugal, getting EUR 15, EUR 11 and EUR 8 million respectively.

While instruments like COSME funded a significant number of projects under Specific Objective 4.2, the bulk of overall funds came from the EU Structural Funds. Accounting for 70% of all projects financed, the EU Structural Funds disbursed 91% of the funds. COSME and Valuing the Ocean, accounting for 13% and 7% of projects financed respectively, become insignificant when looking at overall funds disbursed. Specific Objective 4.2 has the second lowest percentage of transnational projects, with only 18% of projects involving multiple countries. In light of the emphasis on preservation of the Atlantic's cultural heritage, the low number corresponds with the more regional focus of many projects under this Specific Objective.

3.4.1.5 International dimension

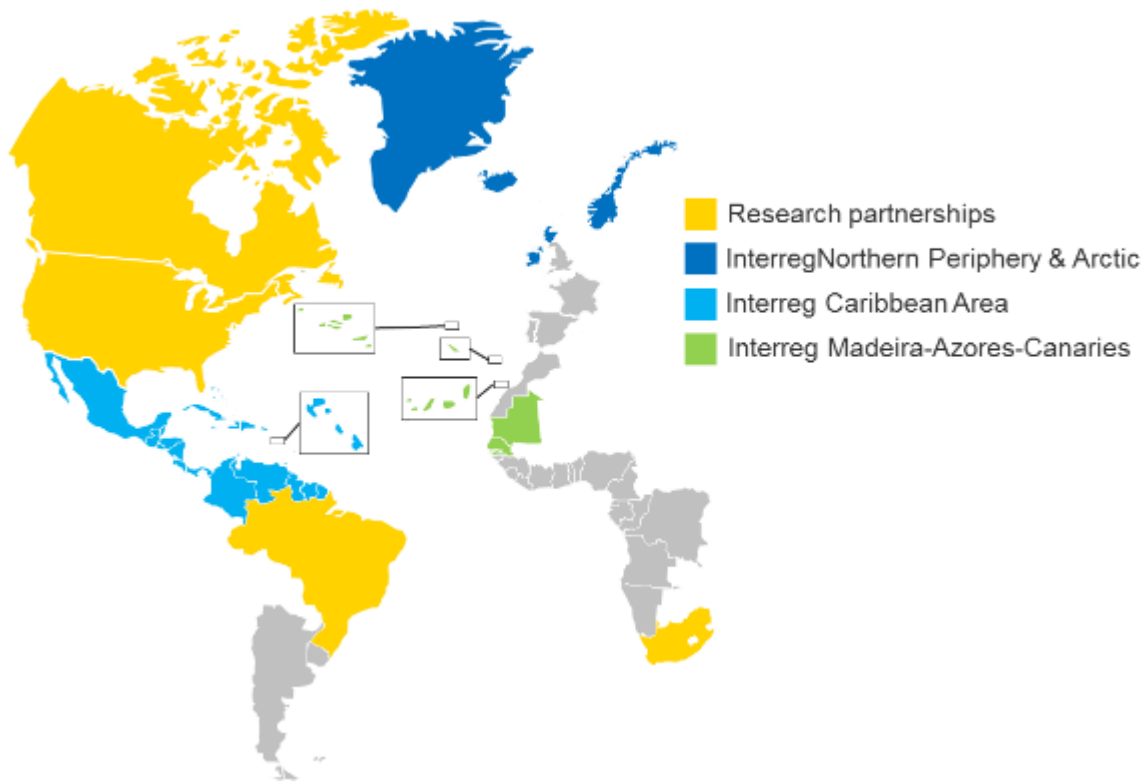
Although not directly integrated into the priorities of the Action Plan, Section 5 of the document calls for the initiative to *create a solid foundation for cooperation with other Atlantic nations*. In particular, it notes the prospect for developing a Transatlantic Research Alliance with the United States and Canada. More generally, it calls on the Commission and Member States to jointly consider what steps can be taken to engage international partners in the phased development of the Atlantic Strategy.

Some notable policy developments since the adoption of the Action Plan have been highly aligned with and strongly supported this call for internationalisation. The 2013 Galway Statement on Atlantic Ocean Cooperation has given birth to the Transatlantic Ocean Research Alliance. Within the framework of this alliance, trilateral working groups have been established to define mutual research theme area topics in the areas of ocean literacy, aquaculture, the ecosystem approach to ocean health and stressors and seabed mapping. This partnership has been supported in particular by a number of projects supported by H2020 bringing together European and North American actors as project partners or through other forms of engagement. Following on this initial success, the Belem Statement was signed in July 2017 to expand the EU's ocean research cooperation with Brazil & South Africa.

Beyond these research partnerships, however, little emphasis has been placed on developing cooperation on marine and maritime issues with other third countries with which the EU shares the Atlantic. For example, there have been no documented attempts to streamline Action Plan priorities to relevant tools such as the EU's development cooperation instruments. While European Neighbourhood Initiative (ENI) Cross-Border Cooperation (CBC) programmes exist for a number of other sea basins and maritime areas, a Mid-Atlantic ENI CBC, slated to be created for the current programming period, was never adopted for reasons that could not be identified by evaluators. Nor have marine or maritime issues featured prominently in political dialogue with other Atlantic regions such as Africa and the Latin America and Caribbean (LAC) area.

Nonetheless, a small number of projects involving international cooperation on projects aligned with the Action Plan (beyond H2020 supported projects) were identified in the project monitoring database. This included projects with partners in the North-western Atlantic (Iceland, Norway and or Danish autonomous / devolved territories of Greenland and the Faroe Islands) and Western Africa (Mauritania, Senegal and Cabo Verde). These projects were all supported by Interreg programmes, namely the Northern Periphery and Arctic and Madeira-Azores-Canaries Programme. It can also be noted that the Interreg Caribbean Programme may also potentially support relevant projects between the French Outermost Regions and parts of the LAC region. However, data on this programme was not available at the time of the evaluation. The Atlantic area's remote and Outermost Regions thus represent unique gateways for cooperation with international partners, which are supported by financial mechanisms already being leveraged to finance projects in line with the Action Plan.

Figure 34: International cooperation mechanisms of relevance to the Action Plan



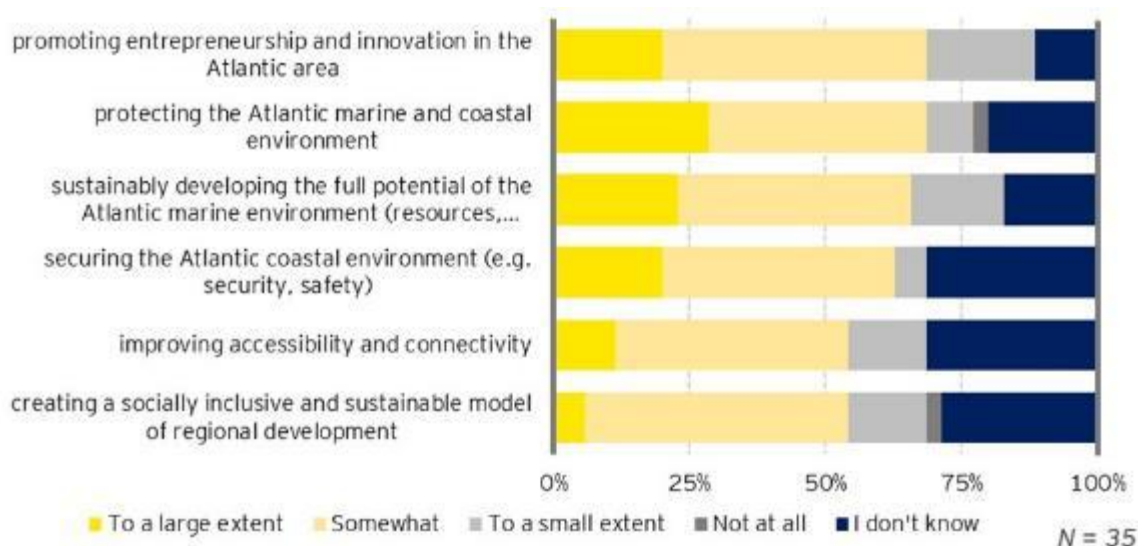
3.4.2 EQ4.2 What are the expected wider socioeconomic and environmental benefits of the Action Plan? Specifically, to what extent has the Action Plan contributed to the expected impacts for each of the main priorities?

Ultimately, the Action Plan has had limited direct, downstream impact, but investments and policies aligned with its objectives are nonetheless driving positive evolutions

Aside from the specific case of H2020, the Action Plan has not meaningfully influenced the priorities of funding sources, making more resources available for relevant projects. Moreover, no projects could be identified that were directly influenced by the Action Plan, in terms of their existence or design. Finally, while policy developments have been strongly aligned with the Action Plan, the level of influence of the latter appears insignificant. For these reasons, **it is in many cases difficult to attribute directly or indirectly to the Action Plan the potential future impact of relevant projects and policy.**

However, observing the projects and policy developments that remain nonetheless aligned with the Action Plan (even if not the direct result of it), one can expect future impacts in line with its objectives in many areas. This is largely reflected in the responses to the Open Public Consultation. As summarised in Figure 35 below, respondents reported being fairly confident that the Action Plan would achieve at least to some extent the expected impacts, in particular in the areas of promoting entrepreneurship and innovation and protecting and sustainably developing the marine environment.

Figure 35: OPC - Overall, to what extent has the action plan achieved its key priorities in terms of:



The following sections provide a discussion of the expected impacts of the projects and initiatives observed that were aligned with the objectives of the Action Plan. Data on the evolution of key contextual indicators related to Action Plan objectives (e.g. economic growth, environmental status, etc.) are presented where available. However, it can be reminded that the Action Plan never designated any monitoring indicators at impact or any other level. Perhaps part of the reason behind this, available data at this level are limited and subject to an important time lag. Regardless of the availability of data, the causal link between the projects and initiatives and these impact indicators is also naturally tenuous. At impact level, outcomes are influenced by a complex interaction of many variables. Moreover, a limited amount of time has elapsed since the Action Plan was launched, meaning few actions are already producing impacts. Considering this, the following sections have also developed a more qualitative description of the expected impacts and the underlying mechanisms.

Promoting knowledge sharing, entrepreneurship & innovation to support Blue growth

Overall, economic trends across the Atlantic area have been positive since 2013. Between 2013 and 2015, the compound annual growth rate of the Atlantic area (NUTS2 level) was almost 5%, with the regional GDP growing from EUR 1 885 million to EUR 2 175 million. This rate of growth largely outpaced that which can be observed at the EU level during the same period – roughly 2%. At the same time, growth was highly unequal between different regions of the Atlantic, with a notable North-South divide that can be observed. It is not possible to provide specific data on overall growth in the Blue economy. No system of indicators based on reliable data exists at present that is capable of measuring the precise effect of activities directly or indirectly relying on the sea.

While naturally difficult to draw the link between the projects and policy initiatives aligned with the Action Plan and the trends in economic growth, they can clearly be expected to make a positive and tangible contribution. The Blue growth agenda is increasing recognition of the importance of the maritime economy and attracting greater attention and investment. Key policy initiatives are also contributing to improving the framework conditions for innovation and entrepreneurship. More specifically, efforts are being made to strengthen key enablers of Blue growth, such as marine spatial planning. Important investments in research infrastructure and cooperation are enhancing the capacity to innovate. At the same time, projects are providing targeted support to research and innovation across a wide range of fields.

Policy initiatives at EU and national level are supporting a greater recognition of the contribution of the Blue economy, driving higher levels of investment, and stronger monitoring of its contribution and impact. At the EU level, the political impetus created by the Blue

Growth agenda has clearly contributed to raising the level of awareness of the importance of the Blue economy and its contribution to wider economic growth. This can be reflected on the national and regional level in the strong economic & innovation component of maritime policies that have been put in place. Far from being purely a qualitative impact, stakeholders across the Atlantic believe that this recognition has and expect that it will continue to translate into greater attention by decision-makers and higher levels of investment in the maritime economy.

Policy initiatives can be expected to contribute to improved framework conditions for innovation and entrepreneurship. Policy developments at EU and national level have focused in recent years on improving the framework conditions for innovation and entrepreneurship through reducing barriers to entry, facilitating access to credit, investing in necessary infrastructure, or expanding and/or improving the quality of services offered to businesses (in particular SMEs) amongst other levers. For example, the EAGLE1 & 2 projects (COSME) supported stronger cooperation amongst trade promotion organisations to improve the service offering to SMEs. While most of these efforts have not been specific to the maritime industry, they have equal potential to provide benefit to this sector nonetheless. On the EU level, the Blue Growth initiative has focused on a number of enablers of growth in the Blue economy, such as maritime spatial planning or marine data. A wide range of projects have been supported focusing on these enablers (e.g. MUSES, DATAMOR, MarInfo, SimCelt projects, etc.). These efforts, both general and specific to the maritime domain, can be expected to act positively on developing enablers of economic growth and / or removing common obstacles, thereby contributing to economic growth and job creation in the long-term.

Investments are enabling the development of new research infrastructure and networks of expertise to drive future knowledge generation. A number of projects and initiatives were identified supporting the development and/or pooling of key infrastructure in the marine / maritime domain (e.g. PLOCAN, iMARL, JERICO-NEXT, MARINET projects, etc.). These projects can be expected to deliver clear impacts in terms of pooling resources to develop / ensure access to infrastructure of EU strategic interest that will support research and innovation efforts in the long term. Beyond physical infrastructure, projects have also been identified supporting the development of clusters / networks that bring together expertise from across the EU and help bridge the gap between research and industry actors (European Marine Biological Research Infrastructure Cluster, BRIDGES, SMART BLUE projects, etc.). These will contribute to enhancing collaboration and the free flow of ideas, including the critical link between research and industry. These projects have also been complemented on the policy level by generic efforts to support the development of strategic infrastructure and cross-border collaboration, in particular within the framework of the ERA.

Projects are providing targeted support to innovation, from basic research to mature technologies. A wide number of projects were identified providing targeted support to specific innovation projects or enterprise innovation more generally. These projects spanned the spectrum from basic / exploratory research to the development of more mature technologies. Projects have been funded in a number of areas, including basic marine sciences, autonomous surface / underwater vehicles (e.g. SWANS, SWARM, ENABLES3 projects, etc.), marine renewables, shipping / ship-building, marine biotech and medicine amongst others. The MARTERA co-fund action is also financing innovative projects across all marine / maritime sectors. Concerning support to enterprise innovation, some notable projects / initiatives were identified in the UK and Ireland, such as the Marine-i Challenge Fund and the Seafood Development Centre respectively. These were focused more generally on supporting maritime companies to innovate (e.g. process innovation) or develop innovative service offerings. These projects can be expected to have a wide variety of impacts, not just in terms of economic development, but across the entire Action Plan – e.g. marine renewables, biotech, sustainable fisheries & agriculture, etc. Indeed, innovation is a transversal enabler of many objectives supported by the Action Plan.

Specifically, projects are contributing to the development of new knowledge to underpin the

sustainable exploitation of marine resources, in particular fisheries & aquaculture. Concerning the Specific Objective 1.3, the relevant projects identified can be expected to support specifically the sustainable development of the fishing (e.g. FishKOSM, pISCES, SMART FISH, SealTall, DiscardLess, LIFE iSEAS projects, etc.) and aquaculture (e.g. AQUAEXCEL2020, ParaFishControl, TAPAS, AQUASmart, SAMARCH projects, etc.) industries. These efforts have been complemented by the implementation of the new CFP, including the introduction of OMC in the aquaculture sector. In the long term, these efforts can be expected to support the increased competitiveness and maintenance or increase of employment in these sectors. From a macro-economic perspective, they may contribute to closing the trade deficit in seafood products in the long term.

Developing new knowledge of the marine environment and strengthening capacity to sustainably manage marine resources

OSPAR's 2017 Intermediate Assessment provides a picture of environmental progress made in the Atlantic, but also points to the need for further effort. Progress has been made in developing Marine Protected Areas (MPA). Since 2010, a further 289 MPAs have been added to the Atlantic network, bringing the total number to 448 (covering 5,9% of the OSPAR area). The assessment also indicates that fisheries management is beginning to have a positive impact on fish communities, with deterioration halting in many areas and some communities even showing signs of recovery. Contaminant concentrations are also decreasing, even if some concerns remain. However, the assessment points to the persistent problem of marine litter, mixed signals for marine mammals and marine birds and the remaining issue of eutrophication in some areas.

Projects and initiatives aligned with the Action Plan in this area are likely contributing to the positive evolutions that can be noted. Continued political emphasis on and funding for the development of the ocean observation & predictive capacity is driving notable progress towards these ambitious objectives. The process launched by the MSFD has focused efforts in the Atlantic area and provided tangible goals to work towards. Overall, efforts in this area can be expected to contribute to a better understanding of the marine environment, supporting better policy-making and planning, and improved environmental status of Atlantic waters.

Projects aligned with the Action Plan are contributing to developing an enhanced ocean observation and predictive capacity to support improved policy-making and planning. In this area, the impacts of projects aligned with the Action Plan and the Action Plan itself should be seen in the context of long-standing efforts that began decades ago and will continue well into the future. These highly complex efforts rely on many components, including the development of observational infrastructure, the integration of this infrastructure, the development of data services and relevant knowledge outputs and the establishment of a governance framework to ensure adequate strategic direction for all actors involved. A major ongoing project in this area is the EUR 20 million AtlantOS project supported by H2020; it seeks to drive the transition from a loosely-coordinated set of existing ocean observing activities to an Integrated Atlantic Ocean Observing System. In addition, a wide range of other projects in this area, aligned with the Action Plan, have been identified (e.g. My Ocean, EMOCEAN, LAKHsMI, ECOPotential, BAC-TRACK, COMPASS, DEEP TIME, SeaDataCloud). Collectively, these projects can be expected to represent continued progress towards the ultimate goal of achieving an integrated ocean observation and predictive capacity in the Atlantic, which itself is part of a wider European and worldwide system. This capacity will provide a knowledge base and tools to underpin policy-making in areas such as the potential impacts of climate change or pollution and provide a stronger basis for managing the ocean's health and evolution.

More generally, projects can be expected to contribute to developing significant new knowledge on the marine environment. Many research projects were identified contributing to the generation of new knowledge of the marine environment. This notably includes efforts to map critical areas of the Atlantic seafloor. Within the framework of the Transatlantic Research Alliance's Seabed Mapping Working Group (international dimension of the Action Plan), work since 2015 has allowed to identify joint research goals in this area through two White Papers, establish a protocol for sharing

data, develop a data portal and prototype data viewer and coordinate research work. These efforts are contributing to progress in mapping work, in particular through enhanced cooperation. This area will also be extensively supported through the development of ocean observation capacities discussed above.

Projects are also supporting efforts to combat invasive species and mitigate risks. Invasive marine species are one of the main threats to biodiversity. In line with the objectives of the Action Plan, continuous efforts have been deployed to better control and combat alien invasive species and mitigate their impact (e.g. LIFE IAP-RISK, LIFE CROAA, TROM, HELM projects etc.). These projects can be expected to contribute to mitigating the impact of alien invasive species and preserving biodiversity in the Atlantic.

Future impact may also be expected in terms of improved status of specific marine areas and species benefiting from conservation efforts. A number of projects were identified supporting the improved status of specific marine areas or species through the deployment of physical conservation measures or the development of management plans amongst other tools (e.g. SeaFate, LIFE14 Roseate Tern, LIFE-Shad Severn, LIFE SIRENIA, CONVIVE-LIFE, SponGES, CANN projects, etc.). For example, the CANN project, supported by Interreg VA, will support the protection of cross-border natural habitats at 25 sites covering over 3 000 hectares through the development of Conservation Action Plans. More generally at the national and EU level, efforts continue to develop protected areas and support their sustainability. These projects can be expected to have a direct impact at the local level on the health of the targeted species / areas. They can also be expected to have important 'knock-on' effects in terms of preserving biodiversity (with its ecological and economic value) and preserving the attractiveness of coastal regions for residents and tourists.

Efforts are contributing to enhanced knowledge of the impacts of climate change in the Atlantic area and development of mitigation and adaptation measures. The impact of climate change is a growing preoccupation for stakeholders across the Atlantic area. A wide range of projects were identified in this area, ranging from research to better understand the effects, generally or specifically with regards to issues such as fish stocks or maritime cultural heritage (e.g. CHERISH, EMSODEV, MOCCA, Bluefish, COMPASS, CERES), to the development of risk-mitigation / adaptation tools (e.g. Ecostructure, COCORISCO, Adapt_Norther_Heritage, CLOCK) and physical works designed to protect coastal zones from the anticipated impacts of climate change, which are expected to have an impact on weather systems and phenomena such as coastal erosion (e.g. the Wrangle Sear Banks Flood Defence Scheme). These actions are complemented by wider initiatives at the EU and national levels to better understand the expected effects of climate change and develop mitigation and adaptation strategies.

Sustainably exploiting marine resources to contribute to growth and positive societal outcomes

Projects and initiatives aligned with the Action Plan can be expected to provide support to the development of key emerging industries in the Atlantic area, notably marine renewable energies and marine biotech. Concerning the former, the sector has seen considerable growth in recent years, which is expected to continue at a healthy pace. By mid-2016, 17MW of tidal stream and 12MW of wave energy had been deployed, bringing cumulative deployed capacity to 252MW (excluding machines that have been decommissioned). Over the past ten years, the ocean energy industry has also invested an estimated EUR 1 billion in private capital. Almost all of this has been concentrated in the Atlantic area. No detailed statistics are available on the marine biotech industry in the Atlantic, but analysis of the project monitoring database would point towards significant interest in the topic on the part of public and private actors (see the relevant parts of section 3.4.1.2).

Projects and initiatives aligned with the Action Plan are supporting the maturing of the marine renewables sector as investment in the development of new devices and testing infrastructure drives the emergence of viable wave and tidal technologies. Marine renewable energies (wave, tidal & current) are attracting an increasing level of attention and investment due to their potential to

provide a virtually limitless source of sustainable energy. On the EU and national levels, important efforts have been undertaken to better structure action and define priorities. At project level, dozens of projects have been identified contributing to the development of critical onshore and offshore testing infrastructure (e.g. MARINET, OM-MaREI, Orkney Research Campus, Wave Hub cable extension, OPERA, FORSEA, Bryden Centre, MARINERG-I, MaREI, ENERMAC, DESAL+ projects, etc.) and the development of specific technologies (e.g. InTER, LIFE DEMOWAVE, Deep Green, CETO 6, AW-Energy device, Score, Ocean Wave Rider, Tidal Turbine Take-Off Accelerator, Wave-Sub, PLAT-O 2, MegaWattBlue, WaveBoost, PLAT-I, TiMUKA projects etc.). In addition, other projects supported the development of associated technologies and components for marine renewables, such as the testing of composites, improving cable resilience or developing a design upscaling tool. Finally, other projects aimed to develop and test concepts for small-scale renewable-powered, isolated grid systems, including energy storage technologies, for deployment in isolated coastal areas.

Projects are supporting expanded offshore wind capacity through the development of commercially viable floating wind solutions of particular relevance to the Atlantic area. Also a marine renewable energy, but considered separately due to its higher level of maturity, the development of offshore wind is a priority in several areas across the Atlantic, in particular in the UK. A EUR 800 million EUB loan was recently secured to develop the West of Duddon Sands Offshore Wind Farm, for example. However, many areas have seen little development of offshore wind to date, notably due to the depth of waters which does not allow for the deployment of fixed structures. The emergence of floating offshore wind may provide an alternate route for deploying this technology in new areas of the Atlantic. A number of projects have been identified supporting these developments (e.g. ARCWIND, GRAVI3, LIFE 50plus, RCRM, MARLIN, FLOW projects etc.). These projects can be expected to contribute to the future deployment of offshore wind in areas where this has to present been unfeasible, increasing the share of renewables in the energy mix.

Projects are contributing to the development of new marine biotechnology research with a wide range of potential future applications. Marine biotechnologies are seen as a high potential emerging sector in the Blue economy. They have the potential to result in many useful industrial and medical applications, some with a high potential societal impact. Projects and initiatives in this area are contributing to developing research capacities and networking (e.g. MarPipe project), as well as targeted research efforts focused on specific potential applications (e.g. INNOVMAR, GENIALG, TASCAR, MARISURF, NOMORFILM, PALM-UK, ARCADES, GHANA, INMARE, MAR4PAIN projects, etc.). These projects can be expected to contribute to the generation of useful new knowledge and, in the longer term, potential economic and societal returns.

Contributing to the improvement of maritime safety and security

According to EMSA statistics, the number of marine casualties and incidents has continually increased between 2011 and 2015. While EMSA's public reporting does not include detailed breakdowns of statistics by sea basin, approximately 2 900 casualties and incidents⁷ have been located in the Atlantic area, representing roughly 38% of all reported in Europe. 'Hot spots' in the Atlantic area included the southern Celtic Sea, the area around the Scottish Outer Hebrides, the English Channel and the Bay of Biscay. Since 2007, migratory flows on the Western African Route in the Atlantic have largely subsided (to 671 illegal border crossings in 2016), with over-water migratory flows mainly focused in the Mediterranean. Flows of narcotics and other illicit activities remain a concern, reflecting continued strong support for the Maritime Analysis and Operations Centre in Lisbon. However, publicly available data on these trends do not allow to paint a full picture of the

⁷ Reported in the EMCIP – Statistics taken from the 2016 Annual Overview of Marine Casualties and Incidents produced by EMSA

situation and its evolution.

Critical to supporting security and safety, projects and initiatives aligned with the Action Plan are contributing to developing a greater level of situational awareness in the Atlantic. The level of situational awareness can be expected to be improved through better integration of existing surveillance data and the development of new sources of observational data. A number of projects were identified in this area contributing to this overall goal, notably through the design and development of IT tools and platforms or integrating the use of novel tools such as remotely piloted aircraft systems (e.g. CANOPUS, RANGER, MerSure, USMOOTH, ALFA, SafeShore, SAIS, SMACS IT-2I, SHAREMARE, 602-SINKER projects, etc.). These project-level efforts are complemented by other important initiatives supporting the Action Plan – such as new initiatives launched by EMSA (development and integration of systems, acquisition of drones for surveillance missions, etc.) and the on-going work for the development of CISE.

Projects are also supporting the development of innovative technologies supporting the safety and environmental sustainability of the maritime industry. A number of projects are being implemented to support the safety, through developing novel technologies for navigation, ship-building or inspections amongst others (e.g. SIDENAV, ShipTest, PICASSO, SHIPLY, projects, etc.), and the environmental sustainability, for example through technologies to optimize fuel consumption (e.g. TROM, VoyagOR, EONAV, MAGS projects, etc.), of the shipping industry. In addition, the work of national stakeholders and EMSA is contributing to the maintenance and improvement of safety levels through the implementation of legislation, cooperation and sharing of best practices.

Improving the accessibility & connectivity of EU ports

According to Eurostat, the total gross weight of goods handled in the main Atlantic ports (inward/outward flows)⁸ declined slightly since 2014 from 918 million tonnes to 904 million tonnes in 2016. Most areas, with the exception of Ireland and Northern Spain, saw a decline. At the same time, the total gross weight of goods handled at EU level grew by 2,1% between 2014 and 2016. Le Havre (FR) and Sines (PT), the only two Atlantic ports amongst the top twenty largest container ports in Europe by volume of goods, have seen healthy growth at +5,2% and +8,5% respectively over the past decade. Le Havre maintained its number 11 position over this period, while Sines moved up one spot to 17. Overall, activity in Atlantic ports continued to be dwarfed by that in the North Sea and Mediterranean.

Even amidst the overall stagnant growth, developments in line with the Action Plan can be seen as contributing to positive impacts. If relatively few relevant policy developments can be noted, significant investments have been made in improving the capacity and connectivity of ports in the Atlantic area. Projects can also be expected to contribute to increasing the efficiency and environmental sustainability of port operations and diversifying sources of income.

Investments can be expected to support the economic development of coastal regions by providing access to markets through greater port capacity and connectivity with the hinterland. Most large investments in ports identified concerned the development of port infrastructure capacity and hinterland connections. These projects aimed to keep pace with the expected future demand and support local economic growth by providing market access to local industry for exports and imports. For example, the Ringaskiddy Development Project in Ireland (co-financed by the CEF) aims to overcome physical constraints inhibiting the port's future development

⁸ Atlantic specific data is not available for the UK in Eurostat data; the data thus includes UK ports on the North Sea. Spanish data excludes southern Atlantic ports, which were combined with Mediterranean ports in Eurostat data.

through the construction of new deep water berths in lower Cork Harbour, as well as land-side logistics facilities. As another example, the Rail2Bordeaux project (CEF) concerns the renewal of hinterland rail connections to the port of Bordeaux to increase freight volume and improve safety. Other similar port development projects were identified in Ireland, the United Kingdom, Spain, France and Portugal.

Projects are also contributing to improving the efficiency and environmental sustainability of port operations through the introduction of new innovative technologies. Atlantic ports are investing in improving efficiency and environmental sustainability in order to better compete at the EU and global level and adapt to higher environmental norms. As part of the port redevelopment projects discussed above, the introduction of new technologies, equipment and working practices are often integrated into the projects. In addition, some free standing projects were identified (notably supported by the CEF) aiming to improve the efficiency of port operations. These projects are most often were synonymous with decreasing the environmental footprint of operations.

Finally, projects and other initiatives should contribute to diversifying economic activity and income streams for ports to improve their economic sustainability. In order to ensure their future economic sustainability, ports in the Atlantic area are investing in the development of alternate sources of revenue. Two ports in France (Brest and Calais) are implementing major infrastructure projects to allow for the installation of marine renewable energy devices. A number of CEF projects are aiming to develop Liquid Natural Gas operations at Atlantic ports. As another example, a development project at the Calais-Blériot Port is seeking to better valorise this asset and make it amenable to visitors.

Creating a socially inclusive and sustainable model of regional development

The Atlantic area continued to face a number of pressing social challenges, notably demographic changes and inequality. Between 2014 and 2016, the Atlantic Area's population grew by 0,62%, in line with the overall growth of the EU population – 0,65%. While some regions have seen very high growth, many, in particular many parts of Portugal and northern Spain, are struggling with shrinking populations as local residents age and younger inhabitants leave in search of economic opportunities elsewhere. The Atlantic area's recent positive economic trajectory also masks many differences at regional level. It includes a number of relatively affluent regions, as well as regions with a GDP per capita significantly lower than the EU average. The latter are struggling to tap into growth opportunities and/or sustain them in the long term. Many Atlantic regions, even relatively wealthy ones, harbour significant marginalised or socially at risk populations.

Due to the wide nature of the 'social' objective of the Action Plan and the fact that it was difficult to identify relevant social investments, the potential future impact in this area is more challenging to identify. On the basis of the limited number of projects identified, some expected impacts may be considered, such as developing new knowledge and technologies to support healthy aging of coastal populations and effectively and efficiently deliver public services in rural and remote coastal areas. Some instances of harnessing Blue economic opportunities can also be expected to contribute to support socio-economic inclusion of marginalized and at risk populations in coastal areas. However, the link between the projects and overall impacts is tenuous.

Supporting the growth of coastal and maritime tourism

Tourism across the Atlantic area has generally been growing at a healthy pace since 2014. Eurostat figures on nights spent by non-residents in tourist accommodation establishments in the Atlantic area (NUTS2), have grown consistently almost across the board between 2014 and 2016. More detailed data from national level also points to sustained growth. In Portugal, the total contribution of the tourism industry to GDP has grown from approximately EUR 26 billion in 2007 to over EUR 32 billion in 2017. In Ireland, surveys conducted by Fáilte Ireland have shown consistently high positive 'business sentiment' amongst tourism operators - 76% in 2016. In France, jobs in the tourism industry in Atlantic regions stood at 269 000. French departments along the Atlantic facade

showed some of the highest levels of overnight stays as a share of the national total.

Projects aligned with the Action Plan are contributing to the development of new, high value added tourism ‘offerings’. Numerous projects were identified focused on the development of new high added value tourism niches, such as ‘slow tourism’ (e.g. SAINT project), hiking in coastal areas (e.g. Hiking Europe project), surfing (e.g. SURFINGEUROPE & SUNRISE projects), angling (e.g. Fish Trail & WILDSEA EUROPE projects), cruise tourism (e.g. Cool Route & Cool Waters project), gastro-tourism (e.g. MACAROFOOD & EDEN-FOOD-Tourism projects), ecotourism / geoparks (e.g. Atlantic-Geoparks, ECOTUR AZUL & ECOTOUR projects) or underwater cultural heritage (e.g. IMARECULTURE & MARGULLAR projects). These reflect wider efforts by tourism operators and authorities across the region (in particular in the North) to develop new niches to attract tourists in absence of traditional ‘beach tourism’ assets. These projects can be expected to contribute to the development of the coastal tourism economy across the Atlantic and in particular in areas that have not benefited historically from tourist flows. Many of these new tourism niches also favour a recognition of natural and cultural aspects and will thus encourage their protection.

Major investments are allowing the construction of new tourism infrastructure in coastal areas. A number of projects have been focused on targeted infrastructure investments to increase capacity and make local tourist sites more accessible and accommodating to evolving needs. The *Tourism Attractor Destinations* programme in Wales will leverage almost EUR 80 million in funding to invest in ten ‘must see’ attractions in Wales. This includes six coastal sites, namely: the Pendine Land Speed Cultural Centre and Eco Resort Complex, the Saundersfoot Harbour regeneration scheme, the Porthcawl Marine Centre of Excellence, the Caernarfon World Heritage Site, Venue Cymru and Cruise improvements at Holyhead. Major ERDF-supported investments were also identified in France, Portugal and Spain. These investments will serve to boost the capacity and attractiveness of tourism sites in the Atlantic area, allowing for a sustainable increase in the number of visitors in coming years and generating important economic benefits for local communities.

Projects are also supporting the promotion of Atlantic destination in EU and overseas markets, raising awareness of the tourism offering. Another common area of action identified was investment in raising the level of awareness of the Atlantic tourism offering. For example, ERDF-supported investments in the Azores were used to set up a EUR 17 million communication campaign. These activities can be expected to increase tourist flows to destinations across the Atlantic area in coming years.

Finally, projects can also be expected to support the development of greater cross border cooperation to promote Atlantic area tourism offerings. EU funds have been an important source of funding for cross-border cooperation projects in the area of tourism. The main tools include Interreg programmes and COSME. In addition to the direct impact of these projects, covering the areas enumerated above, these projects are contributing to developing, cross-border cooperation, sharing best practices (e.g. the MARCET cross-border cluster) and developing transnational tourism offerings that can enhance the attractiveness of the region as a whole (e.g. SABER & AtlanticOnBike projects).

International dimension

The Action Plan’s ‘international dimension’ consisted mainly of the Galway Statement and the subsequent establishment of the Transatlantic Ocean Research Alliance (AORA) bringing together the EU, the United States and Canada. The work of AORA is organised around four cooperation areas including Ocean Literacy, Aquaculture, Ecosystem Approach and Seabed Mapping. Active Working Groups have been set up for each. In addition to national research activities, the EU contribution has been through H2020. Recognizing the success of the Galway Statement, the Belem Agreement was signed in 2017 and seeks to build similar cooperation with Brazil and South Africa.

Through the AORA, the Action Plan has contributed to creating a solid foundation for cooperation with other Atlantic nations in the domain of marine research. As underlined in the report, the Atlantic Strategy process and the momentum created during the development of the Action

Plan provided additional impetus to the eventual signing of the Galway Statement and establishment of AORA. Beyond providing a platform to converse and identify common goals, the AORA, with the support of EU and national funding, has provided significant momentum to research activities in the Atlantic area. This can be witnessed with the launching of strategic projects such as AquaSpace (aquaculture), AtlantOS (ocean observation) or SeaChange (ocean literacy). The recent signing of the Belem Agreement in Lisbon seeks to replicate this success in the South Atlantic.

Beyond the area of research, the impact of the Action Plan's international dimension has been less pronounced. A small number of other projects involving international cooperation on issues aligned with the Action Plan have been supported, by Interreg Cooperation Programmes in particular. However, there have not been any attempts to engage on a strategic level with Atlantic neighbours outside of the research domain.

3.5 EU added value of the AAP

This transversal criterion sought to measure the EU added value of the Action Plan. EU added value is additional to the value created by actions of individual Member States, which may result from different factors, such as coordination gains, legal certainty, greater effectiveness or complementarities, economies of scale, promotion of best practice, benchmarking, etc. This criterion was addressed through a single evaluation question:

- ▶ **EQ5** What is the additional value resulting from the Action Plan compared to what could be achieved by Atlantic Member States at national and/or regional level?

3.5.1 EQ5. What is the additional value resulting from the AAP compared to what could be achieved by Atlantic Member States at national and/or regional level?

The Action Plan is not yet achieving its full potential added value...

While EQ1 and EQ4.1 demonstrated that the Action Plan is highly aligned with relevant policies and priorities at the EU and national level, it is not providing significant additionality.

In other words, there is little evidence that it has had a strong influence on shaping these developments or substantively supported them. This can be attributed to the vague definition of priorities and objectives, which provided little 'translation' of the existing policy frameworks to the context of the Atlantic. For example, the Action Plan did not attempt to identify and address specific bottlenecks or challenges in the Atlantic with regards to the implementation of key policies, such as the MSFD, CFD or MSP. Instead, it offered largely generic calls for support.

Likewise, the evaluation found that the Action Plan does not adequately prioritise areas with the highest potential for EU added value for additional efforts to spur cooperation at sea basin level. While the priorities and objectives were largely found to be relevant, it did not offer a clear analysis of where sea basin level cooperation (above and beyond actions already undertaken by Member States outside the framework of the EU or on the EU level more generally) may provide additional added value.

Finally, the Action Plan has not yet clearly led to a more coordinated use of EU and national instruments at sea basin level. While many collaborative cross-border projects were identified in the project monitoring database, these remain at present the minority in terms of number of projects and volume of financing and rely on existing instruments at EU level that facilitate cross-border cooperation. While purely national or regional projects made significant contributions to the Action Plan's priorities and objectives, there is little evidence of any cooperation or coordination between the investments, notably funded through the ESIF, or that the Action Plan contributed to a convergence of priorities through its common strategic framework. Moreover, there is not significant evidence that the Action Plan has led to increased cooperation or coordination between instruments supporting cross-border collaboration, notably the Interreg programmes.

However, one area of early success has been the synergies achieved between the Action Plan and EU research policy. In particular, the Galway Statement (and more recently the Belem Agreement) reflected in the international dimension' of the Action Plan has contributed to strengthening sea basin research cooperation in the Atlantic, diverting increased funding to this area and, naturally, providing a platform for increased cooperation with third party Atlantic countries.

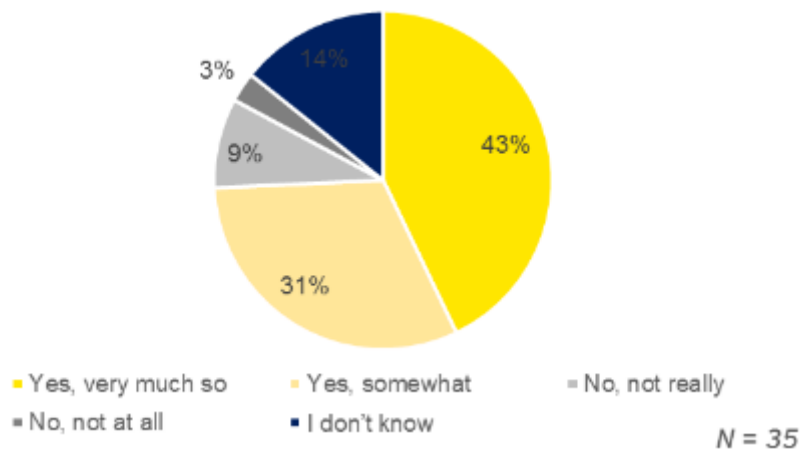
...but the Action Plan can be seen as laying the foundations for more ambitious efforts.

While the Action Plan has not yet been able to realize its full added value, efforts undertaken to date have clearly contributed to laying the groundwork for the future. In particular, very positive work has been undertaken to strengthen the coordination between Managing Authorities in the

Atlantic area, both at the national and EU level. A success story of cooperation can also be underlined with DG MARE and DG RTD. The Action Plan (including the process of its elaboration) has contributed to the emergence of a strong community of actors and 'Atlantic consciousness' even if the evaluation found that it has been difficult to extend this community to include other stakeholders historically less active at the EU level. Finally, the stock-taking of activities in the Atlantic area aligned with the Action Plan provide a valuable baseline moving forward.

If there is room for enhancing the added value of the Action Plan, the results of the Open Public Consultation pointed towards strong stakeholder satisfaction with what has already been achieved in the first four years. As can be seen in Figure 36 below, the large majority of respondents believed that the Action Plan had allowed Member States to achieve more than would have otherwise been the case in absence of the document. A slightly smaller percentage (71%) also believed that hypothetically ending the Action Plan would have a significant negative impact on the Atlantic area.

Figure 36: OPC - Do you believe the action plan has allowed the Atlantic area to accomplish more than what could be achieved by the Member States individually?



A photograph of two dolphins leaping from the ocean. The dolphins are captured mid-air, with water splashing around their tails. The background is a dramatic sky with soft, colorful clouds, suggesting a sunset or sunrise. The ocean surface is dark blue with white foam from the dolphins' jumps.

Conclusions & recommendations

4. Conclusions & Recommendations

4.1 Transversal conclusions

The Action Plan reflects the diversity of needs and challenges in the region and takes into account the strategies of most relevant actors, but was inadequately prioritised and focused and does not reflect best practices, ultimately detracting from its effectiveness and added value

Reflecting the bottom-up and participatory manner in which it was elaborated, **the Action Plan assures a good coverage of vast majority of existing needs and challenges that can be identified across the region**, even if a number of specific issues identified could have been better reflected. This inclusive framework is highly appreciated by stakeholders and contributes to securing the buy-in of stakeholders. The Action Plan is also well aligned with the relevant policy directions at EU and national level. Looking beyond the EU, it is also generally aligned with the strategies and priorities of other relevant organisations.

However, **the Action Plan is not adequately focused on issues specific to the Atlantic area or areas where additional efforts to strengthen sea basin level cooperation have the highest potential added value**. As a result, the Action Plan is in many areas redundant with the existing framework of relevant sectoral policies, adding little value to policies already with a vocation to cover the Atlantic area. This has detracted from its effectiveness, as the general and wide ranging nature of its objectives provide little concrete substance for engaging with policymakers and funding sources. It also limits the added value of the Action Plan itself considering its contribution in addition to the existing policy frameworks.

The architecture and internal coherence of the document can also be improved in order to provide for a clearer internal logic and legibility for stakeholders. Moreover, the Action Plan document did not reflect widely accepted best practices in terms of developing operational documents. Reflecting the broad nature of its objectives, no specific objective, indicators or targets were developed to track its implementation for example. The Action Plan may benefit in particular from incorporating best practices from existing macro-regional strategies and their action plans.

The Action Plan has contributed to strengthening the Atlantic community of stakeholders, building awareness and buy-in around common objectives and developing networks of relevant policymakers and funding programmes

Efforts to date have contributed to developing a community of diverse stakeholders across the Atlantic area and the emergence of an 'Atlantic consciousness'. It has served as the opportunity for the first time to bring this community together and define, through an inclusive process, a set of common priorities. If they remain somewhat generic and could be better prioritised, they provide nonetheless a succinct encapsulation of the priorities of stakeholders in the region. While knowledge of the Action Plan is excellent amongst some groups, a challenge for the future remains continuing to build awareness and extending the community beyond organisations with pre-existing and extensive experience with EU projects.

Subsequently to its launch, the first efforts to open up more financial opportunities for relevant projects in the Atlantic area have contributed to **building awareness of the Action Plan and its objectives**. They have also helped to put in place **networks of policymakers and funding programmes** that may continue to be strengthened in the future and leveraged to channel more resources to Action Plan priorities and better coordinate existing investment. Within the Commission, the Action Plan has contributed to strengthening the implementation of integrated maritime policy in the Atlantic by bringing together relevant Services around the table. The success of early collaboration between DG MARE with DG RTD and DG REGIO can be replicated with other services in the future.

Finally, it can be noted that **the Action Plan has contributed to developing a more**

comprehensive picture of what is happening across the Atlantic. A number of actors have committed to monitoring how investments and initiatives are contributing to its implementation, in addition to efforts undertaken by the Assistance Mechanism and the contribution of this evaluation. This information can be fed into strategic decision-making in the future to improve implementation of the Action Plan and notably ensure greater coordination between actions being undertaken across the region.

However, the effectiveness of the Action Plan as such has been somewhat limited to date in terms of influencing priorities and supporting the development of relevant projects

Rather than creating a new financial instrument, the implementation of the Action Plan is supported through influencing and coordinating existing funding instruments and the policymaking activity of relevant stakeholders. At the same time, it sought to support the development of new partnerships and to accompany project promoters in the development of their ideas and securing of financing; to this end, the Assistance Mechanism was notably created.

While policy evolutions and funding priorities are largely supportive of and aligned with the Action Plan, the evidence of any direct influence of the Action Plan is limited to date with the exception of the area of research. This can be attributed to the general and generic nature of many objectives, which are often redundant with pre-existing policies and priorities, a lack of awareness of the Action Plan in some populations and the lack of structured efforts to engage with relevant stakeholders.

Considering support provided to project promoters by the Assistance Mechanism in particular, the evaluation found that its **resources were limited compared with its broad remit**, contributing to a scattering of resources. Where the Assistance Mechanism was designed to provide support for project promoters, namely communicating information on funding opportunities and finding partners, this was generally **not aligned with their needs**. Finally, the roles of the Assistance Mechanism is **redundant in many respects with resources already existing** and at the disposal of project promoters.

Implementation of the Action Plan may be strengthened through stronger governance and a redesigned Assistance Mechanism

In practice, the roles and responsibilities of different actors have developed organically over time. There is thus **scope for greater formalization, notably taking into account experience and best practices from the implementation of macro-regional strategies**. In particular, the ASG can be strengthened and its members given a clearer mandate to support implementation of the Action Plan on the operational level. A mechanism can also be developed to better involve other relevant actors in governance, notably regional stakeholders. The role of the Commission may also be better defined and adequate resources assigned to the file. Finally, the Terms of Reference of the **Assistance Mechanism may be rethought and in particular refocused and prioritized** to better align its objectives and resources with needs and take account of existing resources available to stakeholders.

A stock-taking of projects and policy developments aligned with the Action Plan reflect the dynamism of the Atlantic area and the future potential of the Action Plan to add value

Overall, 1 216 unique projects supporting the implementation of the Action Plan were identified in the project monitoring database across the Atlantic area at national and EU level, representing over EUR 6 billion in investment. Policy developments and initiatives at EU and national level have also been strongly aligned with its priorities and objectives. However, ample opportunity for greater cooperation and coordination appears possible. Although the Atlantic Action Plan aims to foster cooperation across borders and promote initiatives on a transregional and transnational level, most projects remain implemented on a national level for example. Overall, only around 30% of all projects were

transnational in character, involving more than one Member State.

4.2 Summary table of recommendations

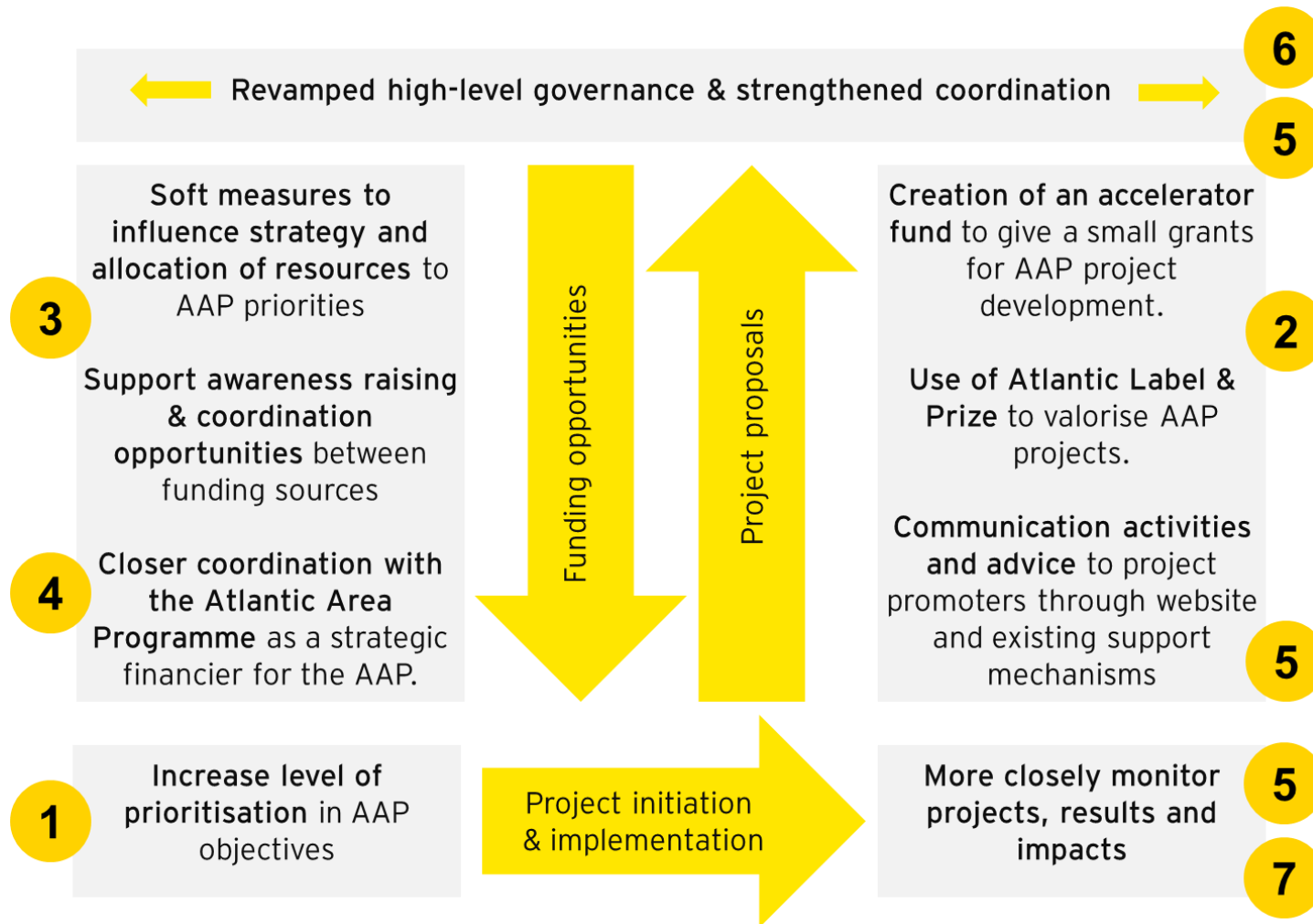


Table 13: Summary table of recommendations

Underlying finding	Recommendation & action items
<ul style="list-style-type: none"> ▶ The Action Plan does not adequately prioritise specific Atlantic challenges and areas of high added value for EU cooperation (3.1.1) ▶ The internal coherence and quality of the document can be improved (3.1.1) ▶ The Action Plan does not correspond to best practice standards observed (3.1.1) 	<p>1. Review the priorities of the Action Plan in order to provide sharper focus on i) areas with clear added value for sea-basin level cooperation, and ii) opportunities and challenges specific to the region and not well supported in transversal policy documents in order to achieve greater additionality. Consider restructuring the architecture of the Action Plan to improve its internal coherence and introduce best practices.</p> <ul style="list-style-type: none"> ▶ The Commission & Member States should launch a participatory process to update the Action Plan, in particular bearing in mind the need to achieve a greater level of prioritisation, improve the architecture and internal coherence of the Action Plan (e.g. <u>recommendation 8</u>) and introduce best practices, such as clear objectives, indicators, targets, etc. (<u>recommendation 7</u>). <p>This process should be launched and undertaken as quickly as possible in view of the necessity to have an updated Action Plan to guide efforts to engage with policy makers and funding programmes in view of the programming process for the next Multi-Annual Financial Framework (<u>recommendation 3</u>).</p>
<ul style="list-style-type: none"> ▶ Stakeholders point to a lack of dedicated funding as a bottleneck for implementation (3.3.1) ▶ The Assistance Mechanism's resources are limited compared to its ambitions and its objectives and tasks are not entirely aligned with needs (3.3.1) 	<p>2. Place greater emphasis on demand rather than supply-side stimulation to drive implementation of the Action Plan through enhanced and optimized support to project promoters.</p> <ul style="list-style-type: none"> ▶ The Commission & Member States should consider options for setting up an 'Atlantic Accelerator Fund' awarding competitive micro-grants – e.g. ~15-20K – to promising project consortia to develop proposals that are aligned with AAP priorities. These grants should be in particular focused at smaller project promoters with little experience cooperating at EU level. Such a fund could potentially be set up and managed by the Atlantic Area Programme during the next programming period (<u>recommendation 4</u>). ▶ The ASG should consider developing an Action Plan Label that is bestowed upon all projects proposals that are strongly aligned with the Action Plan's priorities (<u>recommendation 5</u>). A simple online application form could be created that project promoters can submit to the Assistance Mechanism team for review. If deemed to be aligned with the Action Plan, the Label would be granted and project promoters can make reference to this in their applications to different funding programmes. In parallel, the Commission and Assistance Mechanism should engage with different funding programmes to raise awareness of the Action Plan Label to ensure that they give due consideration during the evaluation of project proposals.

	<ul style="list-style-type: none"> ▶ The ASG & Commission should consider ways to refocus and enhance support provided by the Assistance Mechanism to project promoters (<u>recommendation 5</u>).
<ul style="list-style-type: none"> ▶ The Action Plan has not contributed significantly to influencing funding priorities (3.2.1) ▶ The Action Plan has contributed to developing networks of financiers and policymakers that may be further developed in the future (3.2.2) 	<p>3. Continue efforts to direct greater funding towards Action Plan priorities and coordinate existing instruments.</p> <ul style="list-style-type: none"> ▶ ASG representative should consider developing a coordinated strategy for engaging with relevant stakeholders on the ground influence priorities during the upcoming ESIF programming process – beginning in 2018. ▶ Member States should build on initial efforts in Spain, Portugal and France and continue to encourage cooperation between MAs at the inter-regional level on strategic maritime issues – in view of future cooperation at Sea Basin level. ▶ The Commission should continue efforts to raise awareness of the Action Plan amongst MAs and encourage their cooperation and coordination alongside Member States. Some Assistance Mechanism resources may be diverted to this objective (<u>recommendation 5</u>). ▶ DG MARE should engage regularly with the relevant Commission Services to identify and leverage existing opportunities for funding. Like the ASG members, a clear strategy and objectives should be developed to guide the work of DG MARE in support of Action Plan implementation.
<ul style="list-style-type: none"> ▶ An important identified source of funding, the Action Plan had limited impact on the ESIF programming process (3.2.1) ▶ Stakeholders point to a lack of dedicated funding as a bottleneck for implementation (3.3.1) 	<p>4. Strengthen the role and mandate of the Atlantic Area Interreg programme in supporting implementation of the AAP.</p> <ul style="list-style-type: none"> ▶ Member States and the Joint Secretariat should cooperate closely during the programming process for 2021 – 2028, for example organising a workshop with the ASG. ▶ The Member States representatives on the Monitoring Committee should recognize the unique role played by the programme in the implementation of the Action Plan and give due consideration when taking decisions. ▶ The ASG and the Joint Secretariat should make arrangements to ensure regular participation as an observer in ASG & Monitoring Committees. ▶ The Atlantic Area Programme may consider during the next MFF the possibility of setting up a small facility for supporting the implementation of the AAP, for example providing preparatory funding to project promoters (<u>recommendation 2</u>) and/or supporting the functioning of AAP governance (<u>recommendation 6</u>).
<ul style="list-style-type: none"> ▶ The Assistance Mechanism's resources are limited compared to 	<p>5. The role of the Assistance Mechanism should be refocused and prioritized to focus on areas of greatest added value.</p>

<p>its ambitions and its objectives and tasks are not entirely aligned with needs (3.2.2 & 3.3.1)</p>	<ul style="list-style-type: none"> ▶ Communication & coordination <ul style="list-style-type: none"> ○ Continue traditional communication activities, such as maintaining a website, producing newsletters and maintaining an active presence on Twitter in particular. ○ Place stronger emphasis on communicating on implementation through tangible ‘success stories’ of projects aligned with the priorities of the Action Plan. ○ Divert resources from events intended for the general public and support the organisation of workshops bringing together policy makers & funding sources, in particular at the regional level (<u>recommendation 6</u>) ○ Continue to organise an annual or biennial Stakeholder Conference ▶ Support to project promoters (<u>recommendation 2</u>) <ul style="list-style-type: none"> ○ Manage the attribution of the ‘AAP Label’ for projects and project proposals highly aligned with the objectives of the Action Plan (<u>recommendation 2</u>) ○ Continue to publicise funding opportunities, improving maintenance & functionalities of the database ○ Create a detailed catalogue of existing support resources by sector / MS that are at the availability of project promoters ○ Develop a knowledge hub on useful resources for developing funding proposals on the basis of the wide range of resources already available ▶ Monitoring & reporting <ul style="list-style-type: none"> ○ Strengthen monitoring of AAP implementation: projects & indicators (<u>recommendation 7</u>) ○ Prepare useful reporting documents for the ASG to provide overviews of work being undertaken in different sectors across the Atlantic area in line with ASG needs (<u>recommendation 6</u>) ○ Maintain a listing and interactive ‘project map’ of projects supporting the AAP on the website.
<ul style="list-style-type: none"> ▶ The Action Plan does not explicitly set out roles and responsibilities of different actors (3.3.1) ▶ The ASG is a useful 	<p>6. Take steps to strengthen the governance & coordination of Action Plan implementation.</p> <ul style="list-style-type: none"> ▶ Member States should consider the establishment of a biennial high level meeting of Atlantic area Member States (e.g. Secretary or Minister level) to take stock of implementation and set high level political directions. ▶ The ASG should work together to develop and formalize its roles and responsibilities, considering placing greater

<p>governance body, but a number of limitations can be highlighted. (3.3.1)</p>	<p>emphasis on strategic implementation issues with support of the Assistance Mechanism (recommendation 5).</p> <ul style="list-style-type: none"> ▶ Member States should consider providing greater resources to the representatives of the ASG to devote to the AAP and ensure adequate coordination mechanisms at national level. ▶ The ASG should reflect on manners in which the membership of or participation in governance can be widened through participation in ASG meetings and the creation of thematic working / priority area groups. ▶ DG MARE should engage regularly with the relevant Commission Services to identify and develop areas of cooperation in line with the Action Plan. Like the ASG members, a clear strategy and objectives should be developed to guide the work of DG MARE in support of Action Plan implementation.
<ul style="list-style-type: none"> ▶ The Action Plan does not correspond to best practice standards observed (3.1.1) ▶ The ASG is a useful governance body, but a number of limitations can be highlighted. (3.3.1) 	<p>7. Set out specific, measurable attainable and attributable indicators for the Action Plan in order to better manage implementation and measure the ultimate impact.</p> <ul style="list-style-type: none"> ▶ Intelligent use should be made of the extensive indicators already being reported, such as the common indicators for the ESIF. ▶ Baseline values should be provided and clear targets fixed for each objective. ▶ The project monitoring activity should be improved and strengthened and the database publicly available on the website through an interactive map (recommendation 5)
<ul style="list-style-type: none"> ▶ Possibility for greater alignment with SDG / UN actors (3.1.2) ▶ Scope for further engagement with international partners (3.4.1.5) 	<p>8. Build on the initial success with the development of trans-Atlantic research partnerships and continue to develop the international dimension of the Action Plan.</p> <ul style="list-style-type: none"> ▶ Consider better embedding the international dimension in the architecture of the Action Plan, rather than as a separate section (recommendation 1). ▶ Identify additional mechanisms for supporting the international dimension of the Action Plan, such as Interreg programmes covering third countries and other EU instruments aimed at supporting cooperation with third countries and coordinate with them where possible to potentially make available funding opportunities supporting the implementation of the Action Plan. ▶ Work with the relevant actors (e.g. EEAS, DEVCO) to mainstream Action Plan priorities into relevant bilateral and multilateral political dialogues, such as with Africa and the LAC region. Many aspects of the Action Plan would appear to be highly relevant to sustainable development objectives at the heart of EU cooperation with third countries. ▶ Consider opportunities for cooperating more closely with / incorporating the work of actors of the United Nations system

	<p>and reflect on possibilities for more closely aligning the Action Plan with the relevant Sustainable Development Goals (<u>recommendation 1</u>).</p> <ul style="list-style-type: none">▶ Begin discussions with stakeholders on the role that the Action Plan could potentially play in terms of providing a useful framework for continued cooperation with the UK following its exit from the European Union.
--	---

5. Annexes

5.1 Intervention logic & evaluation framework

5.1.1 Reconstruction of the intervention logic

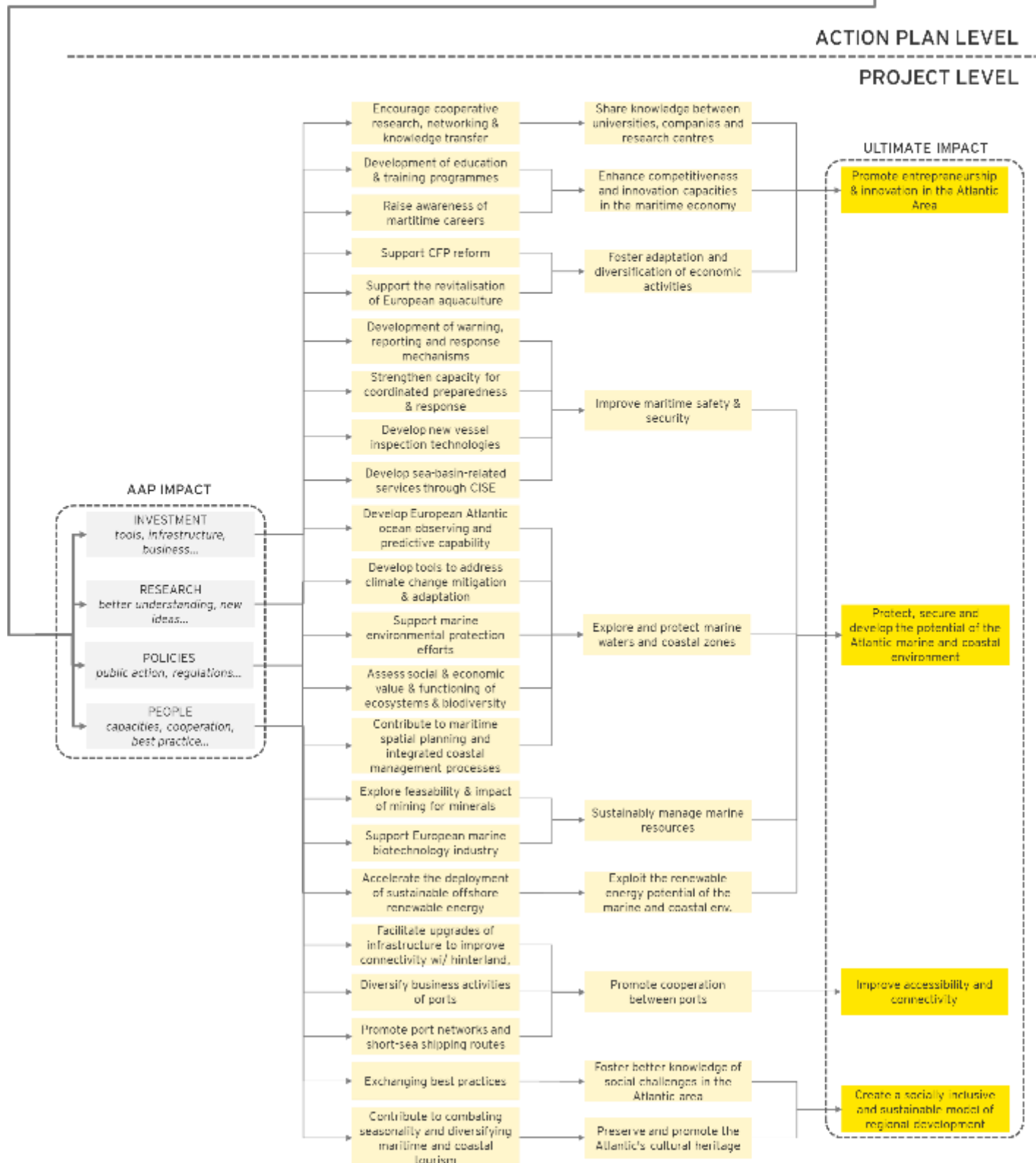
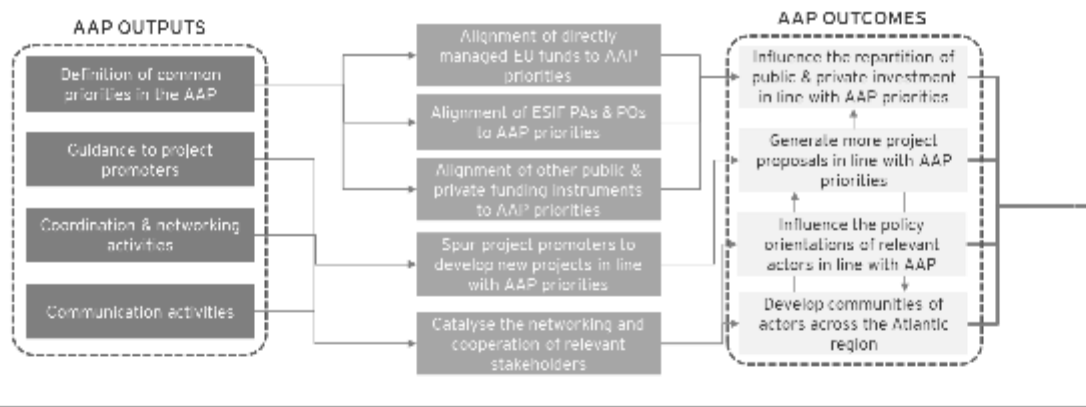
The reconstruction of the Atlantic Action Plan's intervention logic has been developed on the basis of the Action Plan and the evaluator's own reasoning. The objectives tree represents the evaluators' understanding of the expected outputs/activities, outcomes, results and impact, and establishes a clear hierarchy and links between the different levels of corresponding general, specific objectives and operational objectives.

As an Action Plan with no dedicated financing instrument, it is necessary to separate conceptually the impact of the AAP itself from the wider impact generated downstream by projects, policies, and other actions and decisions *influenced* by the AAP. For this reason, the classic objectives tree has been adapted to clearly demarcate these two levels.

- ▶ At the **AAP level**, the outputs of the AAP itself consist of: i) the common priorities set by the AAP, ii) guidance provided to project promoters, iii) coordination & networking activities, and iv) communication activities. The latter three represent primarily the activities supported by the Atlantic Assistance Mechanism. The direct outcomes of the AAP consist of: i) the influence on the repartition of investments made by different actors in alignment with the AAP, ii) a greater level of interest and project proposals put forward by project promoters in alignment with the AAP, iii) influence on policy choices beyond just investment decisions in alignment with the AAP, and iv) the development of networks and communities of stakeholders channelling cooperating in alignment with the AAP. Logically following the results chain, the ultimate impact of the AAP can be summed up as the individual investments, research, policies and people impact that were influenced by the AAP. The direct impact of the AAP stops here, as its primary objective, in absence of a dedicated financing instrument, is necessarily limited to achieving influence and bringing actors together. The counterfactual is not what would have happened to the level of investment and action in absence of the AAP, but how this investment and action would have been targeted (e.g. to what extent it would have been less aligned with AAP priorities).
- ▶ At the **'project' level**, the results chain mirrors the objectives, priorities and actions set out in the AAP itself. Returning to the beginning of the results chain, at the outputs/activities level one finds the individual investments, research, policies and people impact that came about as a result of the AAP. These contribute to the specific actions, priorities and objectives set out in the AAP. The ultimate impacts of these can thus in some way be seen as the extended impact of the AAP itself, although it is difficult to attribute the causality in any sort of meaningful way. Notwithstanding this, it is also possible that the AAP has been able to generate additional financing or actions in alignment with its objectives, beyond what would have taken place in its absence.

The evaluation will consider both levels of this objectives tree, looking at what results and impacts can be attributed directly to the AAP (e.g. influence on the repartition of financing, policy choices, development of communities and cooperation and any additional investment or actions generated), as well as the downstream impacts in the Atlantic Area. The strength of the causal link between the two, however, will depend on the findings of the evaluation concerning the first level.

Figure 37: Action Plan intervention logic



5.1.2 Evaluation framework

The evaluation framework provides an overarching analytical structure for the evaluation. The objective of establishing an evaluation framework is to: structure the analytical approach with regards to the objective of the evaluation; inform the data collection strategy; and render the evaluation more transparent and objective.

The first step in setting up the evaluation framework is defining evaluation questions. The Terms of Reference defined 12 evaluation questions grouped into seven areas. Upon review of the evaluation questions and in light of the reconstructed intervention logic presented in the previous section, these questions have been reorganised, split and/or combined. However, evaluators have ensured that all subjects addressed by the original questions have been reflected in the revised proposal. The evaluation framework proposed by evaluators is organised around eight questions grouped into five groups corresponding to the standard evaluation criteria used at the EU level:

- ▶ **Relevance & coherence:** the extent to which the objectives of the AAP are continually relevant to user needs and complementary to those of relevant outside actors.
 - **EQ1.1** Do the original priorities of the Atlantic Action Plan still correspond to the needs within the EU and in particular in the Atlantic Area? Should they be reconfigured?
 - **EQ1.2** To what extent is the AAP aligned with the work and strategies of other relevant actors in the Atlantic Area?
- ▶ **Effectiveness:** the extent to which the AAP has been able to achieve the intended outcomes and results.
 - **EQ2.1** To what extent has the AAP been able to influence the activities and strategies of financiers, public authorities, universities, industry and other relevant stakeholders in the Atlantic Area?
 - **EQ2.2** How successful has the AAP been in bringing together stakeholders and supporting the development of new project ideas aligned with the AAP priorities?
- ▶ **Implementation / efficiency:** the extent to which the supporting structures have facilitated effective and efficient implementation.
 - **EQ3** To what extent are the current governance and management structures supporting the AAP effectively? Which bottlenecks can be identified?
- ▶ **Impact & sustainability:** the positive and negative long-term economic, environmental, social changes produced or likely to be produced and whether the benefits are likely to continue.
 - **EQ4.1** What have been the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the AAP?
 - **EQ4.2** What are the expected wider socioeconomic and environmental benefits of the AAP? Specifically, to what extent has the AAP contributed to:
 - Promoting entrepreneurship & innovation in the Atlantic Area;
 - Protecting, securing and developing the potential of the Atlantic marine and coastal environment;
 - Improving accessibility and connectivity; and
 - Creating a socially inclusive and sustainable model of regional development?
- ▶ **European added value:** the extent to which action at the EU level generate benefits in terms of efficacy, efficiency, synergies or other that could not have been otherwise attained.
 - **EQ5.** What is the additional value resulting from the AAP compared to what could be achieved by Atlantic Member States at national and/or regional level?

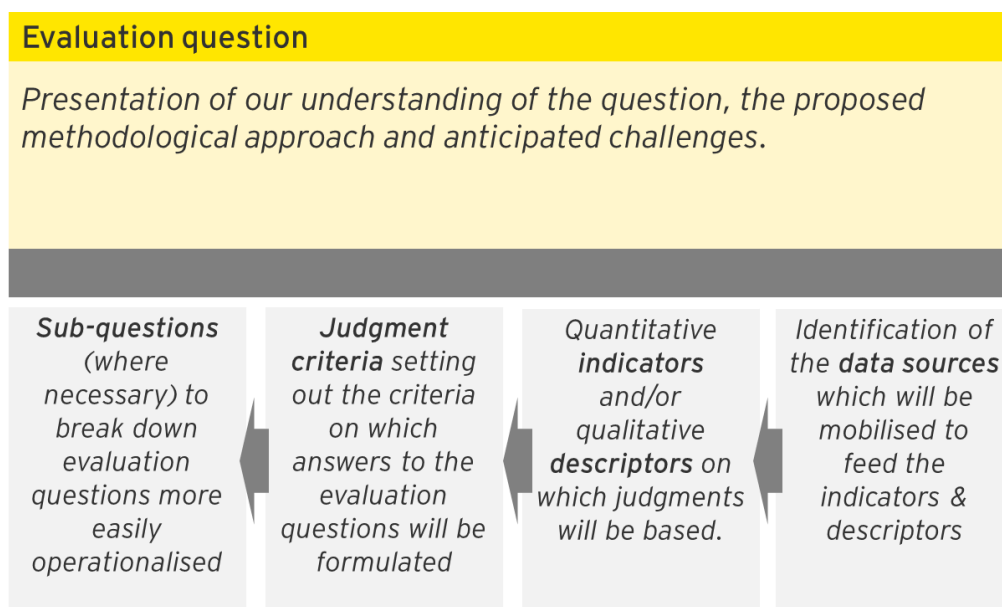
The second step in setting up the evaluation framework is the development of an evaluation grid for

each question. For each question, the following steps have been taken:

- ▶ The overarching evaluation questions have been broken down into sub-questions (where necessary), which can be more easily operationalised;
- ▶ One or more judgement criteria have been elaborated. The purpose of this is to objectively and transparently lay out the criteria on which answers to the evaluation questions will be formulated and ensure that each question is answered in a structured and adequate manner;
- ▶ Each judgement criterion has been linked with one or more quantitative indicators and/or qualitative descriptors on the basis of which success will be assessed;
- ▶ On the basis of the indicators and descriptors identified, information sources and the corresponding data collection tools needed will be clearly stated. The data collection strategy will thus be clearly linked to and informed by the sources and tools identified in the evaluation framework.

Each evaluation question is also accompanied by a discussion of our understanding of the question and the analytical approach envisaged. If applicable, this section also addresses major methodological or logistical challenges that will be faced and discusses the manner in which the answers to each evaluation question will feed reflection on conclusions and recommendations.

Figure 38: Structure of the evaluation grids



RELEVANCE

Our understanding and approach | This criterion will focus on assessing to what extent the priorities of the AAP remain aligned with the needs of stakeholders in the Atlantic Area. It will also look at the extent to which the AAP was and remains aligned with the priorities and work of other relevant actors in the Atlantic Area (e.g. other IOs, third countries, etc.). This criterion will be addressed through two sub-questions:

- ▶ **EQ1.1** Do the original priorities of the Atlantic Action Plan still correspond to the needs within the EU and in particular in the Atlantic Area? Should they be reconfigured?
- ▶ **EQ1.2** To what extent is the AAP aligned with the work and strategies of other relevant actors in the Atlantic Area?

In this context, it should be clearly understood what the AAP sought to accomplish. As noted in the text of the AAP, the document *is not intended to be exhaustive. Much is already being done by the Member States in question, both individually and collectively, to develop their marine and maritime economies....[the AAP] therefore identifies areas where there is scope for additional collective work.* With this in mind, the evaluation will not seek to exhaustively identify the priorities of the Atlantic Area in general. Indeed, such an exercise would largely be beyond the means of a single study. Rather, evaluators will widely consult stakeholders to assess to what extent the AAP continues to highlight the most relevant areas in which EU level cooperation and coordination provides added value beyond the on-going collective and individual efforts of Member States. More generally, evaluators will also look at the extent to which the priorities corresponded to the most pressing issues in the Atlantic Area.

The second question will look at the extent to which the AAP is aligned with the work and strategies of other relevant actors in the Atlantic Area. This may include *inter alia* International Organisations, such as the OSPAR Commission, and other third countries in the Atlantic Area, in particular those with developed cooperation with the EU, such as Iceland, Canada or the United States.

Evaluators will base this assessment on documentary review (e.g. understanding relevant contextual evolutions in the Atlantic Area, review of strategy documents, etc.), but the most important input will be obtained through interviews with various stakeholders and through the Open Public Consultation launched by the Commission.

Evaluation questions	Judgment criteria	Indicators / Descriptors	Data sources
EQ1.1 Do the original priorities of the Atlantic Action Plan still correspond to the needs within the EU and in particular in the Atlantic Area? Should they be reconfigured?	<ul style="list-style-type: none"> ■ The priorities of the AAP remain relevant to date. 	<ul style="list-style-type: none"> ■ Stake holder perception ■ Level of activities implemented under various pillars (e.g. number of projects, policy developments...) ■ Evolution of socio-economic & environmental indicators 	Documentary review <ul style="list-style-type: none"> ■ Eurostat & national level socio-economic and environmental data ■ Relevant EU level and national studies (e.g. EFSI OP diagnostic assessments,
	<ul style="list-style-type: none"> ■ The context and needs of the Atlantic Area have evolved. 	<ul style="list-style-type: none"> ■ Evolution of policy context ■ Stakeholder perception 	

	<ul style="list-style-type: none"> ■ The priorities of the AAP reflect the areas where EU level cooperation and coordination have the most added value. 	<ul style="list-style-type: none"> ■ Stakeholder perception ■ Evidence of EU added value from concrete projects 	<p>SSS, national / regional strategies, etc.)</p> <p>Interviews</p> <ul style="list-style-type: none"> ■ All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>
	<ul style="list-style-type: none"> ■ The priorities of the AAP were focused on the most pressing issues for the Atlantic Area. 	<ul style="list-style-type: none"> ■ Contextual indicators ■ Evidence of priority issues ■ Stakeholder perception 	
<p>EQ1.2 To what extent is the AAP aligned with the work and strategies of other relevant actors in the Atlantic Area?</p>	<ul style="list-style-type: none"> ■ The priorities of the AAP were / remain coherent with those pursued by other relevant actors 	<ul style="list-style-type: none"> ■ Alignment of strategic priorities ■ Stakeholder perception 	<p>Documentary review</p> <ul style="list-style-type: none"> ■ Strategy documents <p>Interviews</p> <ul style="list-style-type: none"> ■ All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>
	<ul style="list-style-type: none"> ■ The AAP has created common grounds for international cooperation 	<ul style="list-style-type: none"> ■ Level of cooperation observed with third actors ■ Stakeholder perception 	

EFFECTIVENESS

Our understanding and approach | This criterion is focused on assessing the extent to which the direct results of the AAP – e.g. the ‘Action Plan’ level of the logical framework presented in section 2.1 – have been achieved to date. This criterion is addressed through two different evaluation questions:

- ▶ **EQ2.1** To what extent has the AAP been able to influence the activities and strategies of financiers, public authorities, universities, industry and other relevant stakeholders in the Atlantic Area?
- ▶ **EQ2.2** How successful has the AAP been in bringing together stakeholders and supporting the development of new project ideas aligned with the AAP priorities?

The two sub-questions (EQ2.1 & EQ2.2) are aligned with the AAP intervention logic presented in section 2.1 (Action Plan level). All levels will be examined (e.g. outputs, outcomes, results and impacts). Most emphasis will be placed on the first three levels due to the fact that this is a mid-term review and the full expected impacts have in most cases not yet fully materialised. At the first level, the evaluation will assess the extent to which the expected outputs have actually been materialised. This mainly concerns the activities of the Assistance Mechanism; however, it also includes actions undertaken by relevant Member State authorities in support of the AAP. At the next level, evaluators will assess the extent to which these outputs have translated into the expected outcomes, primarily the influence achieved on the priorities and strategies of relevant stakeholders. Finally, on the level of results and impacts, evaluators will examine to the greatest extent possible how this influence has led to increased level of funding for AAP priorities, more and more relevant projects, concrete strategy and policy choices and the development of communities of actors focused on AAP priorities.

The answers to these questions will rely on a wide array of data collection tools. Documentary review will be a primary source of data for all sub-questions. This will include extensive review of strategy and policy documents and the development and exploitation of the monitoring database. Looking at the level of outcomes, results and impacts, evaluators will also extensively draw on the results of qualitative interviews with stakeholders at all levels. Finally, these questions will be fed with detailed examples gathered through the case study and the results of the Open Public Consultation.

Evaluation questions	Judgment criteria	Indicators / Descriptors	Data sources
EQ2.1 To what extent has the AAP been able to influence the activities and strategies of financiers, public authorities, universities, industry and other relevant stakeholders in the Atlantic Area?	<ul style="list-style-type: none"> ■ The expected outputs of the AAP have been fully achieved in terms of communication, support to project promoters, coordination and networking. 	<ul style="list-style-type: none"> ■ Number and type of communication activities (e.g. website, newsletters, etc.) ■ Size of audience of communication activities (e.g. visitors to website, size of mailing list, participants in events, etc.) ■ Stakeholder knowledge of AAP and priorities ■ Number and type of events organized & participation ■ Number of project promoters supported by 	<p>Documentary review</p> <ul style="list-style-type: none"> ■ Strategy documents ■ Legal bases of funding instruments ■ Work programmes <p>Interviews</p> <ul style="list-style-type: none"> ■ All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>

		<p>the Assistance Mechanism & type of support</p> <ul style="list-style-type: none"> Number and type of activities undertaken by MS authorities 	
	<ul style="list-style-type: none"> The AAP has contributed to an alignment of the priorities of relevant financial instruments and programmes with the priorities of the AAP. 	<ul style="list-style-type: none"> Reference to the AAP in strategy documents of various financial instruments / programmes (Legal bases, Partnership Agreements, Operational Programmes, strategies etc.) Alignment of priorities with AAP (Operational Programmes, topics of calls for proposals, etc.) Perception of stakeholders (e.g. programme managers, managing authorities, etc.) 	
	<ul style="list-style-type: none"> The AAP has provided guidance and influenced the policy / strategy decisions of relevant actors in the Atlantic Area in line with AAP priorities. 	<ul style="list-style-type: none"> Reference to AAP in policy documents. Alignment of strategic orientations / policy initiatives with AAP priorities Perception of stakeholders 	
<p>EQ2.2 How successful has the AAP been in bringing together stakeholders and supporting the development of new project ideas aligned with the AAP priorities?</p>	<ul style="list-style-type: none"> AAP activities have allowed for the forming of relevant partnerships between project promoters and other actors. The AAP has spurred the interest of project promoters, contributing to the development of new projects and the design of existing projects in line with AAP 	<ul style="list-style-type: none"> Examples of partnerships formed through AAP events Use of AM services to find partners Stakeholder perception Examples of projects initiated as a result of the AAP Identification of examples of projects influenced by the AAP 	<p>Documentary review</p> <ul style="list-style-type: none"> Project documentation AM statistics <p>Interviews</p> <ul style="list-style-type: none"> All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>

priorities.

- Perception of project promoters

IMPLEMENTATION / EFFICIENCY

Our understanding and approach | This criterion will focus on assessing the extent to which the supporting structures have facilitated effective and efficient implementation. These notably include the ASG and the AAM, as well as the role played by the Commission. Evaluators will attempt to understand how these structures have contributed to (or detracted from) the success of the AAP and determine what adjustments could be made in consequence. The evaluation will attempt to specifically identify all bottle necks that have detracted from the effectiveness or efficiency of implementation.

The answers to this question will rely on an array of data collection tools. Documentary review will be a primary source of data for all sub-questions. This will include extensive review of ASG minutes and AAM activity reports. However, qualitative interviews with key stakeholders will be essential for identifying the specific bottle necks that have arisen during implementation. Finally, these questions will be fed with detailed examples gathered through the case study and the results of the Open Public Consultation.

Evaluation questions	Judgment criteria	Indicators / Descriptors	Data sources
EQ3 To what extent are the current governance and management structures supporting the AAP effectively? Which bottlenecks can be identified?	<ul style="list-style-type: none"> The composition of the ASG is appropriate. 	<ul style="list-style-type: none"> Stakeholder perception Composition of the ASG Alignment of objectives of AM to AAP stakeholder needs 	<p>Documentary review</p> <ul style="list-style-type: none"> ASG agendas & minutes AM ToR AM activity reports <p>Interviews</p> <ul style="list-style-type: none"> All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>
	<ul style="list-style-type: none"> The objectives and the role of the ASG supports the AAP. 	<ul style="list-style-type: none"> Stakeholder perception Alignment of objectives with AAP governance needs Examples of contribution of ASG to AAP effectiveness 	
	<ul style="list-style-type: none"> The activities of the Assistance Mechanism support the effectiveness of the AAP. 	<ul style="list-style-type: none"> Examples of contribution of AM to AAP effectiveness Stakeholder perception 	
	<ul style="list-style-type: none"> The activities of the Commission support the effectiveness of the AAP. 	<ul style="list-style-type: none"> Type of Commission support Evidence of coordination between services Stakeholder perception 	

Our understanding and approach | This criterion aims to measure the ultimate impact that can be attributed to the AAP – e.g. the ‘Atlantic Area’ level of the logical framework presented in section 2.1. This criterion is addressed through three different evaluation questions:

- ▶ **EQ4.1** What have been the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the AAP?
- ▶ **EQ4.2** What are the expected wider socioeconomic and environmental benefits of the AAP? Specifically, to what extent has the AAP contributed to:
 - Promoting entrepreneurship & innovation in the Atlantic Area;
 - Protecting, securing and developing the potential of the Atlantic marine and coastal environment;
 - Improving accessibility and connectivity; and
 - Creating a socially inclusive and sustainable model of regional development?

The first evaluation question is focused on assessing the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the AAP – e.g. the left side of the ‘Atlantic Area’ level of the logical framework presented in section 2.1. To do this, evaluators will notably focus on developing the project database in order to provide quantitative analysis of the number and types of projects that can be observed. In addition to projects, evaluators will also take stock of all quantitative achievements, such as the development of new policies and initiatives by actors at the EU and national level in line with the AAP.

The second question will look beyond the results level (e.g. projects, policies, initiatives) and attempt to measure the impact to date in terms of wider socioeconomic and environmental impacts achieved (and expected). To do this, evaluators will adopt a two-pronged approach. Firstly, evaluators will assess concrete impacts that have been achieved already through individual projects, policies, etc. This will be done through interviews with project promoters and the regional case studies. Secondly, evaluators will also use the performance monitoring framework developed for the AAP in order to measure progress achieved since 2013 – the year of the baseline data. However, this conclusions of this analysis will be limited due to i) the time lag concerning the availability of EU level statistics (for most indicators, only 2015 data will be available) and ii) the difficulty in attributing the evolution of contextual impact indicators to the AAP (e.g. separating out the influence of other EU and Member State activities, as well as other conjunctural factors).

Evaluation questions	Judgment criteria	Indicators / Descriptors	Data sources
EQ4.1 What have been the main quantitative and qualitative achievements in terms of projects, policies, initiatives and other activities aligned with the objectives of the AAP?	<ul style="list-style-type: none"> ■ Projects, policies and other initiatives can be attributed to the AAP. 	<ul style="list-style-type: none"> ■ Number and financial amount of projects identified (by priority, country, type of actor, etc.) ■ Stock-taking of policies, initiatives and other actions at EU and national level ■ Stakeholder perception 	<p>Documentary review</p> <ul style="list-style-type: none"> ■ Project monitoring database ■ EU / national policy documents <p>Interviews</p> <ul style="list-style-type: none"> ■ All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>

<p>EQ4.2 What are the expected wider socioeconomic and environmental benefits of the AAP? Specifically, to what extent has the AAP contributed to the expected impacts for each of the main AAP priorities?</p>	<ul style="list-style-type: none"> Projects, policies and other initiatives identified have produced concrete results. 	<ul style="list-style-type: none"> Concrete examples of project / policy impact Stakeholder perception Extrapolation of potential future impact 	<p>Documentary review</p> <ul style="list-style-type: none"> Project / policy documentation Monitoring framework Eurostat, DG REGIO indicators, etc. <p>Interviews</p> <ul style="list-style-type: none"> All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>
	<ul style="list-style-type: none"> Positive evolution can be observed in the impact indicators of the AAP monitoring framework 	<ul style="list-style-type: none"> Evolution of indicators Identification of other possible factors influencing the evolution of indicators 	

Our understanding and approach | This transversal question seeks to measure the EU added value of the AAP. EU added value is additional to the value created by actions of individual Member States, which may result from different factors, such as coordination gains, legal certainty, greater effectiveness or complementarities, economies of scale, promotion of best practice, benchmarking, etc.

The evaluation will firstly analyse whether EU action is more beneficial than action being undertaken by Member States alone at national and regional level – e.g. what impact can be attributed to the AAP. It will then assess whether the EU added value is sufficient to merit a continuation of the AAP. The situation that would exist without the existence of the AAP (counterfactual) will also be examined in order to determine which actions would/could have occurred without EU intervention – e.g. what were the Member States already doing. The responses to the evaluation criteria above will be considered when responding to these evaluation questions.

The answer to this question will draw on virtually all of the data collection methods used in the study as a key transversal theme, most notably qualitative interviews with stakeholders.

Evaluation questions	Judgment criteria	Indicators / Descriptors	Data sources
<p>EQ5. What is the additional value resulting from the AAP compared to what could be achieved by Atlantic Member States at national and/or regional level?</p>	<ul style="list-style-type: none"> ■ The AAP has led to results that would not have been achieved with only cooperation at Member State level. ■ The AAP has allowed for the achievement of greater synergies through EU level action. ■ There is a need to ensure continuation of ongoing actions through further EU Action 	<ul style="list-style-type: none"> ■ Stakeholder perception ■ Evidence of existing Member State level cooperation ■ Observed impact of the AAP (EQ4.1 & 4.2) ■ Evidence of coordination gains, cost-effectiveness, economies of scale, sharing of best practice, benchmarking, etc. ■ Actions under the AAP which could merit additional EU action ■ Actions identified under the AAP which have yet to be implemented fully and are still considered as priorities 	<p>Documentary review</p> <ul style="list-style-type: none"> ■ MS level strategy documentation (prior to 2014) ■ Analysis from previous EQs <p>Interviews</p> <ul style="list-style-type: none"> ■ All stakeholder groups <p>Open Public Consultation</p> <p>Case studies</p>

5.2 List of interviews

Table 14: Interview list

Name	Organization	Position
1. Action Plan level		
James HOW	FCO	1st Secretary (Fisheries and IMP)
Marcella SMYTH	DFA	Attaché (Maritime Affairs)
Claude WOHRER	PM Services	Chargée de Mission
Conceicao SANTOS	MAM	Head of Strategy Department
Paolo MACHADO	MAM	Head of Unit
Bernhard FRIESS	COM - MARE	Director (A)
Felix LEINEMANN	COM - MARE	Head of Unit (A.2)
Svetoslav STOYANOV	COM - MARE	Policy Officer (A.3)
Matthew KING	COM - RTD	Head of Unit (B.1)
Javier BARRIO ALONSO	COM - EASME	Project Adviser
Alain CADEC	European Parliament	MEP / Vice Chair of the Intergroup in charge of the Atlantic Basin
Alexandros CHLOROS	Kantor	Support Team
Sophia SPILIOPOULOU	Kantor	Support Team
Pascale VAN DOREN	Kantor	Support Team
Gildas BOREL	Kantor	NCP - France
Jérémie Christian BAZIN	Kantor	NCP - France Support
Joanne LAFFEY	Kantor	NCP - Ireland
Pauline NI FHLATHARTA	Kantor	NCP - Ireland Support
Ben DRAKEFORD	Kantor	NCP - UK
Pierre FAILLER	Kantor	NCP - UK Support
Jorge GRACA	Kantor	NCP - Portugal
Rodrigo BEJA	Kantor	NCP - Portugal Support
Pauline CAUMONT	Atlantic Arc Commission	Executive Secretary
Tamara GUIRAO ESPÍNEIRA	Conference of Atlantic Arc Cities	Coordinator
Arantza LOPEZ DE MUNAIN	ATN	
Darius CAMPBELL	OSPAR	Executive Secretary
2. Funding sources – policy makers		
Werner SCHMIDT	EIB	Director
Viktoria VARGA LENCSES	DG MARE	Policy Officer
Gilles VANDERWALLE	FARNET	Coordinator
Laszlo BECSY	DG ENV	Programme Manager
Christine BERG	DG MOVE	Head of Unit (D.2)
Carlo DE GRANDIS	COM - MOVE	Policy Officer (C.4)
Joanna KIRYLLO	COM - DG REGIO	Programme Manager (D.1)
Sieglinde GRUBER	COM - DG RTD	Head of Unit (F.4)
Jader CANE	DG EMPL	Policy Officer
Emídio FERREIRA DOS SANTOS GOMES	Atlantic Area	Programme Director
Ruut LOUWERS	NW Europe	Programme Director

Isabelle ROGER	SW Europe	Programme Director
Anne WETZEL	FR - Hauts de France	Director
Fabrice SAINT	FR – Normandie	Head of Service – ERDF/ESF
Sarah HOLDEN	Irish Regions Office	Head of Office
Peter MEANY	DAFAM - IE	Officer
Stephen CROSS	BEIS - UK	
Sam LUCAS	DCLG	
3. Atlantic Area		
TBC	SIMCelt (EMFF)	
Stéphanie BORDENAVE-JUCHEREAU	BBMBC	
Margaret RAE	AORAC-SA	Coordinator
Martin VISBECK	AtlantOS (H2020)	
Clara ULRICH / Ole HASLUND	DiscardLess (H2020)	
Jean-Christophe HATTENVILLE	ATLANTIS (CEF)	Project Manager
François ARBELLOT	Atlantic Games	
Steve CONLON	Atlantic Academic Hub	
Sergio RIBEIRO E SILVA	UGEN	
Yann CHAUTY	EUROMER-ACCIDENT	
Sinead MCGLYNN	VAST Platform	
Caroline LUMMERT	MAREA	
Philip JAMES	URCHIN	
Pau FARRAS	SEAFUEL	
Hugo PINTO	Atlantic-Social-Lab	
Sean LYONS	pSCES	
Isabelle RYCKBOST	European Sea Ports Organisation	Secretary General
Niall MCDONOUGH	European Marine Board	Exec Director
Fiona GRANT	Marine Institute	
Ana BRITO MELO	WavEC	Exec. Director
Rhona FAIRGRIEVE	Scottish Coastal Forum	Manager
Wiebe BOOMSMA	IHC Mining	Manager Product Development
José Joaquín HERNANDEZ BRITO	PLOCAN	COO
Jonathan WILLIAMS	Marine South East	CEO
Chris SHIRLING-ROOKE	Mersey Maritime	CEO
Project case studies		
M ^a del Carmen Hernández Martín	Ministerio de Hacienda	Subdirección General de Cooperación Territorial Europea
Andrés Caballero Quintana	Ayuntamiento de las Palmas	Responsable Técnico U.A. Programación Económica. Área de Promoción Económica, Turismo y Ciudad de Mar
José Joaquín Hernández Brito	COO	
Guillaume Voineson	SHOM	
Henry Kingston	Port of Cork	Chief Engineer

Claire Gibson	WaveHub	General Manager
Paul Tett	Scottish Marine Institute	
Jesús Freire	ECF	Business Development Officer
Martin Visbeck	GEOMAR	Project Coordinator
Regional case studies		
Rui Azevado	Forum Oceano	Director
Cecilia Marques	FLAG NORTE	Coordinator
Ester Gomes da Silva	CCDR-N	
Pat Ledwidge	Cork City Council	Director of Services
Eileen Crowley	Cork City Council	EU Funding Co-ordinator
Michelle O'Sullivan	Cork Chamber of Commerce	Analyst
Claire Davis	Cork Smart Gateway	Programme Coordinator
Brendan Keating	Port of Cork Company	Chief Executive
Henry Kingston	Port of Cork Company	Chief Engineer
Jimmy Murphy	MaREI Centre- Marine and Renewable Energy Ireland	
Valerie CUMMINS	Irish Maritime Energy & Resource Cluster	
Donal Maguire	Irish Seafood Development Agency	Director Aquaculture
Brenda O' Riordan	FLAG south	
Cormac Gebruers	NMCI - National Maritime College Cork	Centre Manager
Dr Susan Steele	SFPA - Sea Fisheries Protection Authority	Chair
John Mc Aleer	Cork IT	EU Projects Consultant
Tim O'Leary	Association of West Cork Islands	President
Dr Tony Lewis	MaREI Centre- Marine and Renewable Energy Ireland	Ocean Governance & Stakeholder Engagement Specialist
Sue James	Cornwall Council	Councillor - Portfolio holder for Environment and Public Protection
Julian German	Cornwall Council	Councillor - Deputy Leader and Portfolio holder for Resources
John Betty	Cornwall Council	Strategic Director Economic Growth and Development
Andy Brigden	Cornwall Council	Maritime Manager
Lucy HARRIS	Cornwall Marine Network	Strategic Projects
Mike KING	Conrwall Development Company	Managing Director
Nicola Lloyd	Invest in Cornwall	Head of Inward Investment
Matt Hodson	Invest in Cornwall	
Leo MCLEMAN	Conrwall Development Company	
Chris Ranford	FLAG	
Claire Gibson	WaveHub	Managing Director

Richard Doughty	National Maritime Museum	Director
Ruth Williams	Cornwall Wildlife Trust	Marine Conservation Manager
Emily Kent	Cornwall & Isles of Scilly LEP	
Guillaume Le Palud		Atlantic Area Programme PoC
James Grant	University of Exeter	Head of Business Development
Yvan Guiton	Conseil régional de Bretagne	Directeur
Stéphane Pennanguer	Conseil régional de Bretagne	Chef du service des politiques maritimes et des stratégies de la zone côtière
Hélène Morin	Bretagne Développement Innovation	Responsable du service Affaires européennes
Jeremie Bazin	Technopôle Brest-iroise	Chef de projet
Tristan LE GUILLOU DE PENANRO	Mairie de Brest	Responsable des politiques européennes, coopérations territoriales et maritimes
Mme Tréguier	Institut Universitaire Européen de la Mer	Directrice
Stéphan Riou	Pôle Mer Bretagne Atlantique	Directeur adjoint
Raoul Laurent	Chambre de commerce et d'industrie	Directeur des équipements
Michel Morvan	Chambre de commerce et d'industrie	expert
Andrés Caballero Quintana	Ayuntamiento de las Palmas	Responsable Técnico U.A. Programación Económica. Área de Promoción Económica, Turismo y Ciudad de Mar
Cosme Antonio García	Sociedad Promoción Económica de Gran Canaria	Director-Gerente
Mónica Quesada Peña	CETECIMA-Centro Tecnológica Ciencias Marinas	Dpto. Cooperación Internacional
José Luis Guersi Sauret	CETECIMA-Centro Tecnológica Ciencias Marinas	Presidente
Gonzalo Piernavieja Izquierdo	ITC-Instituto Tecnológica de Canarias	Director de la División de Investigación y Desarrollo Tecnológico
Andrés Caballero Quintana	Ayuntamiento de las Palmas	Responsable Técnico U.A. Programación Económica. Área de Promoción Económica, Turismo y Ciudad de Mar
Vicente Marrero	Cluster Marítimo de Canarias	Presidente

5.3 Methodology for the project monitoring database

5.3.1 Methodological approach & work undertaken

As part of this evaluation, evaluators developed a detailed database of projects – funded through various instruments on the EU and national level - that are aligned with the priorities of the Action Plan. This database served as a basis for different types of quantitative analysis, in particular in the scope of section 3.4.1.

Work conducted by the evaluation team built on that already undertaken by the Assistance Mechanism. According to Task 8.1 of the Tender Specifications for the Atlantic Assistance Mechanism, the contractor is required to identify projects of relevance to the Action Plan and maintain an inventory of identified projects. As of March 2017, the contractor had compiled a detailed database of 405 projects from European, national and regional levels.

During the inception phase, evaluators obtained the monitoring database and conducted an interview with the Assistance Mechanism team to discuss in detail the methodology used for the project monitoring database. The evaluation team also conducted a review of the database in order to assess limitations. The limitations identified were as follows:

- ▶ The large majority of projects (277 projects) were funded through EU level instruments and the large majority of these through EU directly managed funds, such as H2020 (195), COSME (24), LIFE+ (22) or the Connecting Europe Facility (9). Whilst these instruments represent important sources of financing in absolute terms, they do not represent the largest share of potential financing in relative terms when compared to total available resources. The large number of projects identified from these funding sources can be attributed in part to the relative ease of identifying them, thanks to transparency requirements for EU funding and tools available for identifying projects (e.g. CORDIS).
- ▶ Although these funding sources represent the most important potential for the Action Plan, very few projects have been identified from EU level funding implemented through shared management (21). According to discussions with the contractor, this is due to the lack of centralized monitoring data. Due to the reporting constraints already on Managing Authorities, the Commission did not wish to request that Managing Authorities provide additional reporting beyond what is already foreseen in the ESIF Regulations. There is thus little that the contractor could do to identify projects supported through these channels. It can also be noted that, according to DG REGIO, only 27,7% of funds have been 'decided' to date and 3,2% of funds spent. This means that overall only a limited number of projects are likely under way at present – and many of those are likely only just recently starting.
- ▶ A limited number of projects (128) supported by national and regional funding instruments have been identified to date. According to the contractor, this work is being done with the support of the National Units in each Atlantic Member State. However, it is a labour intensive process to the fragmented and generally less transparent nature of national and regional project financing compared with European standards.

In this context, evaluators mobilized a number of different tools to address the gaps in the project database, including: i) questionnaires sent to Managing Authorities by the Commission, ii) review of project databases / project information available online, and iii) interviews with various stakeholders. During the course of the evaluation, the following work was undertaken with respect to the development of this database:

- ▶ **Desk review:** Evaluators conducted additional project identification targeted at funding instruments at the EU level for which data appeared to be missing in the existing project monitoring database and for which project information is publicly available. Evaluators queried the public project databases using the relevant parameters to identify additional projects in line with

Action Plan priorities. This work identified only a number of additional projects, including from some previously unexploited project databases such as the European Investment Bank.

To mitigate the low response rate from Managing Authorities, evaluators also conducted desk review to identify detailed project information. For approximately two thirds of Operational / Cooperation Programmes, evaluators were able to obtain detailed information on approved operations – most often for years 2014 - 2016. This data was reviewed to identify those projects relevant to the Action Plan and integrate them into the project monitoring database. However, the project lists offer varying levels of information for the projects. In some cases, it is not possible to identify those projects aligned with AAP priorities on the basis of the project description information provided. The lists of approved operations can include several thousand operations to be reviewed manually. Overall, over 500 projects were identified in this manner and integrated into the database.

- ▶ **Managing Authority questionnaire:** During the inception phase, the Commission sent requests for information to relevant ESIF Managing Authorities across the region. 19 responses to the questionnaire were received from the Managing Authorities. The responses were varied in terms of the amount and quality of information provided both to the qualitative and quantitative questions. Out of the 123 ESIF Programmes within scope, the responses from Managing Authorities cover 36 Programmes (one Managing Authority can have purview over multiple Operational Programmes). 15 of the 19 Managing Authorities responding provided project data, either anecdotal evidence or a full listing of relevant projects identified. Overall, the questionnaires have allowed evaluators to identify over 250 relevant projects (excluding EMFF). The large majority of projects identified came from just three Managing Authorities, suggesting that most only provided anecdotal project examples.
- ▶ **Interviews:** Evaluators used interviews with varying stakeholders in order to try and identify relevant projects. While interviews provided highly useful information on the relevance and effectiveness of the Action Plan, stakeholders were generally not able to provide information on specific projects they believe are aligned with Action Plans priorities beyond a select number of emblematic examples. In most cases, this information is not tracked or readily available.

5.3.2 Limitations

While it offers a rich look at the interests being pursued by project promoters across the Atlantic area, the project monitoring database cannot portend to provide a comprehensive picture or a perfectly representative sample. Challenges in collecting data inevitably lead to some biases, meaning the overall analysis of the trends should be nuanced to take into account limitations. For example, information on projects financed through national level funding sources was much less accessible than on those supported by EU level funding sources. Likewise, data on relevant investments in the private sector were not able to be exhaustively surveyed given resource constraints.

The following general limitations can be identified:

- ▶ **Information on relevant projects was not always accessible, in particular at national level and in the private sector.** Concerning national funding programmes, the difficulty collecting information is due in part to the fact that it is often fragmented between different programmes at national, regional or even local level and more difficult to assess exhaustively given available resources. It can also be related to the fact that transparency standards are generally not as high for national-level funds. For example, outside of the UK and Ireland, it is rare to have publicly available and comprehensive lists of beneficiaries of national funding programmes. Concerning the private sector, the lack of centralized sources of data makes surveying relevant investments challenging given resource constraints.

At the EU level, data on programme spending was more readily available. However, some challenges were nonetheless experienced. For example, data on ESF and ERDF expenditure in

Spain and Ireland respectively could not be obtained. Likewise, data on expenditure through the EAFRD was systematically unavailable.

- ▶ **Data on projects identified was sometimes incomplete or missing.** The information collected on projects often did not include all data that the database sought to collect. Commonly, the exact start or end dates were not available. Another challenge was that the breakdown of project budgets by partner for collaborative projects was not always available. In these cases, the budget was divided evenly across all project partners. Finally, for some projects, data on the budget was unavailable (or only the EU financed part).

Concerning the EMFF implemented through shared management, the quality for project monitoring lists obtained made it difficult to integrate these into the database. Moreover, it was often not possible to discern the geographical location of investments in Member States bordering more than one sea basin. For this reason, these projects were excluded from the database and their contribution to the Action Plan examined separately.

- ▶ **Many ESIF programmes rely on intermediary bodies to implement funds / instruments, for which information on final beneficiaries is most often not available.** Many programmes dedicated large amounts of funding to funds / instruments dedicated, for example, to assisting SMEs, supporting training / job-seeking support, supporting R&D etc. While these funds / instruments were highly relevant to the Action Plan, they were generally open to all sectors. It is thus difficult to discern which portion of funding went to Action Plan related projects. These amounts were generally excluded from the database unless the fund / instrument targeted specifically the marine / maritime sector (the i-Marine Challenge Fund in Cornwall for example). In some instances, however, evaluators were able to obtain information on final beneficiaries and this was integrated into the database. As an example, over a dozen projects were identified that were financed through the ERDF-supported Local Energy Challenge Fund and Transformational Demonstrator Fund in Scotland.

This was especially the case with the ESF, which relies almost extensively on intermediary bodies to provide various types of support to citizens. Except in some rare instances (e.g. examples in France & Portugal), the intermediate bodies were not exclusively active in the maritime domain. Without data on the final beneficiaries, it is thus difficult to tell what amount ended up, for example, supporting job-seekers or reconversions in the maritime sector. It can thus be expected that 'social spending' is largely underrepresented in the database.

5.3.3 Data sources

The following table provides an overview of the data sources by instrument in the project monitoring database, as well as comments on limitations.

Table 15: Overview of project monitoring database data sources

Type	Name	Data sources	Limitations / remarks
EU	Horizon 2020	AM database	Only EU support amount available for some projects Budget breakdown by partner not systematically available – budget split evenly between partners
EU	CEF	AM database CEF project database	Budget breakdown by partner not systematically available – budget split evenly between partners

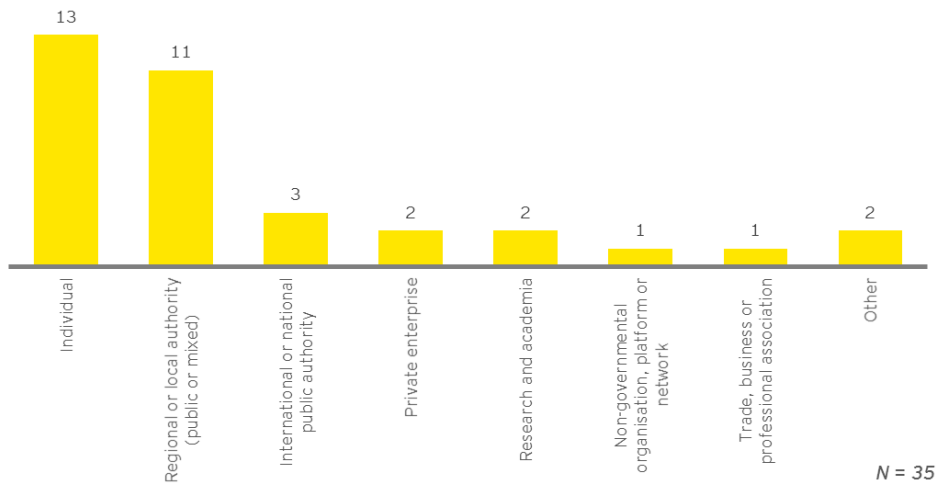
EU	COSME	AM database EASME project database	Budget breakdown by partner not systematically available – budget split evenly between partners
EU	LIFE	AM database LIFE project database	Budget breakdown by partner not systematically available – budget split evenly between partners
EU	EIB	EIB project database	NA
EU	ERDF	Available lists of approved operations / project database MA questionnaires Interviews	Project data unavailable for Ireland Data on final beneficiaries of funds / instruments implemented by intermediate bodies not always available
EU	ERDF-Interreg	Available lists of approved operations / project database MA questionnaires	Project data unavailable for 2 programmes: Caribbean Programme, Interreg V-A - France (Saint Martin-Sint Maarten) Data on budgets / consortia for Atlantic Area Programme not available Budget breakdown by partner not systematically available – budget split evenly between partners
EU	EMFF (directly managed)	EASME project database	NA
EU	EMFF (shared management)	AIRs & project operation lists MA questionnaires	Data quality and consistency issues. Projects not integrated into database, but considered separately
EU	ESF	Available lists of approved operations / project database MA questionnaires	Project data unavailable for Spain Data on final beneficiaries of funds / instruments implemented by intermediate bodies generally not available
EU	Frontex	Frontex project database	NA
EU	JPI Oceans	JPI website	NA
National	Innovate UK	List of beneficiaries	Some recently approved projects do not provide grant amounts
National	Science Foundation Ireland	List of beneficiaries	NA

National	Ocean Awareness Grants (UK)	AM database	NA
National	Valuing the Ocean (UK)	AM database	NA
National	PhD Scholarship (IE)	AM database	NA
National	Project-based Grants (IE)	AM database	NA
National	Ministerio de Agricultura, Pesca, Alimentación y Medio Ambiente (ES)	AM database	NA
National	Programa Estatal de Fomento de la Investigación Científica: Proyectos I+D (ES)	AM database	NA
National	Ship-Time (IE)	AM database	NA
National	Public Funds (IE)	AM database	NA
National	Public Funds (FR)	AM database	NA

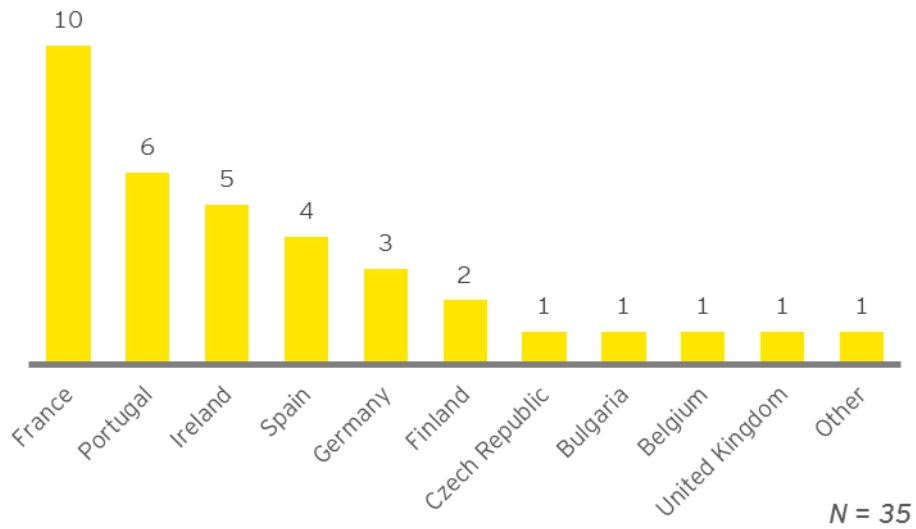
5.4 Open Public Consultation

5.4.1 Characteristics of respondents

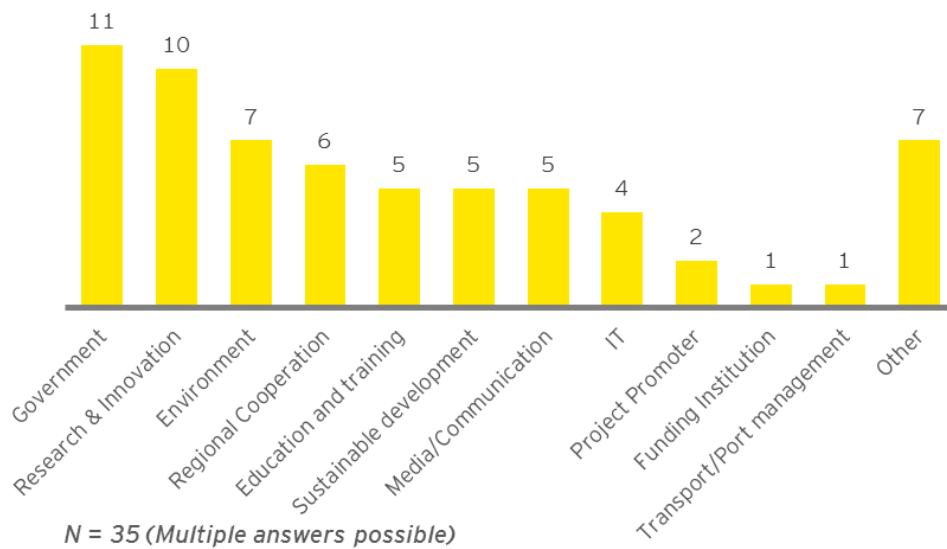
Are you replying as:



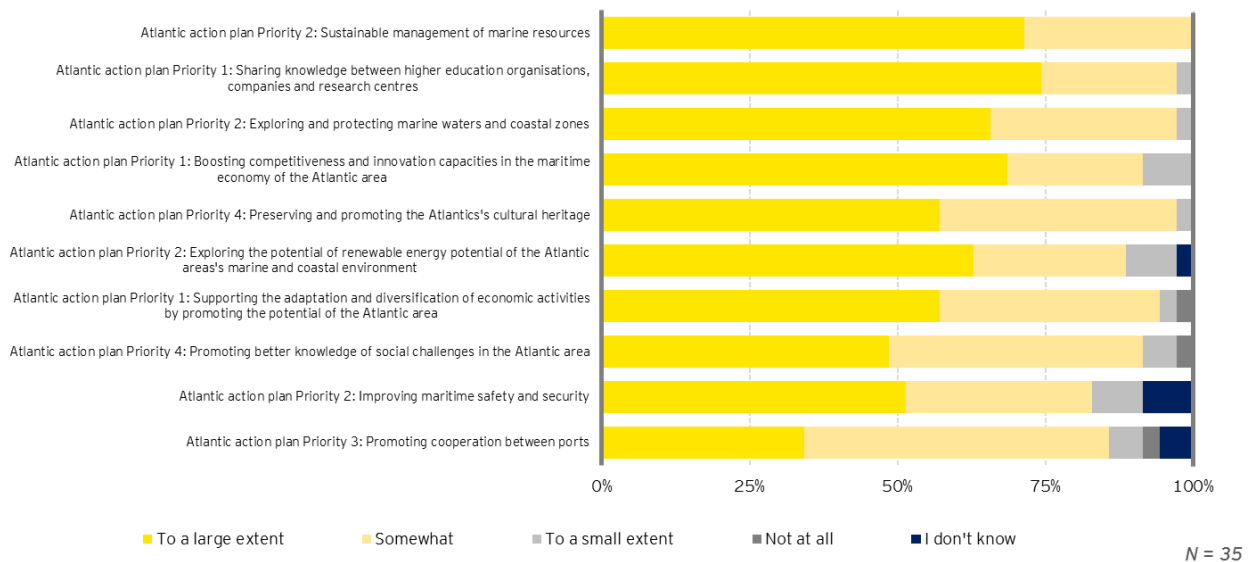
Country of citizenship / residence / organizational headquarters



Field of activity or sector:



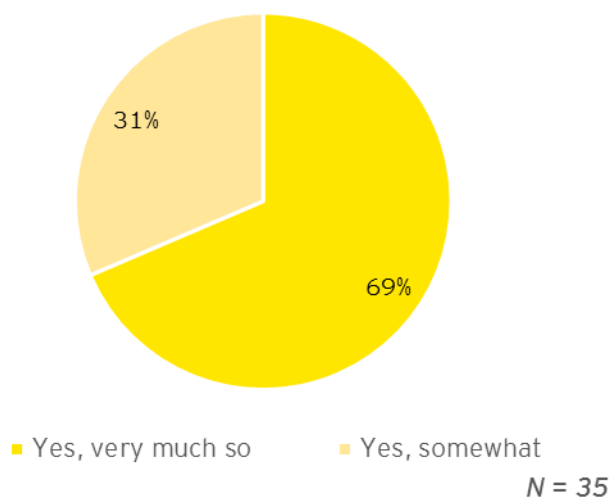
With regards to the ten specific objectives of the Atlantic action plan, to what extent do these still correspond to the needs in the Atlantic area?



If you responded 'to a small extent' or 'not at all' to the previous questions, please explain why:

Respondents called for more coordination of existing initiatives and institutions. There are some overlaps and redundancies with other programs, especially regarding fishery, renewable energies and ports. Furthermore, the AAP is not regarded as the best tool to address social issues such as lack of education. A lack of a coherent political strategy in some regions is criticized in light of the harsh competition between fishing ports, as well as the lack of support for individuals wishing to diversify into tourism.

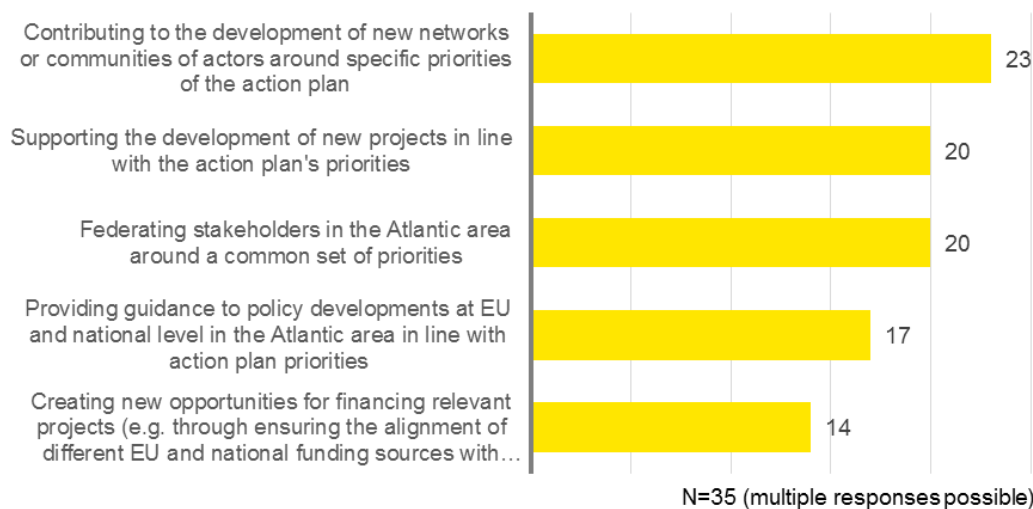
Do you believe that the priorities and objectives of the action plan reflect the areas in which there is the most need for co-operation in the Atlantic area?



What are the main challenges/topics on which cooperation in the Atlantic area should be prioritised in the future to maximise the potential of the action plan?

The most common challenges listed are economic diversification going hand in hand with sustainable growth and development. Other common topics are knowledge sharing and cooperation between institutions as well as sustainable energies and maritime protection.

Has the Atlantic action plan been able to achieve any of the following results? You can mark more than one statement



Are there other achievements of the action plan that are not listed above or would you like to provide further details? Please specify below:

The AAP seems to have created an opportunity to meet and exchange with new partners and furthered collaborative policy making. The region seems more united, especially when facing third parties and international partners.

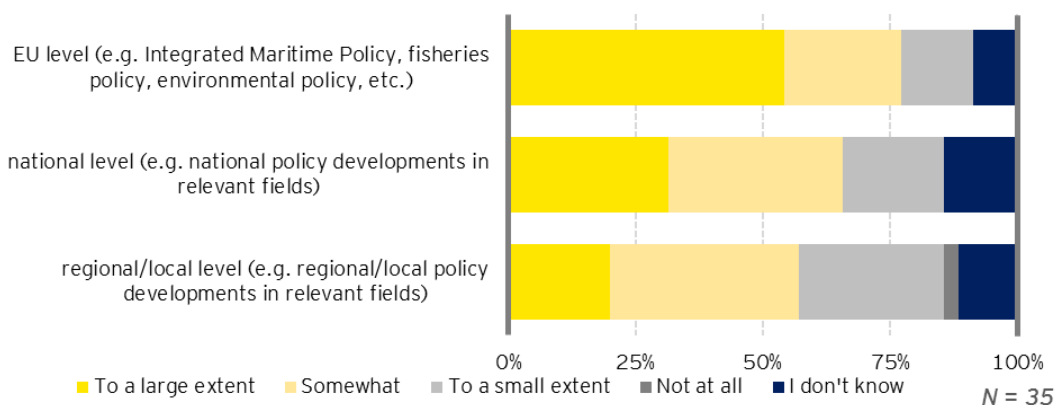
If you had to name one particular success story (initiative, project, event) in the Atlantic resulting from the action plan, which one would it be?

Blue Growth mentioned multiple times; regional and interregional meetings; Atlantic strategy Ireland; Community-led Local Development (CLLD); Hericoast; Surfing Europe; Interreg VB Atlantic Area; HARVEST Atlantic; Atlantic Cities; EMFF; Biomarine; Forum Atlantique; Safer Seas; Northeast Atlantic Geoscience (NAG) cooperation framework; Atlantic Project Awards.

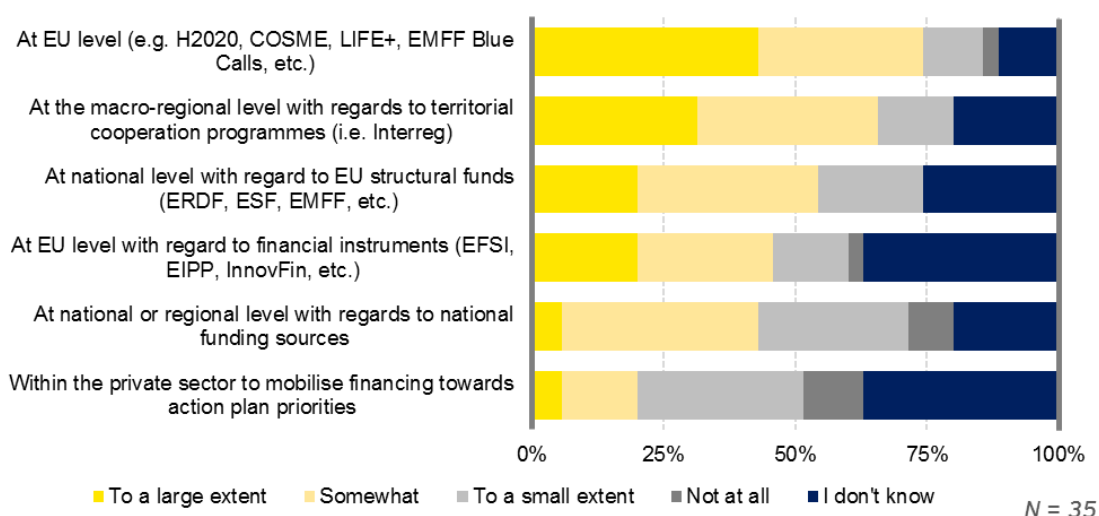
Are there objectives you think the action plan has failed to achieve? Please specify below:

Promoting sustainable fisheries; missing link between objectives and tools; coordination in use or maritime areas; creating social and sustainable development in some regions; not enough awareness of its existence; involving more civil society actors and other stakeholders; further developing transnational actions; increasing visibility of impacts; lack of own funding; implementing effective protection measures

To what extent has the action plan influenced policy developments in line with its priorities at:



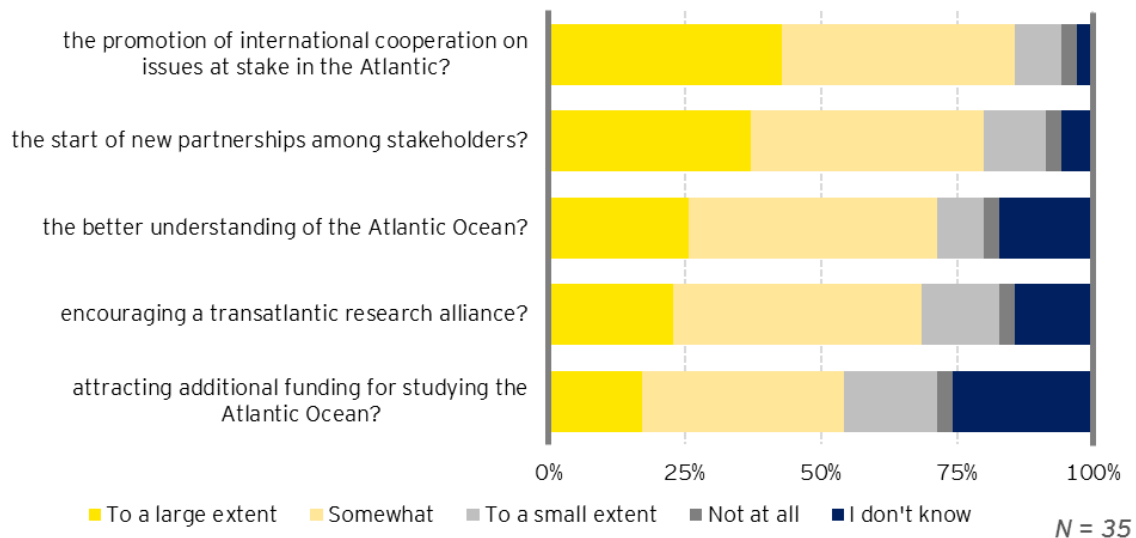
To what extent has the action plan had an influence on the priorities of different funding sources (so as to create new funding opportunities for Atlantic priorities)?:



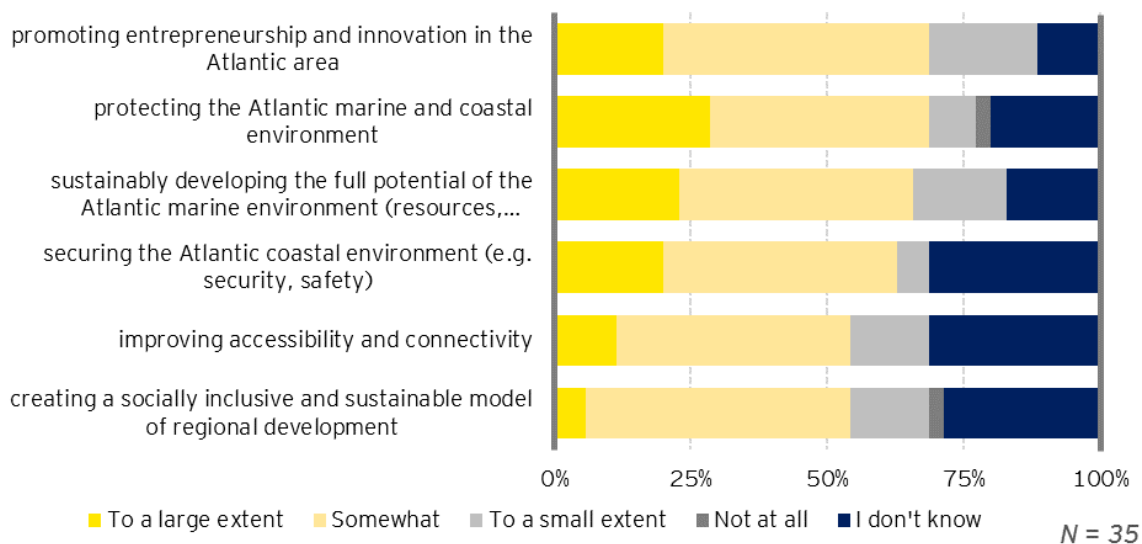
If applicable, please provide specific examples (e.g. action plan-related calls, dedicated initiatives)

Only few examples were provided: ARCOPOL Platform; Difficulties involving the private sector in blue growth, EMODnet

To what extent has the international dimension of the action plan contributed to:



Overall, to what extent has the action plan achieved its key priorities in terms of:



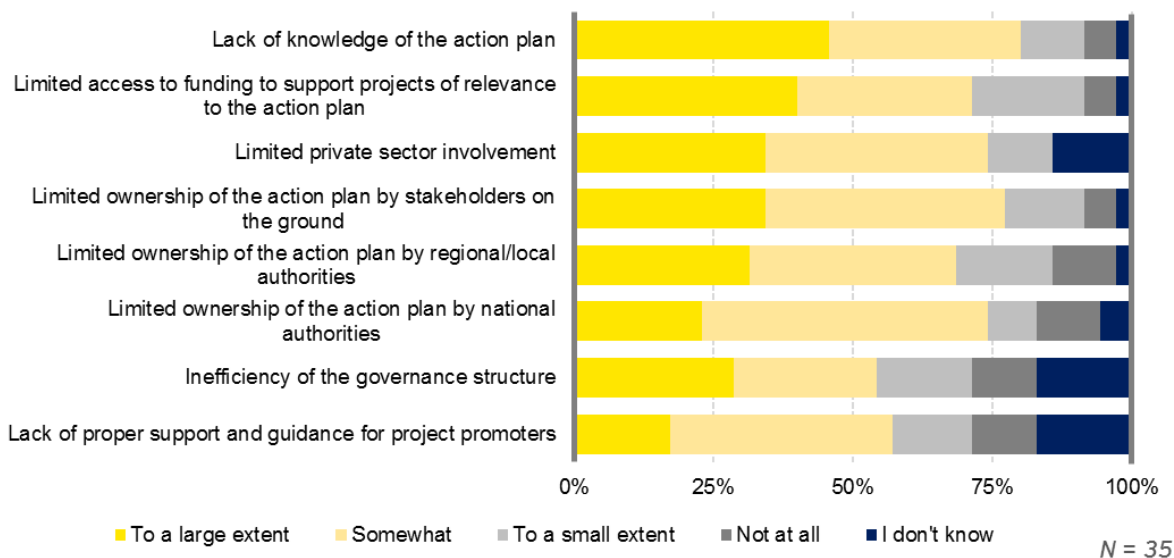
Are there any other economic, social and environmental benefits of the action plan? Please specify below:

The action plan has improved cooperation, socioeconomic diversification and contamination response. Furthermore it has garnered interest by non-EU actors such as Canada, strengthened international agreements and science cooperation (Belem agreement). In addition it has increased interest in the Atlantic Arc.

Or the contrary are there any unintended negative results? Please specify below:

Most respondents found no negative results, although a lack of information about it on certain government levels was mentioned. One respondent criticized an excess exploitation of the oceans while another found neither benefits nor drawbacks of the plan.

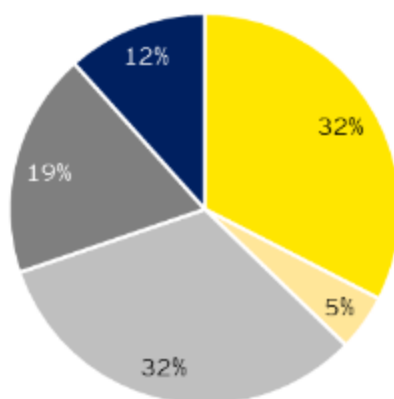
What are the main bottlenecks regarding the implementation of the action plan?



Are there any other implementation bottlenecks not listed above? If so, please specify

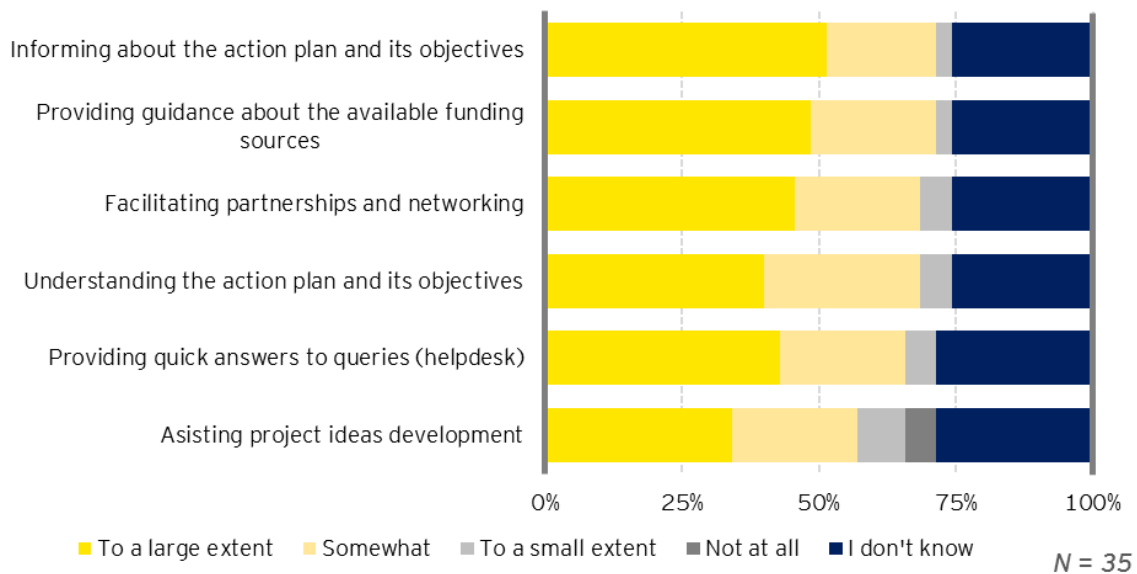
A lack of visibility of impacts and insufficient information as well as too broad of a scope and redundancy with other programs are the most common answers. It was criticized that it is difficult for SME's to partake in the process and that political, business or national interests hinder sustainable fishery management.

Have you ever had direct contact with the support provided through the Atlantic assistance mechanism (including the 'National Unit' or contact point)?

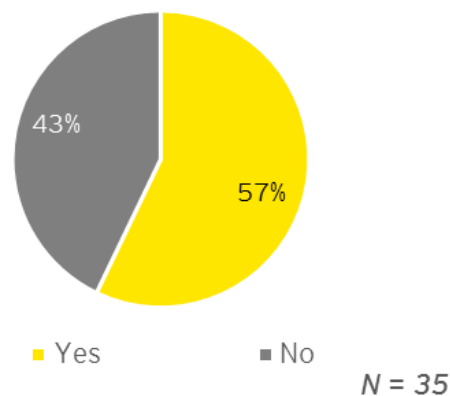


- Yes, I received useful information (e.g. events, funding opportunities, project ideas...)
 - Yes, I received support concerning another type of query
 - Yes, I received useful information (e.g. events, funding opportunities, project ideas...)
 - No, never
 - No, I have never heard of the Atlantic assistance mechanism
- N = 35 (multiple responses possible)

How useful is the Atlantic assistance mechanism for the implementation of the action plan in terms of:



Beyond the Atlantic assistance mechanism, are there any other cooperation mechanisms (e.g. formal or informal networks, partnerships, platforms, etc. specific or not at the Atlantic area) contributing to the implementation of the action plan?



If yes, please specify which ones:

The most common specification was the Atlantic Arc Commission. In addition, many EU mechanisms and projects such as MSDF, MARNET and NECSTouR as well as international bodies such as OSPAR, AORA and ILO were named. Furthermore, research networks, the Irish Sea Forum, and fisheries certification to facilitate sustainable fishery were listed.

How could co-operation mechanisms be improved in the Atlantic region?

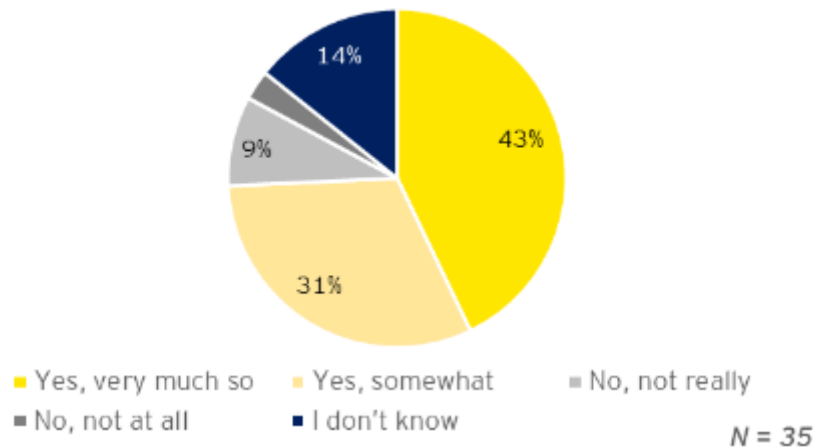
The AAP should aim to improve ownership by national, regional and local authorities and promote partnership and heritage by creating a macroregional label similar to the Baltics. To include more local stakeholders, the accessibility should be simplified and PPPs should be promoted. The creation of focus groups, clusters and expert networks should be supported and cooperation with existing bodies and international organizations should be enhanced. Visibility should be enhanced by disseminating information to local stakeholders, creating an internet platform to facilitate finding partners for projects and by financing certain emblematic projects. A bottom up approach should be adopted and

cooperation with other EU initiatives and funds should be increased.

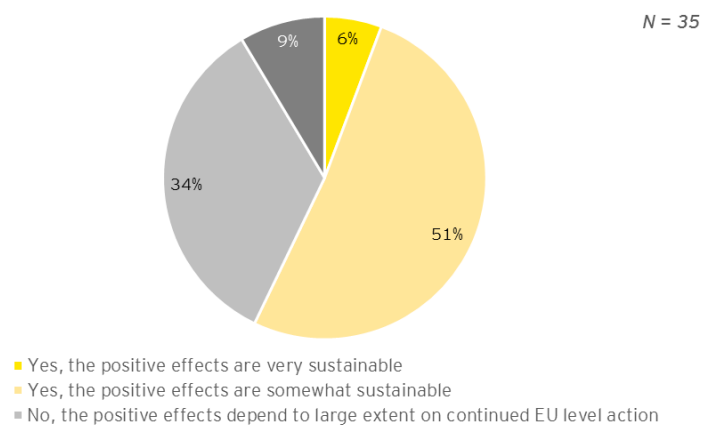
Who would be the key stakeholders concerned for better co-operation and coordination in the Atlantic region in the next years?

The key stakeholders will be local communities and cities as well as regional and national authorities. The private sector, specifically SME's, fisheries and enterprises involved in the blue economy as well as research organizations will also play a key role. International networks and organizations should also be included.

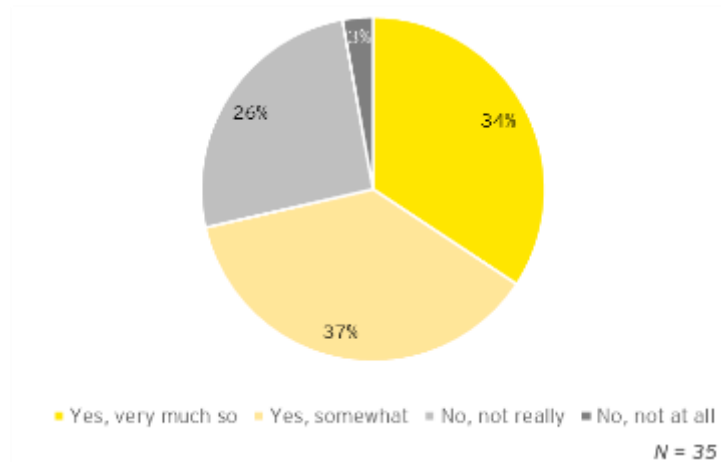
Do you believe the action plan has allowed the Atlantic area to accomplish more than what could be achieved by the Member States individually?



Concerning any positive developments brought about by the action plan, would these be likely to persist in absence of an action plan in the future?



If the action plan ended tomorrow, would this have a significant negative impact on the Atlantic area?



If you have further comments on the added value of the action plan, please specify below:

The AAP is viewed as a good platform that improves important cooperation between actors that otherwise would have failed to meet. In the long run can act as a project incubator in the region. However, currently it is difficult to determine whether a project was supported by the AAP. Furthermore, the lack of financing diminishes its potential impact greatly. The low level of involvement of local, regional and national authorities should be seen as a call to improve ownership on that level. Furthermore, the AAP should have a stronger connection to other European policies and initiatives.

Should you have any further comments on the implementation of the action plan and the planned mid-term review, please specify below:

The AAP should aim to align with ongoing programs and research initiatives such as EMODnet and ESFRI. It should try to increase visibility by financing emblematic projects and aim to involve the private sector.

5.5 Project case studies

5.5.1 CETO Wave Hub

1. Background

Wave power can be defined as the transport of energy by wind waves, and the capture of that energy to do useful work, such as electricity generation, water desalination, or pumping water. A machine designed to capture and convert wave power is known as a Wave Energy Converter (WEC). The first known patent to use energy from ocean waves dates back to 1799; interest ebbed and flowed over the years until the 1990s, after which interest and investment in wave power has grown steadily along with other 'marine renewable energy' technologies, such as tidal range and current or ocean current. EU Atlantic Member States have played a pioneering role in the development of wave energy, in particular Portugal and the United Kingdom. This is largely due to the fact that the global locations with the most potential for wave power include the western seaboard of Europe and the northern coast of the UK.

While the concept wave energy has existed for centuries, it is only in the past decade that technology developers have gone from the drawing board to open ocean and started to produce full-scale prototypes of their WEC devices. Today, there are a number of grid-connected devices installed in high-energy environments, with dozens of other concepts being developed. This first generation of pre-commercial prototype devices are targeted for build-out into utility scale arrays in the coming years, which will mark a key turning point in the development of wave energy.

Carnegie Wave Energy (CWE) has been granted GBP 9,55 million from the European Regional Development Fund (Cornwall & Isles of Scilly Growth Programme) to support the development of its planned 15 Megawatt (MW) commercial wave energy project. This project focuses on the implementation of a two phase scheme. The first phase will involve the design, construction and installation of a single 1 MW grid connected WEC device at the Wave Hub test site off the north coast of Cornwall. Deployment of the device is currently slated for 2018. Stage 2, currently planned for 2020, will deliver a subsequent 15MW commercial array at the same site, offering a commercial return on investment, through 18,500,000 kWh operation. The overall objective of stage 1 is to drive the technology up to full compliance with Technology Readiness Level (TRL) 7. Stage two will confirm compliance with TRL 8 and elements of TRL 9, moving the WEC device to Commercial Readiness Level 4 – 6.

Total project budget: GBP 14 695 325

- ERDF: GBP 9 551 962
- Carnegie Wave Energy Limited: GBP 5 143 363

Stakeholder name	Budget	Country
Carnegie Wave Energy Limited	14 695 325 (100%)	United Kingdom

2. Implementation of the project

The CETO 6 device was initially being designed, installed and operated by parent Australian company, Carnegie Wave Energy Limited as part of a demonstration project off Garden Island in Western Australia. In October 2017, Carnegie announced a shift in focus for the development and deployment of CETO 6 from Garden Island to Albany in the south of Western Australia. Deployment at this site has also been delayed until 2019 / 2020. It is unclear if delay in the deployment of the device in Australia could translate into delays in the UK project time schedule.

The CETO 6 Wave Hub Project in Cornwall was formally launched in November 2016. Design and development have subsequently commenced and continue in 2017, with stage 1 commissioning currently still targeting the end of 2018. Following commissioning, the device will be operated for a period of 12 months, the results of which will be studied closely.

The Project is being delivered by Carnegie's local subsidiary, CWE UK, based at the Hayle Marine Renewable Business Park, with commercial and technical support from its Australian parent company and developer of the CETO wave energy technology. Deployment of the device will take place at the adjacent Wave Hub test facility. The Project will also include engagement with and coordination of a suitable supply chain for the construction and operational phases.

Wave Hub is a facility for testing of WEC device arrays. It provides a fully grid-connected and consented wave energy site, located approximately 10 nautical miles (16km) off the north coast of Cornwall. The Wave Hub Offshore Deployment Area, which covers 8 km² of the seabed, is divided into four separate berths available to lease to wave energy device developers. The Wave Hub test facility is the world's largest and most technologically advanced site for the development of offshore renewable energy technologies. Construction of both Wave Hub and the Hayle Business Park has received extensive support from ERDF funds in previous programming periods.

The issue of Brexit created a significant amount of uncertainty for Carnegie concerning the development of their activities in the UK. However, H.M. Treasury has provided reassurances that funding will continue. Another source of uncertainty for stage 2 of the project is the future of UK feed-in tariffs for renewable energies.

3. Current & future impact

The primary expected impact of the project is to move the TRL of the CETO WEC device to full compliance with TRL 7, 'system prototype demonstration in an operational environment'. This will be an important step in the road to commercial deployment of the technology. Successful demonstration in operational environment will also be important for securing the significant funds necessary to take forward stage 2 of the project. In this respect, the extremely rough conditions off the coast of Cornwall will provide an ideal testing ground for this innovative device that seeks to differentiate itself on the basis of its durability. The CETO technology takes a unique approach to wave power by generating both power and water from the ocean swell while remaining fully submerged beneath the ocean surface, increasing its ability to survive large storms.

The project can be expected to have a positive impact on the local economy. In addition to the call's specification outputs, the project will result in the direct creation of 11 new jobs within CWE UK, Carnegie's UK subsidiary, and provide work that retains 38 jobs in the local supply chain through 72 procurements. From a broader perspective, successful completion of the project will move the technology one step further to realizing significant potential economic returns in the long run through

commercial deployment.

The project should also help to cement Cornwall's 'brand' as one of the foremost regions in the Atlantic area for the development of marine renewable energies. The region has made significant strategic investments in developing a competitive offer to attract technology developers, including investments in testing infrastructure at Wave Hub and in Falmouth Harbour, creating a favourable business environment, structuring the local supply chain (through the Marine Offshore Renewables Group) and promoting cooperation with the research sector.

4. Contribution to the AAP

This project contributes to Specific Objective 2.4 of the Action Plan, which aims to exploit the renewable energy potential of the Atlantic area's marine and coastal environment. The Action Plan in particular identified a number of specific needs to underpin the development of marine renewable energies in the Atlantic Area. These include:

- encouraging assessment and mapping of the potential of the Atlantic's energy resource and determining how to mitigate the environmental and navigational impact;
- contributing to a European electricity transmission system that allows the balancing of loads and provides better links between offshore and onshore energies;
- promoting research, development and demonstration of technologies for the construction and maintenance of renewable energy installations; and
- encouraging the harnessing of the special geological, oceanographic and meteorological conditions of the Outermost Regions of the Atlantic.

The CETO 6 project will contribute directly to promoting research, development and demonstration of marine renewable energy technologies. The project will seek to ultimately demonstrate full compliance with TRL 7. More generally, it can also be seen as contributing to cementing the reputation of the European Atlantic area's position as the most dynamic region for marine renewables in the world. The expected economic impact of the project will also support Priority 1 of the Action Plan.

5.5.2 Ringaskiddy Port Redevelopment

1. Background

The Cork Harbour is the second largest natural harbour in the world behind Sydney. Located at several locations in the Harbour, the Port of Cork is Ireland's second busiest port, after Dublin, handling almost 20% of Irish imports and exports. The Port of Cork's facilities and operations are situated at four distinct locations, namely the City Quays, Tivoli, Ringaskiddy and Cobh. The Port provides and facilitates port activities and services including Roll-On Roll-Off, Lift-On Lift-Off, Bulks, Cruise, Pilotage, Channel Dredging and Land and Property Rental. The Port of Cork is an identified core port located on the North Sea-Mediterranean Core Network Corridor.

However, the future growth of the Port of Cork is constrained by a number of physical constraints. Commercial ships are increasingly becoming larger to improve the efficiency and sustainability of sea freight. To maintain its competitiveness, it is essential that the Port of Cork responds to future growth requirements and shipping trends towards larger vessels. At present, the depth of the water channel and width of the river at the existing Tivoli facility cannot deal with larger vessels and can only handle a small volume of vessels at a time. Secondly, the trend in port logistical operations is to provide land banks adjacent to port facilities for storage and logistical operations. Due to the low level of available space, this cannot be adequately achieved at present in the Upper Harbour locations.

To address these issues, the Port of Cork has identified in its Strategic Development Plan the necessity to implement a major redevelopment project at its Ringaskiddy facility in order to relocate port activity to this more suitable location from the Upper Harbour.

Within the wider context of the Port of Cork's Strategic Development Plan, the CEF-supported grant will support the Ringaskiddy Redevelopment Project for the Port of Cork. The proposed redevelopment works comprise the following main elements:

- Ringaskiddy East: including a new 314m Container Berth capable of accommodating vessels carrying a range of different cargoes and an additional 200m Container Berth, the development of existing port lands to provide operational areas, installation of cranes and terminal equipment and the dredging of the sea bed amongst other works.
- Ringaskiddy West: A new 182m extension to the existing Deep Water Berth and dredging works to facilitate navigational access.
- Road improvements to ensure access to the port area
- Construction of a new public pier, slipway and boarding platform and planting and landscaping to provide public amenity area

These works will allow to expand and develop the deep water port facility at Ringaskiddy in order to make its operations more competitive, efficient, sustainable and responsive to current and projected growth in trade.

Total project budget: EUR 72 902 124

- CEF: EUR 12 736 001
- National funds: EUR 60 166 123

Stakeholder name	Budget	Country
Port of Cork Company	EUR 72 902 124 (100%)	Ireland

2. Implementation of the project

In May 2015, An Bord Pleanála, an independent body that decides on appeals from planning decisions made by local authorities, granted a 10-year planning permission to Port of Cork, for the redevelopment of the existing port facilities at Ringaskiddy. The Advance Works element of the project got underway in January 2016 and was completed in May. A public tender process for the Main Works contract was then launched in the second semester of 2016. This large contract comprises the construction of the new container terminal and associated marine structures, changes to the internal road network in the port, buildings and the construction of a new amenity area at Paddy's Point.

During the detailed design of the proposed works it became evident that the long-term sustainability of the project could be significantly improved by making a number of alterations to the infrastructural works and the landside operations of the permitted container terminal. Therefore, Port of Cork submitted a request to alter the terms of the permission granted to authorities for approval in July 2016. The submission of this request and the time necessary for consideration (as well as an updated Environmental Impact Assessment), resulted in the delay of the tender process for the Main Works contract.

In June 2017, An Bord Pleanála granted permission for alterations to the Ringaskiddy Port development permitted in May 2015. The changes consisted of alterations to the main berth and associated mooring dolphins, the process of landside handling of containers and the layout and design of ancillary buildings. Subsequently the construction contract and ship to shore crane procurement processes had resumed as of September 2017.

Works were originally foreseen to be completed and the new facility operational by the fourth quarter of 2018. With delays incurred, the commissioning of the new facilities will likely be pushed into the following year or beyond. However, this delay is ultimately compensated in terms of the increased sustainability achieved through the redesign of certain elements in the detailed design phase.

Further on the horizon and beyond this specific CEF-supported project, major infrastructure upgrades will be necessary in order to increase access to the ports and notably increase the capacity of the local roadway system. In the medium term, a high level of congestion is expected in the Ringaskiddy area, with the two-lane N28 already highly saturated with traffic from the adjacent pharmaceutical industry and other activities in Ringaskiddy. In April 2017, Transport Infrastructure Ireland confirmed its intent to push ahead with a proposed route for the M28 motorway to Ringaskiddy. However, the project has been slowed by major resistance from local residents. Ensuring adequate infrastructure investments around the new port facility will be critical for realising the full potential of the expanded capacity.

3. Current & future impact

The provision of effective, efficient and competitive port facilities is essential to the economic vitality of Cork and the South West Region, as well as the country as a whole. Trade using the Port of Cork is vital to the stability and future growth of the economy in the South West Region. By facilitating the movement of goods to and from the UK and Continental Europe, the Port also plays an important role

in the development of the EU's Internal Market. The combined traffic at the Port of Cork and its subsidiary facilities amounted to 11 million tonnes in 2015, representing an 8,6% increase from 2014. A report on the economic impact of the Ringaskiddy Port Redevelopment estimated that the value of trade through the port was nearly EUR 14 billion in 2012 and that this trade supported over 172 000 full-time equivalent jobs across the regional and national economy.

Considering the projected growth scenarios, increasing the capacity of the Port of Cork is thus critical to sustaining future economic growth in the region and the country. With Brexit, the strong reliance on the 'land bridge route' across the UK has also come under increasing scrutiny. Indeed, reliance on transiting goods across a third country raises a number of inherent risks that could result in delays in the. Increased capacity in the Port of Cork can address this issue to some extent as it is hoped that it will translate in to increased connections with Continental Europe. Beyond just expanding capacity, the investments are also expected to make its operations more competitive, efficient, sustainable and responsive to current and projected growth in trade. Finally, the project will create additional local jobs in the Cork area.

The relocation of Port activities from the Upper Harbour, including the City Quays, will also allow for the redevelopment of the Docklands and Tivoli for residential and employment uses. Cork City is strongly reliant on the redevelopment of these lands to achieve its population growth targets and spatial planning objectives. Indeed, Cork's docklands have been described as the last great undeveloped urban landbank in Ireland. A blueprint for the redevelopment of the docklands was unveiled in July 2017, proposing the development of 4 000 housing units, shopping centres, offices and a railway station.

4. Contribution to the AAP

This project contributes to Priority 3 of the Action Plan, which seeks to improve accessibility and connectivity. The only Specific Objective under this priority concerns facilitating the development of ports as hubs of the blue economy by:

- facilitating upgrades of infrastructure to improve connectivity with the hinterland, enhance inter-modality and promote fast turnaround of ships;
- enabling ports to diversify into new business activities; and
- analysing and promoting port networks and short-sea shipping routes between European ports.

The Ringaskiddy redevelopment project will contribute directly or indirectly to two of the three areas listed above. The primary output of the project will be expanded capacity at the Ringaskiddy facility, allowing the Port to handle more traffic and larger vessels. The expanded capacity, however, will also assist the Port of Cork to adapt to the changing nature of port activities, notably the trend towards port-centred logistics, and improve the efficiency of port operations and thereby the competitiveness of the port. According to Port management, the redevelopment project will also position to Port of Cork naturally to develop more connections with European ports, in particular on the northern / western coasts of France and Spain.

5.5.3 AquaSpace

1. Background

Farming finfish, shellfish and aquatic plants is one of the fastest growing food sectors in the world. It already provides for about half of all the fish consumed in the world today, including an important part of imports to Europe where demand is continuously increasing. The 2014 EU trade deficit in seafood was the largest ever at EUR 16,6 billion. Aquaculture thus has the potential to address this trade deficit. In Europe, aquaculture accounts for about 20% of fish production and directly employs some 85 000 people. The sector is mainly composed of SMEs or micro-enterprises in coastal and rural areas. While the sector has seen quick growth globally (about 7% per annum), EU overall output has been more or less constant in volume since 2000. Growth of the sector is subject to a number of challenges and bottlenecks.

One of the natural bottlenecks to growth in this sector is the finite amount of space available and the effective management of that space. In this context, the AquaSpace project aims at providing increased space for aquaculture to allow increased production. The overarching goal of the AquaSpace project is to provide increased space of high water quality for aquaculture, by adopting the Ecosystem Approach to Aquaculture (EAA) and Marine Spatial Planning (MSP).

The detailed objectives of the AquaSpace project can be broken down as follows into work packages (WP) :

- ▶ Accurately identify industry-wide issues and options: this package aims at applying an Ecosystem Approach to Aquaculture (EAA) framework to identify key influences on the use of space by aquaculture, as well as determine and prioritise key issues constraining the growth of Aquaculture in Europe.
- ▶ Develop and deliver tailored tools: characterise existing tools and customise or further develop tools.
- ▶ Work collaboratively with stakeholders on validation of tools: use a wide range of case studies to identify relevant stakeholders in order to test and assess relevant tools and document their utility.
- ▶ Synthesise outcomes for post-project legacy and impact: evaluate and compare the outcomes of case studies ; synthesise the findings.
- ▶ Impact through effective knowledge exchange: Exchange information with a panel of stakeholders present in a User Reference Group. Develop a Master level online module for Aquaculture. Develop a course on MSP for aquaculture to impact planners and industries. Disseminate the project's results (newsletters, media presentations web tools and smartphone apps...). Develop a business case for licensing a subset of intellectual property.

Total project budget: EUR 3 625 581

- H2020 - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy: EUR 2 989 814
- National funding sources: EUR 635 767

Stakeholder name	Budget	Country
------------------	--------	---------

The Scottish Association for Marine Science LBG (SAMS) – Project coordinator	EUR 446 066	United Kingdom
AgriFood and Biosciences Institute	EUR 49 351	United Kingdom
Fundacion Azti – Azti Fundazioa	EUR 200 000	Spain
Bluefarm SRL	EUR 150 000	Italy
Christian Michelsen Research AS	EUR 120 000	Norway
Agencia Estatal Consejo Superior De Investigaciones Cientificas	EUR 170 000	Spain
Food and Agriculture Organization of the United Nations FAO	EUR 149 630	Italy
Nemzeti Agrarkutatási és Innovációs Központ	EUR 120 428,75	Hungary
Institut Français de Recherche pour l'Exploitation de la Mer	EUR 200 000	France
HAVFORSKNINGSINSTITUTTET	EUR 200 000	Norway
The James Hutton Institute	119 988,75	United Kingdom
Longline Environment Ltd	EUR 200 000	United Kingdom
Marine Scotland	EUR 120 000	United Kingdom
Sagremarisco-Viveiros de Marisco Lda	EUR 120 000	Portugal
JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LAENDLICHE RAEUME, WALD UND FISCHEREI	EUR 200 000	Germany
University College Cork – National University of Ireland	EUR 200 000	Ireland
PANEPISTIMIO KRITIS	EUR 174 850	Greece
Dalhousie University	EUR 0	Canada
Yellow Sea Fisheries Research Institute, Chinese Academy of fishery sciences	EUR 0	China

The University of Western Australia	EUR 0	Australia
BIHARUGRAI HALGAZDASAG MEZOGAZDASAGI TERMELO ERTEKESITO ES TERMESZETVEDELMI KFT	EUR 49 500	Hungary

2. Implementation of the project

The project was officially launched in 2015 and is expected to be finalized on time in February 2018. As of November 2017, it has been nearly fully implemented with all deliverables having been completed.

- The key governance, legal, environmental, economic, social and cultural issues have been assessed. The assessment was based on a questionnaire which was sent to 100 stakeholders. The findings have been presented during a workshop on February 2016.
- Two Web application tools have been developed (GIS based assessment tool and an “Investor Appeal Index” Smartphone App).
- A review of existing methods supporting an Ecosystem Approach to Aquaculture (EAA) was performed (with a focus on Cost-Benefit Analysis).
- 17 Case Studies were performed, including a wide range of environments and locations (Adriatic Sea, the Algarve Coast, Argyll, Basque country, Bekes country, Carlingford Lough, Germany, Great Bay, Houtman Abrolhos, Long Island Sound, Mediterranean Sea, Normandy, Norway, Nova Scotia Bays, Sanggou Bay, Zangzodao Island). In each case, the relevant stakeholders have been identified, as well as key issues related to aquaculture.

The remaining tasks are the development of the online master programme and the completion of the toolbox.

The project was implemented without significant problems. The obstacles faced, as described by the coordinating entity interviewed, were mainly due to the fact that the project was implemented in various countries. Due to the very nature of the project, the involved stakeholders had to take into account geographical and environmental specificities, which were gradually addressed during the project. Various changes had to be made to make sure that the project kept meeting the European funding requirements.

3. Current & future impact

The AquaSpace toolbox is currently being designed in order to be developed further. This will allow, in the long run, to perform risk-based analysis of spatial management options to support the licensing process and, furthermore, facilitate investments.

The findings and experiments which have been led during the case studies will provide enriched information and methods to push Ecosystem Approach to Aquaculture and Maritime Spatial Planning (MSP) further.

Finally, the development of a module will allow to gain expertise and skills on the subject of aquaculture for both the public and business stakeholders.

As stated by the interviewed coordinator of the project, Aquaspace has provided a number of tools in order to allow space for aquaculture to increase. Nevertheless, it will be crucial to continue to raise awareness on that matter, in order to highlight the need for political involvement and innovative policies, as well as in order to further involve people on that matter. The interviewed coordinator

insisted upon the need for further research on aquaculture.

4. Contribution to the AAP

As a project focused on developing aquaculture, both through the Ecosystem Approach to Aquaculture (EAA) and Marine Spatial Planning (MSP), the AquaSpace project is in line with the Action Plan, which aims to support the marine and maritime economy in the Atlantic, while creating a socially inclusive and sustainable model of regional development. In particular, it is aligned with Specific Objective 1.3

In the long run, the AquaSpace project could help identify sustainable and environment-friendly solutions which would decrease Europe's dependency on imported products.

The AquaSpace project also tends to be in line with the AAP's objective to encourage Member States' collaboration on subjects related to the blue economy, especially by sharing information, costs, results and best practices. In that regard, the AquaSpace project team has performed 16 case studies so far in various European Member States, such as France, Italy, Spain, Hungary, Germany, Portugal, the United Kingdom, and Ireland.

5.5.4 Spanish Sustainable and Integrated Urban Development Strategies

1. Background

Cities can be seen as both the source of and solution to today's economic, environmental and social challenges. Europe's urban areas are home to over two-thirds of the EU's population, they account for about 80 % of energy use and generate up to 85 % of Europe's GDP. These urban areas are the engines of the European economy and act as catalysts for creativity and innovation throughout the Union. But they are also places where persistent problems. Europe's Atlantic arc is home to many mid-sized cities. Some are high growth hubs struggling with the challenges of expansion, whereas others are attempting to turnaround trends of decline. Their success is key to the wider economic success of the Atlantic area.

With the various challenges facing urban areas – economic, environmental, climate, social and demographic – highly interwoven, success in urban development can only be achieved through an integrated approach. Measures concerning physical urban renewal should be combined with measures promoting education, economic development, social inclusion and environmental protection. This need has been recognized in the development of an approach to planning known as Integrated Sustainable Urban Development.

To support the development of this During the 2014-2020 programming period for EU Structural Funds, a minimum 5 % of the ERDF is earmarked for integrated sustainable urban development. To this end, Spain has dedicated EUR 1 billion from the EU Structural Funds to develop **Sustainable and Integrated Urban Development strategies (Spanish acronym: DUSI)**. The DUSI Strategies should be developed in **cities or urban functional areas of more than 20,000 inhabitants**.

This initiative aims to support an Integrated Sustainable Urban development in Spain through local authorities' strategies which address economic, environmental, climate, demographic, and social issues.

To date, two rounds of funding have been organised:

- The first round of funding (finalized) distributed 70% of this amount under the ERDF resources initially scheduled in the Operational Programme on Sustainable Growth
- The second round of funding included financial support for 30% of this total.
- A third round will be launched, including an additional budget of 349 million euros.

The second round of funding has maintained the three funding categories which are based on population as follows

- For cities or functional areas with over 100,000 inhabitants, the co-financed funding limit is 15 million euros
- For cities or functional areas with over 50,000 inhabitants and less than 100,000 inhabitants, the co-financed funding limit will be 10 million euros

For cities or functional areas with over 20,000 inhabitants and less than 50,000 inhabitants, the co-financed funding limit will be 5 million euros

The thematic (TO) and specific (SO) objectives are:

- TO2: Improving access, use and quality of information and communication technologies
 - o SO.2.3.3. Local eGovernment and Smart Cities.
- TO4: Enhancing the transition to a low-carbon economy in all sectors
 - o SO.4.5.1. Sustainable urban mobility.
 - o SO.4.5.3. Energy efficiency and renewable.
- TO6: Conserving and protecting the environment and promote resource efficiency.
 - o SO.6.3.4. Cultural heritage/

- SO.6.5.2. Urban environment, waste, water.
- TO9: Promoting social inclusion and combating poverty.
 - SO.9.8.2. Economic and social regeneration of zones disadvantaged urban areas.

Total project budget: EUR 1 billion including:

- **16% for the SO.2.3.3.** Local eGovernment and Smart Cities
- **25% for the SO.4.5.1.** Sustainable urban mobility **and the SO 4.5.3.** energy efficiency and renewable
- **12% for the SO.6.3.4.** Cultural heritage
- **20% for the SO.6.5.2.** urban environment, waste, water
- **28% for the SO.9.8.2.** Economic and social regeneration of zones disadvantaged urban areas

There are **three co-financing rate** depending on the level of development of each autonomous communities:

- The most developed: 50%
- The least developed: 80%
- In transition: 80% (except Canary Islands: 85%).

Stakeholder name	Budget	Country
<u>Project coordinator</u> General Sub-direction of Urban Development- General Directorate of EU Funds Ministry of Treasury and Public Function	1 billion	Spain
<u>Other stakeholders:</u> Locals governments Ministry of Development (<i>Ministerio de Fomento</i>)		Spain

2. Implementation of the project

123 Spanish cities have a Sustainable and Integrated Urban Development Strategies.

All municipalities of over 50,000 inhabitants and 44% of those with between 20,000 and 50,000 inhabitants presented strategies in the first round of funding.

From the second round of funding, all municipalities with over 20,000 inhabitants that could opt for the funding have presented strategies.

3. Current & future impact

The main impacts achieved are:

- The development of city planning and local eGovernment
- The improvement of water supply system.

- The improvement of energy efficiency.
- The maintenance of cultural heritage.

In the framework of its 2014-2020 DUSI Strategy, the city of Las Palmas in Gran Canarias has registered several progress, such as the development of eGovernment management and a system of environmental monitoring, the maintenance of its museums.

4. Contribution to the AAP

The project is contributing to the AAP *via* Atlantic cities of Spain in fields such as:

- The priority 2 “*Protect, secure and develop the potential of the Atlantic marine and coastal environment*” through the specific objective “***the exploitation of the renewable energy potential of the Atlantic area’s marine and coastal environment***”.
- The Priority 4 “*Create a socially inclusive and sustainable model of regional development*” through the specific objective “***Preserving and promoting the Atlantic’s cultural heritage***”.

DUSI’s strategies are also aligned with the URBACT program cooperation in the field of innovative urban action.

5.5.5 AtlanticOnBike

1. Background

Long-distance cycling has emerged as a popular form of tourism not just for hardened 'professionals', but also for more novice cyclists (of all ages) looking for a challenging and exciting holiday. In addition to the physical challenge, long-distance cyclists enjoy the unique opportunity to take in the scenery and experience local culture first hand in areas not often visited by the tourist masses.

With the growing popularity of long-distance cycling, a number of routes have been developed to cater to the demand. The association 'EuroVelo' is a network aimed at developing cycling tourism and soft mobility throughout Europe by implementing reliable and continuous routes, harmonising the signing and standards which will apply to these routes and marketing the use of the network toward European citizens. It currently has developed a network of 15 long distance cycle routes connecting and uniting the whole European continent and plans to develop a significant additional number by 2020.

Led by the EuroVelo association, the "AtlanticOnBike" project was approved in 2017 with the support of the European Union via the Atlantic Area Interreg Programme. Over the course of three years, an international partnership reuniting parties from Norway, UK, Ireland, France, Spain and Portugal will work on building one of the longest European long distance cycle routes: the Atlantic Coast Route (EV1).

Following Europe's mighty western border, the Atlantic Coast Route combines for around 9,100 km the majestic fjords of Norway, the wild Irish coastline and the sun-kissed beaches of Portugal. It passes through bustling port cities and cosy fishing villages, exposing cyclists to dramatic landscapes, unique culture and excellent cuisine.

The AtlanticOnBike project aims at achieving a positive economic impact by developing a transnational cycle tourism route highlighting the natural and cultural heritage of the region. As highlighted by the interviewed coordinating entity, the Atlantic on Bike project mainly aims at:

- Enhancing the local development of the communities covered by the itinerary and particularly boosting job creation.
- Developing tourism in the concerned area while avoiding greenhouse gas emissions.

The total project budget amounts to EUR 5 million. The final budget (and co-financed budget) were not available at the time of the evaluation due to its recent approval.

Stakeholder name	Budget	Country
The European Cyclists Federation (EuroVelo)	EUR 5 000 000	Belgium

2. Implementation of the project

The project has only recently been approved and kicked off in September 2017. The implementation and management of the project on the operational level will be largely supported by the European Cyclists' Federation, which will:

- Coordinate the route survey according to the European Certification Standard for Long Distance Cycle Routes;
- Support the project partners with methodologies (route development, promotion, monitoring, etc.);
- Develop a transnational EuroVelo 1 – Atlantic Coast Route website; and
- Manage a long term agreement for the route.

So far, the interviewed coordination entity has not faced particular difficulties while implementing the project. It was insisted upon the fact that the European Cyclists Federation wishes to remain ahead in order to anticipate the following steps. The ECF is already thinking of ways to keep alive the project outputs after it is completed.

3. Current & future impact

As a project based on tourism cooperation, AtlanticOnBike is expected to have positive impact on the local economy and boost the creation of new activities and jobs in the tourism sector. It will also allow for the valorisation of the Atlantic Coast Heritage. Moreover, this growth will likely disproportionately impact remote areas. Finally, it will also contribute to the environmental sustainability of tourism in the Atlantic area.

- Concerning the expected economic impacts, these can be considered at several different levels. At the macro-level, the development of the Atlantic Coast Route combined with the expected growth in the long-distance cycling market will likely translate into positive economic impacts for the tourism sector across the Atlantic area. Cyclists, like normal tourists, provide business to local hotels, restaurants and various tourist attractions during their stay.

With the Atlantic route going through many rural areas, this economic impact can be expected to be disproportionately concentrated in rural areas. It may thus provide an important financial boon for remote areas struggling to attract tourists.

- Long-distance cycling routes benefit not only holiday-goers, but also the local population. Many locals use small portions of the routes for short rides. This infrastructure will thus promote an active lifestyle for locals and contribute to improving the quality of life.
- The growth of environmentally sustainable tourism will contribute to the overall sustainability of tourism in the Atlantic area. It is very much in line with the wider growth in environmentally friendly tourist options, such as eco-tourism.

In addition, the development of the Atlantic route can be expected to have positive impacts in terms of the development of cooperation between various stakeholders on the local level. The sustainable development of the route will be predicated on the implementation of long-term cooperation mechanisms. This cooperation may in turn spill over into other areas.

4. Contribution to the AAP

The AtlanticOnBike project can be expected to contribute to the Atlantic Action Plan in a number of ways. Most directly, the project will directly support Specific Objective 4.2, which aims to combat seasonality and improving prospects for SMEs through diversification of maritime and coastal tourism products and development of niche markets. The project will not only contribute to the development of a new tourism offering in the Atlantic area, but also promote the valorization of the area's natural and cultural heritage. Indeed, long-distance cycling holidays entail immersion in the natural and cultural landscape to a much greater extent than more traditional holidays.

More generally, the project will also contribute in a more indirect manner to Priorities 1 & 2. Priority 1 concerns the development of the Blue Economy across the Atlantic area. With many local economies along the coast relying extensively on tourism, the development of the Atlantic route will have a potentially important impact. The type of economic growth promoted can also be considered to be highly sustainable, benefiting stakeholders in local and remote areas (Specific Objective 4.1). Finally, as an environmentally sustainable tourism product, the project can also be seen as contributing to Priority 2 and Specific Objective 2.2 in particular.

It should be noted that the interviewed coordinating entity, the European Cyclists Federation, drew no direct connection between the Atlantic on Bike project and the Action Plan. As far as the interviewee knew, the project had not specifically been design in order to meet Action Plan criteria or goal; any alignment is thus largely coincidental.

5.5.6 MerSur Project

1. Background

Knowledge of the ocean is a fundamental part of the information needed to meet the growing needs of maritime and coastal policies, and of the various users of the sea (environmental protection, rescue at sea, spatial planning safety of navigation, marine renewable energies, etc.).

More specifically, developing an Atlantic ocean observing and predictive capability based on existing structures, platforms and mechanisms is a crucial objective of the maritime strategy at the regional level (Brittany region) and at the European level (Atlantic Action Plan). Indeed, the expected advantages linked to the development of programs, tools and actions for surveying and observing the Atlantic coast are significant: they will help to support the implementation of public policies, reduce costs for industry, public authorities and research institutions, stimulate innovation and reduce uncertainty in the behavior of the Atlantic ocean and the impact of climate change.

For more than 20 years, SHOM has been carrying out R & D activities on ocean modeling, in cooperation with the main French organizations involved in the field of the environment (Météo-France, CNRS, IRD, CNES, Ifremer, etc.), as well as French and foreign university research laboratories.

Supported by the CPER Bretagne 2015-2020 (State-Region Cooperation Contract) and Brittany's ERDF programme, the SHOM and its partners (Météo-France, IUEM, CNRS, Pôle Mer Bretagne Atlantique) have launched the MerSure project, which aims at promoting a modern coastal oceanographic forecasting capacity by developing new tools and services dedicated to the specific needs of public maritime policies and public and private sea users.

The project is guided by four overarching objectives:

- **Improvement of modeling tools in coastal and littoral zones:** the R & D objective is to improve and optimize monitoring and forecasting models for hydro-oceanographic conditions in different areas: optimization of numerical schemes, increase of the resolution in coastal zones, assimilation of in-situ and satellite data adapted to fast processes in the coastal field, evaluation of the performances of the models...
- **Creation of a collaborative platform providing key services:** the goal is to create and share an innovative collaborative platform for the visualization, exploitation and dissemination of oceanographic forecasts. A tool will also be dedicated to the exchange of information and knowledge on the state-of-the-art in coastal forecasting. The platform will also integrate the contribution by citizens of physical measurements (underwater visibility for example). Finally, the platform will be closely linked to the national scientific landscape and to other national portals on the marine environment (REFMAR, Coriolis, Mercator Ocean, Sea Pole, VVS Météo-France)
- **Design and development of dedicated operational services to meet the needs of various users of the sea and public policies:** The objective is to develop online tools and services to exploit model outputs for direct applications by different users of the sea.
- **Training and transfer of know-how and technologies to SMEs:** The aim is to ensure the transfer of know-how, technologies and data to SMEs in order to give them the means to develop value-added services and products.

Total project budget: EUR 7 810 000

- ERDF: EUR 365 000
- National funds: EUR 7445 000

Stakeholder name	Budget	Country
SHOM	EUR 7 810 000	France

2. Implementation of the project

The main actions implemented during the 2015-mid 2017 period include the development and optimization of modelling tools, the development of the collaborative work platform and the strengthening of relationships with the private sector.

Concerning the development and optimization of modeling tools of the coastal zone, continued coastal modeling efforts have been undertaken in several areas such as:

- Study of wave breaking in coastal zone;
- Optimization of HYCOM numerical schemes used in SHOM hydrodynamic models; and
- Development of MNT fusion methods.

The collaborative platform has been developed and is online on the SHOM website. It is now based on the SHOM cartographic portal and the “ncwms” technology developed by Reading University (UK). In this way, the dynamic oceanographic data can be combined with the static data already present on the portal to improve the interpretation of the results – e.g. backdrop maps, high resolution bathymetries, current maps, legal boundaries or areas of interest, etc. Special attention was paid to ensure the interactivity of the platform in order to democratize as much as possible the access to results of hydrodynamic models.

To be more precise, there are two ways of visualizing the forecasts (tutorials are proposed to users online):

- Access the forecast maps through the SHOM forecast catalog to spot the areas of interest; and
- Access to Oceanogram tabs by clicking on the map at any position to get in one page all the high resolution forecasts available at this very position.

Concerning the strengthening of relationships with the private sector, the SHOM has promoted the dialogue between its teams and SMEs and industrial groups in the field of the sea. To this end, the SHOM relied on the cluster “Pôle Mer Bretagne Atlantique” to organize a presentation day of its service offering to the private sector: the “Blue Day” organised on 21 April 2016. SHOM also participated as a data provider in the first “Ocean Hackathon” organized by the cluster “Brest Technopôle” from 7 to 9 October 2016.

3. Current & future impact

The MerSure project is expected to have important impacts on the Atlantic issues. It will contribute to :

- **Increase the capacity of marine and maritime stakeholders in Brittany to innovate through research and technology:** the project will improve the models of monitoring and forecasting hydro-oceanographic conditions and will share the results through an innovative collaborative platform. On this platform, the users will benefit from the visualization, exploitation and dissemination of oceanographic forecasts.
- **Guide research towards greater acknowledgement of the specific needs of the users of the sea and public policies:** the platform will develop online tools like automatic generation and sending of custom coastal oceanographic bulletins featuring custom maps, oceanograms and automatic detection of the presence of particular physical processes. This will help to reinforce the safety and security of seafarers, coastal populations, property and ecosystems.
- **Developing the blue economy in Brittany:** The main objective of the project is to deliver a free service accessible to all potential users with high resolution coastal forecasts. This will help to stimulate the private sector, which may use them for added-value products, and thus encourage blue growth around operational oceanography in general.

4. Contribution to the AAP

The MerSur project is in line with the objective of the Priority 1 of the AAP, which aims to “Promote entrepreneurship and innovation”, more specifically, to the Specific Objectives 1.1 & 1.2. It will help to collect improved knowledge on the Atlantic ocean through the development of modeling tools of the coastal zone. Moreover, its collaborative platform will help to share knowledge between researchers, higher education organizations, companies and even citizens at many levels (regional, national and, to some extent, european level). Finally, the project will enhance the competitiveness and innovation capacities in the maritime economy of the Brittany region. Indeed, the project pays special attention to the needs of SMEs. The platform offers the possibility to put online and share models and results developed by SMEs and / or the SHOM R&D partners. Training for the use of the portal and the exploitation of oceanographic forecasts will also be opened to SMEs and research laboratories.

The MerSur project also contributes to the implementation of the Priority 2 of the Atlantic Action Plan “Protect, secure and develop the potential of the Atlantic marine and coastal environment” and, more specifically, to the Specific Objectives 2.1 and 2.2. First, by improving the knowledge of the Atlantic Ocean, the MerSur project will help to reinforce the safety and security of seafarers, coastal populations, property and ecosystems. For example, it is important to underline that a restricted access to the platform will be offered to public actors to support rescuing operations at sea and/or the management of accidental pollution events. Secondly, the Action Plan explicitly aims at developing a European Atlantic ocean observing and predictive capability, based on existing structures, platforms and mechanisms to support the implementation of EU policies, reduce costs for industry, public authorities and research institutions, stimulate innovation and reduce uncertainty in the behaviour of the Atlantic ocean and the impact of climate change. The MerSur projects directly contributes to this objective.

5.5.7 WEAMEC

1. Background

The world's tides, ocean waves, river currents and strong coastal winds all contain potential energy that can be used to produce electricity—reducing our dependence on fossil fuels. Even the differences in salinity and temperature that occur in bodies of water create dynamic forces that can be used to produce power. All of these make up different forms of marine renewable energies (MREs).

The Pays de la Loire region of France has several natural advantages to develop MREs. The region has very good infrastructure to support the optimal deployment of MREs (powerful port and logistics facilities), internationally recognized public and private R&D teams on all MRE technologies, and some well-recognized schools and institutions offering training in domains relevant to MREs.

Following a process of extensive collective deliberations, a dedicated joint strategy for MREs was defined by the stakeholders in research, training and innovation with the strong support of the Regional council. The strategy seeks to boost the MRE sector in the region, protecting its jobs and increasing its visibility.

This led to the launch of the **West Atlantic Marine Energy Center (WEAMEC)** on 19 May 2015 in Nantes. The WEAMEC was founded by the university *Centrale Nantes* and its main partners: the University of Nantes, the EMC2 competitiveness cluster, and the Jules Verne Institute of Research and Technology. It also benefits from the support of the Regional Council of the Pays de la Loire, the ERDF (European Regional Development Fund), Nantes Métropole, and the CARENE (Saint-Nazaire and Estuary Regional Urban Community). The WEAMEC is entirely dedicated to MREs, and was created to accelerate the awareness and attractiveness of the sector and the expertise of its actors. Its ambition is to make the region an international leader in the sector by 2020.

The WEAMEC's general objective is to **better structure the services on offer and to become a veritable R & D gateway for the MRE sector.**

At the initiative of the Regional Council of the Pays de la Loire, academic and industrial actors in the fields of research, training and innovation worked to define a common strategy for structuring and further developing the dynamics of the regional MRE sector.

The **resulting roadmap (2015-2020)** sets out the way forward, the means and the actions to be implemented. According to this road map, the WEAMEC will concentrate on progress on the following objectives:

- **Develop fixed-structure wind power**, especially in the extreme conditions (hard ground, strong swell, etc.) of the Atlantic coast area.
- **Accelerate the transition from fixed to floating wind turbines.** Crucially, floating turbines expand the zone available for exploiting wind. They can be sited where the wind is stronger, avoid zoning conflicts with other maritime users, and reduce environmental impacts.
- **Move ahead with less mature MRE technologies**, such as tidal energy, ocean thermal energy conversion (OTEC) and wave energy.
- **Develop innovative technological components** for these different technologies.

Total project budget: EUR 5 million

- ERDF: EUR 1,5 million
- Other resources: EUR 3,5 million

Stakeholder name	Budget	Country
Regional Council Pays de la Loire	EUR 5 million	France

2. Implementation of the project

The day-to-day running of the consortium is led by its four founding members (the *École Centrale* and the University of Nantes, the competitiveness cluster EMC2 and the Jules Verne Institute of Research and Technology) based on the shared strategic plan developed.

The structuration and development of a powerful MRE network in Pays de la Loire

To date, the WEAMEC has already managed to bring together 10 laboratories, 15 research institutions and several local authorities. 300 people (150 Full Time Equivalents) are involved in research, innovation and training activities. The WEAMEC ecosystem is further boosted by the involvement of about 50 industrials in MRE challenges with major players in ship building (DCNS, STX...), energy providers (EDF, ENGIE), turbine and integrated MRE device developers and manufacturers (GE), or major component manufacturers (ROLLIX), and a large number of small and medium firms, mainly federated in the NEOPOLIA MRE cluster.

The WEAMEC's partners take part in over 100 joint projects worth over EUR 50 million. It does not finance these projects, but it supports them by providing different types of services according to their needs (e.g. contribution to setting up of the projects and the project's elaboration or access to the WEAMEC network).

The WEAMEC call for projects

A first WEAMEC **call for projects** was made in early 2016 to co-finance 11 academic research projects involving regional laboratories and dealing with issues identified in the roadmap. A second call for projects was launched in January 2017 and led to the co-financing of 5 academic research projects. The projects financed last up to three years. The research teams should be organized in consortiums and be supported, at least, by two regional laboratories. Most of them are co-funded by industrials involved in the MRE sector. Some are only encouraged by an economic player through a support letter describing its interest for the issues.

Calls for projects dedicated to **support the attractiveness of the Pays de la Loire** are also launched. Indeed, a key mission of the WEAMEC is to attract the best researchers to the region. In order to help the members of the WEAMEC network to find and keep the best researchers, when they create a job linked to the MRE sector, the WEAMEC offers to co-finance their research project. The selection of laureates is made through an open and continuous call for projects. The WEAMEC has already hired two people who are responsible for assessing candidates to this programme.

WEAMEC also supports the development of **international relations of the research teams** in its ecosystem. To this end, WEAMEC co-finances the mobility of researchers to carry out projects in close collaboration with two laboratories: a research establishment from Pays de la Loire and an establishment of an ecosystem targeted in the international strategy of WEAMEC. The call for "International Mobility-WEAMEC" is permanently open over the 2016-2020 period and offers a support

of up to 2 years to accompany the researcher, via his salary, his running costs and mobility costs. A WEAMEC grant of up to EUR 200k is allocated per operation. An important aspect to underline is that it was decided to link this call for projects to the H2020 Marie Skłodowska-Curie actions (MSCA) calls for project. As a consequence, the EU first assesses applications, and in case of non-selection, the application is re-analyzed by the WEAMEC.

The development of a continuous training related to MRE

The WEAMEC has developed a continuous training programme covering all the dimensions of the MRE supply chain. This training, coordinated by *Centrale Nantes* and the University of Nantes, is unique in France and allows the successful participants to be officially recognized as “referent MRE”.

3. Current & future impact

The WEAMEC will accelerate **training, research, and innovation projects** in the marine renewables ecosystem in the Pays de la Loire.

With the support of the EMC2, *Pôle Mer Bretagne Atlantique*, and the S2E2 clusters, as well as research and training organisations, it will progressively gather all the actors of the supply chain, to develop and accelerate collaborative projects. The development of innovative production methods, ocean engineering and electrical engineering are thus strongly encouraged by the WEAMEC. WEAMEC has a double positive impact on the research ecosystem of the Pays de la Loire. First, it financially supports researchers selected through the calls for projects previously described. Second, it provides different types of services according to the needs identified by the WEAMEC's partners engaged in joint projects (100 joint projects are identified worth over EUR 50 million euros). For these projects, the WEAMEC estimates that its support to projects helps to increase their turnover by 25%.

Moreover, the WEAMEC will help to meet the growing needs for skills and support job creation in the field of MREs in Pays de la Loire. Indeed, it registers and evaluates training related to this topic, but also participates in the development of new training courses on MREs. The network around MRE training now represents:

- Training from operator- to engineer-level across all MRE fields
- 15 master and engineering courses covering all marine sciences
- Initial education for more than 300 students / year
- More than 20 executive education modules (see the continuous training mentioned in section2)

Finally, the WEAMEC also supports the international dimension of the Pays de la Loire in the field of MREs through the “International Mobility-WEAMEC” calls for proposal. This will support the region Pays de la Loire in realizing its aspiration of becoming an international leader of MRE in 2020.

4. Contribution to the Action Plan

The WEAMEC will contribute directly to the implementation of the Priority 1 of the Action Plan, dealing with the promotion of research and innovation. Indeed, this center of excellence brings together the MRE eco-system in the Pays de la Loire Region within the fields of research and innovation. It increases the capacity of the region to innovate through research and technology by encouraging networking and co-operative research between research centres, higher education and business and by transferring knowledge and insights, as well as skills, between them. It also encourages the international and inter-sectoral mobility of researchers in Europe through the

“WEAMEC International Mobility call” which is linked to the “MSCA calls for project”.

By developing MRE technologies, the WEAMEC project also contributes to the Priority 2 of the Action Plan dedicated to *“the exploitation of the renewable energy potential of the Atlantic area’s marine and costal environment”*. The Action Plan in particular identified a number of specific needs to support the development of marine renewable energies in the Atlantic area. These include:

- *encouraging assessment and mapping of the potential of the Atlantic’s energy resource and determining how to mitigate the environmental and navigational impact;*
- *contributing to a European electricity transmission system that allows the balancing of loads and provides better links between offshore and onshore energies;*
- *promoting research, development and demonstration of technologies for the construction and maintenance of renewable energy installations;*

The WEAMEC project directly contributes to promoting research, development and demonstration of marine renewable energy technologies.

5.5.8 Innovation and Sustainability in the Management and Exploitation of Marine Resources

1. Background

The European Blue Economy is one of the cornerstones of the European economy with an estimated contribution of over EUR 500 billion in GVA per annum. If the Blue Economy is to continue to be a key driver for economic growth, it will require continued investment in research and innovation. Much of this is focused on 'emerging areas' of the Blue Economy, such as marine biotech or marine renewable energies. However, innovation will also play a critical role in continuing to support the viability and success of more traditional sectors, such as the seafood or shipbuilding sectors. Research and innovation are also needed to secure the marine resources on which this future growth is predicated and develop novel strategies and tools for their monitoring, protection and sustainable management.

The Interdisciplinary Centre of Marine and Environmental Research (CIIMAR) is a leading Portuguese research & training institution at the University of Porto. It supports the development of high-quality research, promotes technological development and supports public policies in the area of Marine and Environmental Sciences. As such, it plays a key role in supporting research and innovation in the Blue Economy in Portugal.

The **Innovation and Sustainability in the Management and Exploitation of Marine Resources** (INNOVMAR) project, supported by the Norte 2020 ERDF Operational Programme, aims to develop and consolidate the three main research lines of CIIMAR, thereby enhancing its ability to contribute to research and innovation. In particular, the project will focus on work in the area of marine biotechnologies, enhancing the added value generated by the seafood sector and protecting and sustainably managing marine resources.

The INNOVMAR project aims to develop and consolidate the main research lines of CIIMAR through the implementation of three sub-projects:

- The **novel marine products with biotechnological applications** (NOVELMAR) sub-project aims to strengthen and consolidate CIIMAR know-how and competence in the area of marine biotechnology in special on the use of marine organisms' bioactive products that may have pharmacological, nutraceutical, cosmeceutical, antifouling and other industrial applications. CIIMAR researchers will survey the bioactive compounds produced by marine organisms using an innovative approach, gathering knowledge that will make CIIMAR more competitive in national and international terms.
- The **innovation and valorization of seafood products** (INSEAFOOD) sub-project aims to enhance CIIMAR scientific competences in the area of Aquaculture and Seafood Quality, which are relevant for the implementation of the North Portugal Smart Specialization Strategy. Research effort will be focused on economically important and well established shellfish and finfish species playing an important role in Portuguese aquaculture. The project will also monitor marine algae and natural populations of sea urchin.
- The ECOSERVICES sub-project (**assessing the environmental quality, vulnerability and risks for the sustainable management of NW coast natural resources and ecosystem services**) aims to strengthen and consolidate CIIMAR expertise and competence to assess environmental quality, vulnerability and risks providing knowledge, technology and solutions for the sustainable management of natural resources and ecosystem services. It is focusing in particular on the NW Portuguese coast.

Total project budget: EUR 4 269 257

- ERDF: EUR 3 628 869
- Other resources: EUR 640 388

Stakeholder name	Budget	Country
CIIMAR	EUR 4 269 257 (100%)	Portugal

2. Implementation of the project

Managed independently, the three sub-projects were launched in 2015 and 2016. Work will continue in the coming years. No major issues are expected for implementation of the project. CIIMAR has delivered a number of similar research programmes and participated in a wide range of EU supported projects in the past. Inherent to the nature of scientific undertakings, however, the ultimate results of the project are dependent on the findings of the scientific work, which cannot be predicted beforehand.

The **NOVELMAR** research plan is structured in 9 major Work Packages. Work has begun on the harvesting, isolation and culture of marine organisms in preparation for the sequencing, genome analysis and molecular cloning. The main innovation in this research is the use of a double approach – a genomic and a bioassay-guided approach - to study a diversity of industrial applications using a biorefinery pipeline concept, aiming to produce zero residues. CIIMAR researchers are applying a methodology that will involve several levels of biological organization from the DNA to the organisms. Due to the previous successful experience of the MARBIOTECH project (ON2) researchers have available at the beginning of the project pure elucidated compounds, organisms biomass, isolated organisms, and will continue the collection and isolation of new organisms, in special extremofiles that may have innovative products, including enzymes, with novel properties to be used in industrial processes.

The **INSEAFOOD** research plan is structured in 8 major Work Packages. Some of the early work in this sub-project has focused on sea urchins. The sea urchin is considered a high commercial value species due to their gonads (roe) which are highly appreciated. Local producers hope to raise the status and exports of Portuguese sea urchins, establishing it as the 'Portuguese caviar'. As part of Work Package 3.3, the natural populations of sea urchin (*Paracentrotus lividus*) from the North coast of Portugal were characterized in terms of distribution, abundance, environmental quality of the habitat and market-related traits of gonads. Seasonal surveys have also been undertaken of oyster populations in Mira channel. Other Work Packages will be focusing on the optimization of algae cultivation conditions, development of functional diets for farm-raised fin fish, development of multi-trophic aquaculture systems, innovative processing and preservation techniques and food safety.

The **ECOSERVICES** research plan is structured in 7 major Work Packages. These are based on different thematic monitoring and research programmes. Work underway covers hydro-biological and biodiversity dynamics of systems, invasive species and ecological functioning, models for coastal and estuarine environmental management and assessing ecosystem vulnerabilities and environmental risks in relation to climate change

3. Current & future impact

Overall, the INNOVMAR project aims to generate new knowledge to support the sustainable development of the Blue Economy and strengthen public policies to underpin the monitoring, protection and sustainable management of marine resources. The project will also be crucial to increasing CIIMAR (and by extension European) competitiveness across the fields of research covered. In particular:

- The **NOVELMAR** sub-project will generate new knowledge in the field of marine biotechnology. Discoveries may have pharmacological, nutraceutical, cosmeceutical, antifouling and other industrial applications. The genetic diversity in the marine environment and multiplicity of applications make it difficult to comprehend the full future (economic and societal) impact of different discoveries.
- The **INSEAFOD** sub-project is expected to enhance the competitiveness and sustainability of the seafood sector in Portugal. The various components of the research plan will contribute to knowledge allowing to increase the quality and productivity of Portuguese seafood (notably aquaculture) and develop innovative processes and practices to increase efficiency and add value.
- The **ECOSERVICES** sub-project is expected to support environmental policies, management actions, and other activities contributing to increase the exploitation of natural resources and ecosystem services in a sustainably way.

4. Contribution to the AAP

The INNOVMAR project is directly aligned with three of the Action Plan's four main Priorities.

- The **NOVELMAR** sub-project support Specific Objective 2.3 concerning the development of high value added emerging marine industries. Marine biotechnology in particular is explicitly mentioned by the Action Plan.
- The **INSEAFOD** sub-project supports Specific Objective 1.3 aiming to foster adaptation and diversification of economic activities by promoting the potential of the Atlantic area. It is contributing to both the future competitiveness and sustainability of the seafood industry. It is also highly aligned with the EU-wide priority of unlocking the full potential of European aquaculture.
- The **ECOSERVICES** sub-project is aligned with Specific Objective 2.2 supporting the exploration and protection of marine waters and coastal zones. It is contributing both to the monitoring of environmental health and risks, but also the development of new methodologies for applying this knowledge towards strengthened management of the marine and coastal environment.

5.6 Regional case studies

5.6.1 Ireland – Cork

1. Relationship between the region and the Atlantic

County Cork is the largest and southernmost county of Ireland. It has 1 094 km of coastline, the second-longest coastline of any county after Mayo and approximately 20% of Irish coastline. In 2016, the County's population was 542 196, making it the third most populous county in Ireland. Its namesake Cork City is also the second most populous city in Ireland, with a population of 125 622 according to the 2016 census. The coastal area of County Cork is home to approximately 65% of the County's population who live on or adjacent to the coast, including seven inhabited West Cork islands.

Set amid the marshlands of the River Lee, Cork City has been a maritime hub since records began. The city and its Harbour, the second largest natural harbour in the world, have been pivotal to the history of Ireland. Today, the Cork Harbour is Ireland's second busiest port, after Dublin, handling almost 20% of Irish imports and exports.

The Harbour area also remains a major centre of employment in Cork. Traditional heavy industries have waned since the late 20th century. Today, the Harbour has major and strategic significance in energy generation, shipping, refining and pharmaceuticals. Several pharmaceutical companies have significant operations in the area, including Pfizer Inc., Johnson & Johnson and Swiss company Novartis. It is also home to the Irish Naval Service and National Maritime Institute of Ireland. In recent years, it has also emerged as an epicentre of maritime technological innovation as the epicentre of the IMERC initiative launched in 2010. A major redevelopment project underway by the Port of Cork will also pave the way for urban renewal projects in the docklands worth billions of Euros. Cork City is also the European headquarters for Apple and hosts a significant presence by other major tech firms such as Dell or Logitech. Its ability to attract foreign industry has contributed to its economic dynamism. With an average household income of EUR 72K, the Cork area enjoys a relatively higher affluence than most parts of the country outside Dublin.

Outside the Cork metropolitan area, County Cork is also home to many rural remote areas with a strong reliance on traditional industries such as agriculture and fishing. Cork has a mountainous and flat landscape with many beaches and sea cliffs along its coast. This region of Ireland is particularly well known for its peninsulas. The south west region, with all of its natural beauty, is one of Ireland's main tourist destinations, and is particularly known as the starting point for the Wild Atlantic Way.

2. Regional maritime strategy

Cork (County or City) does not have a specific maritime strategy. Rather, efforts are guided mainly by Ireland's national maritime strategy (**Harnessing Our Ocean Wealth**). Other aspects covered by the Action Plan are also addressed through other national strategic frameworks, such as the **Food Harvest 2025 Strategy** for the fisheries and aquaculture sectors. On the regional and local levels, strategies in place acknowledge the importance of maritime issues to varying degrees.

The **Cork County Development Plan** (published in 2014 and updated in 2017) is a six year development plan for the County that attempts to set out Cork County Council's current thinking on planning policy looking towards the horizon year of 2022. The Strategy a number of key aims, namely: i) creation of an enhanced quality of life for all, ii) sustainable patterns of growth in urban and rural areas, iii) sustainable and balanced economic investment, iv) an effective physical and community infrastructure, v) a quality built environment, vi) a network of enhanced natural resources and vii) responsible guardianship of the County. The plan covers a number of relevant maritime issues,

including marine and coastal planning, development of maritime sectors, and protection of coastal and marine habitats.

The **Cork Area Strategic Plan** is a framework to enable Cork to become a leading European city region - globally competitive, socially inclusive and culturally enriched. Cork Area Strategic Plan 2001 - 2020 was adopted by Cork City Council and Cork County Council on 22nd October 2001. The Strategic Plan was subsequently updated in 2008. The strategy is underpinned by six key concepts, including: i) the regeneration of Cork City, ii) the development of Metropolitan Cork, iii) reinforcement of the Ring Towns and Rural Areas, iv) infrastructure led development, v) creation of an integrated transport system and vi) protection and enhancement of the environment.

Throughout the strategy, a number of relevant maritime themes are underlined. Concerning the Harbour, it underlines the importance in particular of protecting it and enhancing its environmental status. It also states that the reorganisation of harbour activities and their move downstream is a key priority and will also play a driving role in urban renewal efforts. As part of the development of an integrated transport system, the development of water busses and ferries is encouraged. More generally, the strategy underlines that the harbours and coast of the Cork Area are an under-appreciated resource, and there is considerable scope to further develop their tourist potential in particular.

Finally, **Cork 2050** is a joint submission by Cork County Council and Cork City Council to the National Planning Framework, which is currently being revised. The document recognises the importance of the marine sector and places emphasis in particular on environmental protection and strengthened coastal and marine spatial planning.

3. Local maritime ecosystem

Public authorities

The **Cork County Council**, with responsibility over a broad stretch of territory comprising approximately 20% of the total Irish coastline and Cork Harbour, has traditionally had a large focus on maritime issues. This includes issues such as maritime and coastal planning and management, development of maritime activities or environmental protection.

The **City Council** has historically not had an extensive focus on maritime issues. Cork City is located slightly upstream on the River Lee on the northwest corner of Cork Harbour, thus several miles 'inland'. While having a strong maritime heritage and an industrial port close to the city centre, the City has not traditionally thought of itself as distinctly maritime. The possible boundary extension of the city limits may in the future, including much of Cork Harbour, may significantly change this.

The **Irish Naval Service (INS)**, headquartered in Cork Harbour, is Ireland's largest maritime institution with over 1 100 personnel. It has become increasingly involved in maritime innovation activities, in particular through the now defunct IMERC initiative. The White Paper on Defence published in 2015 recognised innovation as a force multiplier for the Defence Forces.

The **Irish Seafood Development Agency (BIM)** aims to grow a thriving Irish seafood industry by expanding the raw material base, adding value and developing efficient supply chains to deliver on the Irish Government's Food harvest 2025 targets for seafood. BIM has two facilities in County Cork, a major centre of fishing and aquaculture activity in Ireland, namely the Regional Fisheries Centre in Castletownbere and the **Seafood Development Centre** in Clonakilty. The latter offers organisations the ability to test and trial innovative product and process ideas before committing to full commercialisation.

The **Seafood Protection Authority (SFPA)**, located in Clonakilty next to BIM, is Ireland's competent

authority for Seafood Safety and Sea-Fisheries Protection.

Research & innovation

The **University College Cork** is home to the largest and most significant marine renewable energy research group in the world. Research groups are housed in the EUR 14 million state-of-the-art Beaufort Laboratory in Ringaskiddy. This facility is also home to the national marine energy test-tank facility. The UCC also has a wide array of other marine and maritime issues, such as fisheries and aquaculture (Aquaculture and Fisheries Development Centre), marine environmental monitoring, marine forecasting, energy modelling, climate and coastal science, seabed mapping, data management

The **Cork Institute of Technology (CIT)** is the highest research-performing Institute of Technology in Ireland. It hosts multidisciplinary research groups covering a wide array of areas relevant to the maritime domain, such as the Maritime Research and Development Group or the NIMBUS Centre for Research in Embedded Networked Systems.

In 2003, the CIT and the INS engaged in a Public Private Partnership to establish the **National Maritime College of Ireland (NMCI)** to train candidates for the merchant marine and the INS. The NMCI hosts important training infrastructure for maritime and energy sectors and has strong expertise in areas such as navigation, maintenance, security, maritime engineering and logistics. It has increasingly engaged in collaborative research projects at the EU level in these areas through its Halpin Centre for Research & Innovation.

The **Tyndall National Institute** is a leading European research centre in integrated ICT hardware and systems. Tyndall is focused on developing technology solutions for health, communications, energy, agriculture, food, marine and the environment sectors.

Ports & harbours

The **Port of Cork** is the main port serving the South of Ireland, County Cork and Cork City. It is the second busiest port in Ireland and offers all six shipping modes. The Port of Cork company is a commercial semi-state company responsible for the commercial running of the harbour as well as responsibility for navigation and berthage in the port.

The **Castletownbere Fishery Harbour Centre** is one of Ireland's major fishing ports and is Ireland's largest whitefish port.

The **Royal Cork Yacht Club** located at Crosshaven in Cork Harbour was founded in 1720, making it the oldest in the world. It pioneered the development of leisure sailing and will celebrate its 300th anniversary in 2020.

Private sector

Cork Chamber is the leading business organisation for the promotion and development of economic and commercial activity in the region representing close to 1 100 companies.

4. Relevance of the Atlantic Action Plan for the region

The Action Plan is broadly relevant to the needs, challenges and opportunities observed in the Cork region. Only a small number of specific issues were identified by stakeholders as being inadequately covered by the Action Plan, these include developing connectivity and accessibility beyond just ports, the specific socio-economic challenges of islands and sustainable urban development.

With regards to **Priority 1**, innovation and entrepreneurship are high on the agenda in Cork. This is evidenced in the launching of the IMERC Cluster in 2010 to bring together research actors and

industry. While it has been discontinued, it has created a strong dynamic and participants UCC, CIT and NMCI remain highly active in this area.

Fishing and aquaculture also remain an important part of the economy, especially in more rural areas. Ireland has ambitious objectives to develop its seafood sector through sustainable exploitation of resources and innovation. National actors, such as BIM's Seafood Development Centre and the SFPA are supporting the sustainable development of the industry in the region. UCC can also be noted as one of Ireland's leading institutions on fisheries and aquaculture research.

Concerning **Priority 2**, environmental protection and conservation of Cork's approximately 100 km coastline is a major priority, in particular given the importance of the region's natural assets for attracting tourists to the region. With Cork Harbour to play a central role in the development of the region, coastal and maritime spatial planning issues has been high on local agendas. Two thirds of the land around the harbour is expected to be developed by 2050. Recent redevelopment of the Ringaskiddy port facilities has demonstrated the importance of foresightful and integrated planning. Local actors, such as UCC, are strongly involved in research into areas such as ocean observation and forecasting or seabed mapping. Cork has also sought to establish itself as a leading centre of research & innovation in the marine renewable energy sector. Other emerging Blue growth fields are also an interest, in particular blue biotechnology with the region being home to a major concentration of pharmaceuticals

Home to the second largest port in Ireland, **Priority 3** is of particular relevance to County Cork and the wider South West region. The Ringaskiddy Port Redevelopment project is expanding capacity and moving port activities downstream to the Lower Harbour. Key challenges for the project relate to issues of accessibility, with major infrastructure enhancements needed, such as the expansion of the two-lane N28 leading to Ringaskiddy and railway connections. As a high growth city seeking to reaffirm its status as Ireland's second city, public authorities also underlined challenges faced by ensuring other types of connectivity, notably air.

With regards to **Priority 4**, County Cork and the City of Cork face typical social challenges, such as poverty and exclusion in both rural and urban contexts. With some 26 islands off the coast of (mainly Western) County Cork, the specific challenges of islands are also of high priority and not adequately reflected in the Action Plan according to stakeholders. However, Islands as well as the rest of the region in general rely extensively on developing tourism to maintain livelihoods on inhabited islands, making the coastal tourism objective of the Action Plan highly relevant. Sustainable urban development (in the context of maritime cities) is also a priority issue in Cork City that is not well reflected in the Action Plan. With the movement of port activities to the Lower Harbour, the redevelopment of the old port area near the city centre ('docklands') will largely define the development of the city in coming years.

5. Implementation of the Action Plan

Overall, the evaluation did not find evidence to suggest that the Action Plan had achieved influence on local decisions or priorities or otherwise exercised influence on stakeholders. The effectiveness of the Action Plan in County Cork has been limited to date primarily due to the low level of awareness. Stakeholders in the research & innovation sector were generally aware of the Action Plan and / or had participated in different events related to the Action Plan; however, the level of knowledge within other stakeholder groups, notably the public administration, ports and private sector was generally very low or non-existent.

The implementation mechanisms of the Action Plan, notably the Atlantic Assistance Mechanism, also appear as ineffective to date in the region. While an Atlantic Forum workshop was organised in Cork in 2013, no subsequent Action Plan events have been organised in the region. Most stakeholders had

little to no knowledge of the National Unit of the Assistance Mechanism, based in Galway at the Marine Institute. Local leaders did not report having contact with or awareness of the Irish member of the ASG. Stakeholders also underlined that the lack of any dedicated funds was a handicap.

However, evidence points to the wider impact of European policies in the Cork area and Ireland more generally. Stakeholders underlined that Ireland had long been a country focused more on agriculture than the sea. Developments in EU maritime policy have had an important impact in terms of developing and shaping the country's 'maritime consciousness'. Regardless of the influence of the Action Plan, developments in the Cork area in recent years have also been largely in line with the Action Plan. This is presented in the following sub-sections.

Priority 1

The Cork Harbour area has traditionally been amongst the key employment locations that have underpinned Cork's economic success. While previously a centre of heavy industry, the Harbour area is today the focal point for key industries such as the pharmaceutical industry, Ireland's only oil refinery at Whitegate and significant port activities. The Harbour area is also home to an increasing number of research & training organisation pioneering the development of new technologies, in particular harnessing the potential of marine based renewable energy technologies.

While the Marine Institute in Galway has long been considered as the premier centre for marine and maritime research in Ireland, Cork has emerged as a challenger and pursued a vision to establish itself as a global maritime and energy innovation hub. If this vision today can be somewhat called into question with the demise of the IMERC Cluster, its legacy has nonetheless left a strong ecosystem of actors in Cork's Lower Harbour area that continue to make it a centre for research and innovation in Ireland. This notably includes the MaREI Centre for Marine and Renewable Energy, the LIR Ocean Test Facility, the 'Entrepreneur Ship', a business incubator dedicated to marine and energy companies or the Halpin Centre at the NMCI.

IMERC was established during Ireland's 'maritime awakening' during the post-crisis years as attention increasingly was turned to the ocean's potential to contribute to the country's economic development. A tripartite alliance between the UCC, CIT and INS, IMERC sought to become a research and commercial cluster of world standing, by realising Ireland's potential in the global, maritime and energy markets of tomorrow. IMERC provided the framework for the development of a campus in the Lower Harbour adjacent to the NMCI, beginning with the UCC's new Beaufort Laboratory, developing research cooperation and cooperating with industry. The cluster was shuttered in 2016, however this decision has since been strongly criticised and government and business leaders have called for its relaunching.

Cork has sought to establish itself as a centre of innovation in the area of ICT more generally. This is witnessed through recent initiatives, such as the Cork Smart Gateway initiative. Ground was also recently broken on the first buildings of the Cork Science Innovation and Technology Park. While not specifically focused on marine technologies, the development of the local ICT industry creates many opportunities for synergies with the development of innovative marine technology. This can already be evidenced by research partnerships in the maritime domain with the Tyndall National Institute

Fishing also remains a core activity for the economy of the County's rural areas, with Cork being home to one of Ireland's largest fishing ports. Various local and national actors are supporting the sustainable development of the fishery and aquaculture industries in the region, such as the County Council, BIM and its Seafood Development Centre or the Irish Fisheries training School, also located in Cork. These efforts are also supported through extensive research activities, notably at the UCC's Aquaculture and Fisheries Development Centre.

Priority 2

Maritime safety is a central part of the training and research undertaken at the NMCI in Ringaskiddy.

In addition to traditional training activities, NMCI's Halpin Centre has increasingly harnessed in-house expertise towards the development of innovative safety and security technologies.

Developing Cork Harbour in a sustainable manner, including the safeguarding of its key environmental and heritage resources, is an increasingly important priority. Likewise, Cork's coastal and inland waters are a major asset in terms of tourism and marine leisure activities. Their protection and preservation has attracted significant efforts from public authorities and civil society, such as Whale Watch West Cork.

In this context, Cork County Council has taken a lead in the field of Integrated Coastal Zone Management through participation in initiatives, such as the EU Demonstration Programme on ICZM (resulting in the development of the Bantry Bay Coastal Zone Charter, the first ICZM plan in Ireland). A comprehensive was also published for Cork Harbour in 2011, seeking to promote a more integrated approach to development of the Harbour, using a coastal zone management approach.

As already noted, Cork aspires to establish itself as a leader in the area of marine renewable energies. Local research & innovation actors have developed world class expertise and capacity in this area, notably at the UCC's Beaufort Laboratory. The Laboratory is home to world class testing infrastructure for marine energy technologies and participates in numerous collaborative research projects. The region is also home to a strong ecosystem of private companies working in this sector. The presence of numerous pharmaceutical companies also creates potential synergies with the emerging marine biotechnology sector.

Priority 3

In May 2015, An Board Pleanála granted planning permission to the Port of Cork for the redevelopment of existing port facilities at Ringaskiddy. This redevelopment is necessary to allow the Port of Cork to overcome the existing physical constraints in handling larger vessels and to adapt to the changing nature of port activities, including the trend towards port-centred logistics. Being able to accommodate larger vessels is vital for the Port of Cork to remain competitive and future proof Cork as an international gateway for trade. The project will also allow to relocate port activity from the city centre and redevelop this land.

Priority 4

The Cork regions faces a number of socio-economic challenges in both urban and rural contexts largely similar to those in inland areas. However, these areas have the potential to harness blue growth opportunities to address these challenges. In this sense, much of the investment in developing traditional and innovative blue industries has strong socio-economic undertones. One specific challenge in the Cork area concerns its 26 islands. The unique group of islands off the West coast of County Cork have, for decades, experienced forces of decline. Local authorities have supported island populations in organising and developing strategies to overcome challenges. Funding through CLLD instruments such as the FLAGs and LEADER have traditionally been important in this context.

Coastal and maritime tourism is a very important priority for Cork. Marine and coastal tourism in Country Cork, with its picturesque coastal scenery and as starting point of the highly popular Wild Atlantic Way coastal path, is already a highly developed and important industry. The City of Cork, on the other hand, has focused on better leveraging its maritime assets for increasing tourism, such as Spike Island and the leisure opportunities offered by the Cork Harbour. A new joint tourism strategy was adopted in 2016.

6. Lessons learnt & good practice

A number of lessons and best practices can be drawn from this examination of the Action Plan in the Cork region over the past years.

- ▶ Based in Galway and with few resources, the Assistance Mechanism has had significant difficulties engaging with stakeholders in the Cork area. Even in a small Member State, stakeholders are most often unwilling or unable to travel far to attend events.
- ▶ While there was good awareness of the Action Plan within certain 'pockets', a lack of awareness of buy-in to the Action Plan can be observed, in particular in the local administration. Local authorities viewed it as a relevant document, but too broad to act on and with little incentive to act on given the lack of dedicated resources.
- ▶ The experience of IMERC can be fully capitalised to inform future initiatives, both in terms of good practices and lessons learnt from difficulties. In terms of good practices, IMERC created a highly effective vehicle for integrating the efforts of relevant stakeholders around a common goal. This was supported by strong buy in at local and national level, the implication of the INS and financial commitments for campus development. However, some lessons may be learnt from the challenges of managing the branding of multiple partners in the cluster context.
- ▶ A number of stakeholders underlined that the Blue Growth Agenda honed in to narrowly on a number of sectors seen as high growth. They argued for the need for wider 'Blue-field' funding.
- ▶ The SFPA called for greater participation of regulatory authorities in maritime policymaking. Regulators are able to better see the risks that may exist in policy proposals or innovations early on.

5.6.2 United Kingdom – Cornwall

1. Relationship between the region and the Atlantic

Cornwall is a county in South West England in the United Kingdom with maritime borders to the north, west (Celtic Sea) and south (English Channel). With 697 kilometers of coastline, the length of the coast is significantly large in proportion to the area of the county. So much so that no town or village is further than about 30 kilometers from the coast. The north coast is more exposed and therefore has a wilder nature. The south coast, often referred to as the "Cornish Riviera", is more sheltered, with several broad estuaries offering safe anchorages. The region had a population of 553 000 in 2016, with the demographic trends generally increasing since the 1950s after a century of decline and stagnation.

Historically tin mining was important in the Cornish economy, followed by china clay extraction. Fishing and agriculture have traditionally been other important sectors of the economy. Railways led to the rapid growth of the tourism industry in the region, which has continued importance today – 5 million visitors annually. The economy has struggled in recent decades with the decline of the mining and fishing industries. Today, Cornwall is amongst poorest areas in the United Kingdom, with a GDP per capita of approximately EUR 21K, 70% of the national average and 75% of the EU average. To lay the groundwork for the economy of tomorrow, the area is investing in areas such as agri-tech, the digital economy, marine technology or space & aerospace.

The historical marine related economic activities of fishing, ship and boat building and repair and transportation are still very present and important to the economy. However, the maritime sector is also expanding to include new activities, notably marine renewable energies. Today, marine related activities generate around GBP 500 million to the GDP of Cornwall and support in excess of 14 000 jobs. In addition, a large part of the areas tourism industry, which supports 28 000 jobs, is based on coastal attractions and marine leisure.

2. Regional maritime strategy

In order to guide the future direction of work, increase the recognition of the importance of the maritime sector and respond to the various challenges and opportunities that lie ahead, the Cornwall County Council adopted a Maritime Strategy in 2012 covering 2012 - 2030. The vision set out in the Strategy is underpinned by seven overarching and cross-cutting themes:

- A sustainable approach;
- A joined-up approach;
- Encouraging maritime enterprise and innovation;
- Healthy and resilient coastal communities;
- A working peninsula;
- Connecting land and sea; and
- Pride, recognition and responsibility for cultural, natural and historic assets.

By 2030, the Strategy seeks to achieve four global objectives:

- Cornwall has a sustainably managed maritime environment, which is well understood and known internationally as an excellent location for work, wildlife and for recreation;
- Cornwall's economy is supported by a diverse range of opportunities for ports, marine-related

industries, transport and businesses including environmental technologies;

- Cornwall has a rich and enviable maritime heritage, a healthy maritime natural environment and landscape;
- Cornwall has distinctive, well-connected communities, resilient in the face of change.

In addition to the maritime strategy, local and regional authorities are guided by a number of other relevant policy frameworks. Marine Management Organisations together with local authorities have developed Marine Plans on the basis of the 2009 Marine and Coastal Access Act and the 2011 Marine Policy Statement. Cornwall sits within the South West England inshore / offshore plan areas. Relevant local strategies have also been developed in areas such as tourism, economic development and heritage.

3. Local maritime ecosystem

Public authorities

The **Cornwall County Council** has many relevant responsibilities within the maritime domain. These include planning and execution of the economic development strategy, in particular supporting the **Local Enterprise Partnership** (a voluntary partnerships between local authorities and businesses). The County Council also has responsibilities for the management of a number of ports, culture and heritage and environmental services and protection.

The **Cornwall Development Company** is the economic development company of Cornwall Council and it has been charged with delivering economic priorities and solutions on behalf of the Council. It manages and supports a number of strategic projects an initiatives, such as the Invest in Cornwall initiative or the Marine-i project.

The **Marine Management Organisation** is an executive non-departmental public body established under the Marine and Coastal Access Act. It is notably responsible for setting up a marine planning system and a marine licensing regime, manage UK fishing fleet capacity and UK fisheries quotas, creating and managing a network of marine protected areas (Marine Conservation Zones and European marine sites) and responding to marine emergencies.

Research & innovation

While located in neighbouring Devon, the **University of Exeter** is highly integrated into the Cornish research & innovation community and has a large presence in Cornwall (Penryn Campus). Its research capabilities include a range of field testing, hydrodynamic analysis and deployment expertise including the **Falmouth Bay test site** (Fab-Test), Dynamic Marine Component Test Facility (DMaC) and South West Mooring Test Facility (SWMTF).

Located just across the border in Devon, the **University of Plymouth** offers world class marine and maritime research capacities. It is home to the 3 000 person Marine Institute, the first and largest such institute in the UK.

The **UK South Coast Marine Cluster** brings together over 30 research organisations with industry in Cornwall, Devon, Somerset, Dorset and Hampshire & Isle of Wight. It covers a wide range of areas including marine renewables, autonomy and robotics, design & manufacture and sensors, satellites & environment.

Wave Hub Ltd was set up to manage the **Wave Hub facility** and facilitate testing of a range of offshore technologies including large scale wave energy devices, wave energy arrays, floating wind, hybrid wind/wave devices, major subcomponents and associated subsea equipment.

The **Offshore Renewable Energy Catapult** (ORE Catapult) is the UK's flagship technology innovation and research centre for advancing wind, wave and tidal energy. ORE Catapult works closely with stakeholders across Cornwall and the South West.

Private sector

The **Cornwall Marine Network** is an organisation dedicated to supporting the Marine sector in Cornwall via initiatives that improve profitability and encourage growth through quality and innovation. It was originally created by a small group of Cornish marine businesses in 2002.

The **Marine Offshore Renewables Group** (MOR Group) was formed in 2012 as a network of quality businesses in the South West UK providing outstanding solutions for the marine renewable industry.

Only 40 businesses in the region are classified as being larger than an SME, with three operating in the marine sector. These include **A&P Falmouth, Pendennis Superyachts** and **Fugro Seacore**. Hundreds of other SMEs and micro businesses exist in the marine sector in traditional industries, notably fishing and ship building, as well as coastal tourism and marine leisure and emerging sectors such as marine renewables.

4. Relevance of the Atlantic Action Plan for the region

The Action Plan is broadly relevant to the needs, challenges and opportunities observed in the Cork region. Only Priority 3 was to some extent irrelevant given the lack of large ports in the region.

Concerning **Priority 1**, innovation and entrepreneurship are a key priority of the County Council. In this area, Cornwall has prioritised growth areas such as marine renewables, ship building and space tech (which has some overlaps with marine technologies). In these areas, stakeholders have worked to put in place platforms for cooperating on research and sharing knowledge between the public and private sector.

With regards to **Priority 2**, Cornwall's marine and coastal environment is one of its main attractions for drawing visitors from all over the world. Priority has thus been given to protecting these unique assets. The Cornwall Marine Strategy also highlights a number of issues under Priority 2 of the Action Plan, including integrated coastal and marine spatial planning and climate change adaptation and mitigation. Finally, marine renewable energy has been at the core of the regions strategy for developing the maritime economy. Authorities have worked with the research sector and business to develop a dynamic community with a strong offering for technology developers looking to develop and deploy their devices.

With no large ports, **Priority 3**, is naturally less relevant for Cornwall. However, as underlined in the Action Plan, a major priority of Cornwall's numerous small ports and marinas is developing new incomes streams to ensure their financial sustainability.

Finally, **Priority 4** is highly relevant for Cornwall, as an isolated region both geographically and economically. Large parts of the local populations suffer from socio-economic exclusion that can span over generations. On the other hand, coastal tourism and marine leisure are an integral part of the economy and the lifeblood of many micro businesses, including many in rural and remote areas where tourism remains one of the only means of securing income.

5. Implementation of the Action Plan

Overall, the evaluation did not find evidence to suggest that the Action Plan had achieved influence on local decisions or priorities or otherwise exercised influence on stakeholders. The effectiveness of the Action Plan in Cornwall has notably been constrained due to the low level of awareness of the Action Plan. Only one actor interviewed had extensive knowledge of the document and had participated its elaboration. In the research and public sectors, knowledge of the Action Plan was generally limited to a basic knowledge of its existence. In the private sector there was generally little to no knowledge. This observation is in spite of a generally good familiarity with other relevant EU policy frameworks and a pattern of active EU level participation in a region that has historically considered itself as marginalised in the national context and turned to the EU both for support (e.g. through structural funds) and as a platform to valorise itself.

The implementation mechanisms of the Action Plan, notably the Atlantic Assistance Mechanism, also appear as ineffective to date in the region. None of the stakeholders interviewed were familiar with the Assistance Mechanism or had participated in any associated events. Indeed, no events had yet been held in the South West of the UK. Finally, most of the actors were unaware of the existence of the ASG, the UK representative or which Department was responsible for the Action Plan on national level.

Nevertheless, developments and initiatives taken in Cornwall since 2013 have been highly aligned with the Action Plan, reflecting its ultimate relevance. The main developments are summarised in the following sub-sections.

Priority 1

Cornwall's Maritime Strategy seeks to ensure that its economy is supported by a diverse range of opportunities. This includes supporting the development of existing marine technology businesses, as well as the growth of new sectors, notably offshore renewable energy. Fishing also remains an important industry being pushed, whereas aquaculture is still little developed.

Traditional marine technology businesses are heavily clustered within the Falmouth and Penryn area, and represent more than 75% of the marine technology workforce in Cornwall. However, significant investment to date has been limited to a small number of companies. In this context, the Matrine-i project has been launched in 2015 (supported by ERDF) to help the marine technology sector in Cornwall and the Isles of Scilly grow through research, development and innovation. It does this by bringing specialist services and skills to companies along with the opportunity for funding. The Propel Project (ERDF) is also being implemented by the Cornwall Marine Network to support businesses to improve their skills, productivity and outputs - provided through the assistance of Marine Innovation Mentors.

Beyond traditional marine technology, Cornwall believes it has the potential to become an international market leader in offshore renewable energy and has invested heavily in developing this sector in recent years. Indeed, the UK in general is already recognised as a market leader in the offshore renewable energy sector with major actors and test infrastructure in Scotland, Wales and Northern Ireland. Cornwall has made significant investments of its own in developing world class testing infrastructure (Fab-Test & Wave Hub), creating a business friendly environment and engaging with relevant research actors and the supply chain to attract technology developers. Key international players in offshore wind and wave energy devices have established a base in Cornwall and a number of local companies such as A&P, Mojo Maritime and Insight are working with these companies creating a cluster of device developers and supply chain operators (e.g. the MOR Group).

Aside from the necessity to support innovation in the maritime sector, there is a consensus that the size of and skills in the local labour market are insufficient for the sector's current needs and acts as a barrier to investment and growth. Organisations such as the Cornwall Marine Network and Falmouth Marine School are working to develop the workforce.

Fishing has always been vital to the survival of the Cornish. The oldest, large scale, well documented fishery in Cornwall is the Pilchard fishery (Cornish sardines). Like the rest of the fleet in Europe, the Cornish fishing fleet has been through a painful but necessary process of restructuring, and many vessels have been decommissioned. Authorities and civil society have implemented efforts to raise awareness of sustainable fishing practices amongst consumers and promote locally and sustainably caught fish. The Cornish Wildlife Trust has launched the 'Cornwall Good Seafood Guide' for example.

Cornish aquaculture is still relatively undeveloped and the main sector is bivalve farming (Mussels or oysters). There is also a very small amount of finfish farming and Lobster stocks in Cornwall are being enhanced utilising aquaculture technology within the county - National Lobster Hatchery.

Priority 2

With conditions on the coasts of Cornwall often highly dangerous, maritime safety is a priority locally. The RNLI provides lifeguarding services on beaches across the county. It also operates 11 lifeboat stations in Cornwall.

Cornwall relies heavily on its natural assets – both beautiful coastal scenery and the diversity of wildlife – to attract tourists from around the world. With 11 European and 61 national coastal and marine nature conservation sites, a significant portion of the Cornish coast is subject to protective landscape designation. Actors such as the Cornwall Wildlife Trust are active in this area. The latter manages a marine wildlife programme known as 'Living Seas'. Through this programme, the Wildlife Trust and a network of volunteers collect data on marine wildlife, create awareness of threats and campaign for better protections.

As already noted above, Cornwall has invested significantly in developing the potential of offshore renewable energy in the region.

Priority 3

A major priority of Cornwall's numerous small ports and marinas is developing new income streams to ensure their financial sustainability. Falmouth Harbour is Cornwall's only deep-water port. A multi-million pound dredging works in Falmouth Harbor are currently an important priority and seen as essential for underpinning future growth in the cruise and ship repair business.

Priority 4

Cornwall has long been an isolated region, both geographically and economically. Large parts of the local populations suffer from socio-economic exclusion that can span over generations. Actors such as the Cornwall Marine Network work to make blue opportunities accessible to many disadvantaged residents.

Coastal tourism and marine leisure is a highly important industry for Cornwall, with some five million visitors annually. In 2013, Cornwall adopted a new Visitor Economy Strategy for 2014 - 2020. The strategy is focused on: i) protecting and enhancing the natural and built environment, ii) developing the cultural product, iii) enhancing research and market intelligence, iv) innovative destination marketing and v) and industry-led approach. Cornish actors have participated in a number of EU projects focusing on developing coastal and marine tourism, such as Surfing Europe.

6. Lessons learnt & good practice

A number of lessons and best practices can be drawn from this examination of the Action Plan in the Cornwall region over the past years.

- Based in Portsmouth and with limited resources, the Assistance Mechanism has had significant

difficulties engaging with stakeholders in the Cornwall area. No events had been held in Cornwall or neighbouring Devon.

- Recognising the importance of the maritime industry, projects have been set up focused on supporting innovation in the maritime sector. This includes notably the Marine-i and Propel projects. Earmarking funding support for the maritime sector (rather than delivering it through multi-sector focused instruments) has enabled to build strong partnerships with research & innovation organisations in the region to support project delivery.
- Cornwall has put in place a dedicated maritime strategy. While it has been adopted prior to the Atlantic Strategy and Action Plan, it reflects many of the same priorities and objectives. The document provides a strong regional basis for coordination maritime policy. It is planned to be updated in the coming year and stakeholders confirmed that the Action Plan will be duly considered during this process.
- In view of Brexit, local stakeholders underlined that they saw the Action Plan as an important means for continuing to engage with the EU in the maritime space. In particular, Cornwall Council has strongly advocated for continued UK participation in different cooperation programmes. Should this be the case, the Action Plan would continue to have strong relevance for EU funding in the UK.

5.6.3 Spain – Canary Islands

1. Relationship between the region and the Atlantic

The Canary Islands are an archipelago and autonomous community of Spain located in the Atlantic Ocean. With an area of 7 447 km² distributed over seven large islands and several small islands, the Canary Islands are the most southerly region of Spain and the largest archipelago of the Macaronesia region (Azores, Cape Verde, Madeira and the Savage Isles) and play a key role in this area.

Just over 1 000 km from the Spanish mainland and about 100 km from Africa, its geographical location makes it a **gateway region between Europe and North & West Africa**. The archipelago is also classified as one of the **EU's nine Outermost Regions**.

In 2016, the Canaries has a population of over 2.1 million, making it the eighth most populous of Spain's autonomous communities. However, it has a higher population density than mainland Spain. The large majority of the population is located on the islands of Tenerife and Gran Canaria. The island is home to a highly diverse population.

The economy is based **primarily on tourism**, which makes up a third of its GDP. The archipelago's beaches, climate and important natural attractions make it an important tourist destination with over 12 million visitors per year. There are also **emerging sectors** such as the knowledge economy, green growth and smart cooperation for development or increasingly the **blue economy** with a variety of sectors (naval, port infrastructure and services, shipping, fishing, aquaculture, water sports, offshore platform services, marine biotechnology).

Nevertheless, the Canary Islands **face several structural challenges**, notably its insularity, distance from the continent and lack of raw materials. The fragmentation of the territory produces extra costs for infrastructure. Except within tourism, there are only a few regional companies in overseas markets. The island has a lower GDP per capita than mainland Spain. Unemployment, reaching over a quarter of the active population, is a major socio-economic issue.

2. Regional maritime strategy

The Canary Islands does not have a general maritime strategy, but **several strategies exist that cover directly or indirectly areas included in the Action Plan**, including:

- **Research and Innovation Strategy for Intelligent Specialization (RIS3)**, including the priority to promote the Canary Islands as an intelligent Atlantic reference with several sub-priorities: (i) knowledge, technology and operations center for development cooperation; (ii) business platform and middle Atlantic financial center; (iii) cultural and environmental reference Atlantic; (iv) middle Atlantic nodal center.
- **A strategic promotional plan for the Canary Islands** for the 2012-2016 period. A new plan for the 2018-2022 period is being developed.
- **An internationalization plan of maritime sector** elaborated by the private sector (*Cluster Marítimo de Canarias*).
- **Tourism plan of municipalities** such as in the Palmas.

These strategies generally **underline well marine and maritime issues**. For instance, RIS3 plans to strengthen marine science. In addition, the internationalization plan of maritime sector aims to **double the contribution to the GDP of the marine sector over the 2014-2020 period** by implementing several activities covering a variety of issues such as naval, port infrastructure and services, shipping, fishing, aquaculture, water sports, offshore platform services, marine biotechnology.

3. Local maritime ecosystem

The local maritime ecosystem in the Canary Islands is composed by many actors, including public authorities, research and innovation actors and the private sector.

Public authorities

Regional and local government bodies, such as the Government of the Canary Islands, the Isle Council (ie. “cabildos”) and the Municipalities, are extensively involved in various marine and maritime issues. The local government of Las Palmas has been particularly active in this area; it was designated ‘City of the Atlantic’ in 2017.

Research & innovation

The **Oceanic Platform of the Canary Islands (PLOCAN)** is a scientific and technological infrastructural built in order to create a new network of production in the marine and maritime sector that is in harmony with the strategy for blue growth established within the EU.

The **Technological Center of Marine Science (CETECIMA)** is a private, non profit making organization whose principal aim is to be a benchmark of excellence in innovation and technology in the maritime marine area of the Canary Islands.

Other actors such as the Technologic Institute of the Canary Islands (ITC), the Spanish Bank of Algae, and universities, especially the Palmas University, offer many trainings oriented towards maritime topics.

Private sector

The Canary Islands Maritime Cluster which aims to promote the development and international competitiveness of the maritime sector.

There are also **Economic Promotion Societies** (for instance of Gran Canarias-SPEGC) and **start ups** such as Marine Park, a collaborative space of 10 companies for the innovation and development.

4. Relevance of the Atlantic Action Plan for the region

The Action Plan is broadly relevant to the needs, challenges and opportunities observed in the Canary Islands.

Concerning **Priority 1**, entrepreneurship and innovation are a priority listed in several strategic documents such as RIS3, as well as an issue promoted by actors such as the Canary Islands Maritime Cluster, CETECIMA, PLOCAN or the ITC. In this area, growth areas have been prioritized such as marine biotechnology, ocean energy, offshore platform services, and coastal industry.

The **Priority 2** is more or less relevant due to the actual situation. A marine environmental protection is developing especially by the Demarcation Coast of Canary Islands through for instance the implementation of national and European plans or initiatives (the Marine Environment Directive, Natura 2000 sites). Nevertheless, these efforts are affected by the exclusion of the Canary Islands in the zonification of the OSPAR Convention. The Canaries is also betting on developing new emerging sectors, such as marine biotechnologies, and plays an active role in the development of marine renewable energies.

With regards to **Priority 3**, the improvement of the accessibility and connectivity of the Canary Islands is also relevant. The development of infrastructure and port services is cited as a priority of the internationalization plan of maritime sector elaborated by the private sector. This strategy encourages ports to diversify their activities as hubs of the blue economy, for example in terms of platform

services or renewable energy development (sub-priority b of the priority 3). At the same time, the Canary Islands, as a gateway between Europa and North & West Africa, are seeking to promoting cooperation between ports, especially in the framework of the Macaronesia (Acores-Madeira-Canarias), for instance in the cruises sector, and also with the North & West Africa, including countries such as Morocco and Cape Verde (sub-priority).

Priority 4 is highly relevant for the Canary Islands which have a great challenge in maintaining marine sustainability in order to maintain their survival and quality of life together with developing their tourism model with efficiency and sustainability, with special emphasis on the management of all waste, its control and treatment.

5. Implementation of the Action Plan

5.1 Overview of implementation

Overall, the Atlantic Action Plan has a **limited influence** in the elaboration of strategies in the Canary Islands, which are more influenced by the EU framework and programs (H2020, Blue Economy, Smart Specialization Platform, Interreg programs, Natura 2000) according to stakeholders interviewed.

The effectiveness of the Action Plan in the Canary Islands has notably been constrained due to the **variable level of awareness** of the Action Plan amongst stakeholders consulted. It is well known especially from research actors (ITC, PLOCAN, and CETECIMA) and local actors (municipality of Las Palmas), but there is little awareness beyond these actors, especially in the private sector. Many actors were unaware of the existence of the Atlantic Assistance Mechanism (and its Spanish NCP) or which Department was responsible for the Action Plan on national level.

Nevertheless, **some developments** have been identified in the Canary Islands that can be seen as supporting the priorities of the Atlantic Action Plan.

Priority 1

Within the framework of the Action Plan, there was a strong mobilization of research centers, who participated in various workshops (Atlantic Stakeholder Platform Conference in 2015, CETECIMA was speaker in the workshop “We are Atlantics” in 2015) and round tables (testimony of the CETECIMA’s President in a presentation of the mechanism of assistance).

In line with the specific objective to share knowledge between research centers, the Action Plan has provided **valuable networking opportunities**, for instance, to CETECIMA, which has developed contacts with EU stakeholders (previously, they were only in touch with African actors).

PLOCAN received an Atlantic project prize awarded to the European support and co-ordination project for the Atlantic Ocean Research Alliance. The Atlantic Project Award is granted in recognition of outstanding successes attained by projects in the target geographic zone of the Atlantic Strategy.

Regardless of the Action Plan, many initiatives to promote entrepreneurship and innovation have been implemented such as **blue weekends** including hackathon between startups.

Priority 2

The AAP **facilitated the integration of the Canary Islands at the Atlantic area**. Moreover, **Interreg Projects** are contributing to this priority for instance:

- **Macbioblue** dedicated to the promotion of blue biotechnology;
- **SmartBlue**, project approved in the first call of the Territorial Cooperation Program INTERREG VA MAC (Madeira-Azores-Canary Islands) 2014-2020, co-financed by the ERDF Fund. It aims to

enhance the competitiveness of marine maritime companies through a network of clusters that promote innovation and internationalization processes.

Nevertheless, several factors currently **limit the implementation of this priority**:

- The private sector, through the voice of the Canary Islands Maritime Cluster, would like the Canary Islands play a role more important to “Protect, secure and enhance the marine and coastal environment” (first specific objective of this priority 2).
- As said previously, the Canary Islands are excluded in the zonification of the OSPAR Convention.

Priority 3

Several projects are contributing to the promotion of the cooperation between ports such as

- The SMARTPORT project "Port Environmental Management Strategy between. The Canaries and the Souss Massa Draa Region" aims to standardize environmental management of port operators in the region, through the establishment of integrated solutions in the field of quality environmental protection, in the prevention and control of pollution and application of new ICT systems.
- The NAUCAM project “Canary-Moroccan Nautical Network of Cooperation” seeks to promote economic, social and cultural activities linked to sports nautical tourism in the area between the ports of Agadir and Tarfaya with the Canary Islands.
- Previously, PORTVERT established a platform between Canary Islands and Morocco which worked to standardize and optimize environmental management in ports through the establishment of integrated solutions in the field of port water quality, waste collection and environmental monitoring port.

Priority 4

Several projects are contributing to the creation of a socially inclusive and sustainable model of regional development, especially by fostering better knowledge of social challenges in the Atlantic area, preserving and promoting the Atlantic’s cultural heritage, for instance:

- **The Sunrise project**, an initiative to promote sustainable tourism strategies for surfing destinations.
- **Ecoareas Mar de Todos**: a project to foster the citizen’s participation and management of the littoral;
- **The International Feria of the sea**;
- **Integrated Sustainable Urban Development Strategy (DUSI strategy)** of the Palmas.
- **REDPROMAR**: The Network of Observers of the Marine Environment in the Canary Islands (RedPROMAR) is a tool of the Government of the Canary Islands for the monitoring and surveillance of the marine life of the archipelago.

6. Lessons learnt & good practice

A number of lessons can be drawn from this examination of the Action Plan in the Canary Islands over the past years.

- The Canary Islands do not have a global maritime strategy, but several strategies exist that cover directly or indirectly areas included in the Action Plan.
- On the one hand, there is a strong mobilization of research centers within the AAP. On the other hand, the private sector of the Canary Island is little or not at all mobilized.
- Several developments linked directly or indirectly with the Action Plan have been identified in the Canary Islands, including good practice reflected especially by the Atlantic project prize received

by PLOCAN or by Las Palmas designed city of the Atlantic in 2017, which are reflecting its relevance, especially with regards to priorities 1, 3 and 4, but less with regards to the priority 2, an underutilized priority.

5.6.4 Portugal – Norte

1. Relationship between the region and the Atlantic

The *Região Norte* (Northern Portugal) is one of the five NUTS II regions of Portugal. Bordered by Spain to the North (Galicia) and the East (Castile-Leon), it is the northernmost region of the country. The length of its coastline is of approximately 144 km, which accounts for 15% of the 943 km Portuguese continental seafront.

The largest region by area, the region represents 24% of the Portuguese continental territory. With 3,6 million inhabitants (2016), which amounts to 35% of the total Portuguese population, it is also the most populous Portuguese region. Its main population centre is the Greater Porto area where around 1 million people live. The city of Porto itself, with 216 405 inhabitants (2015) is the second biggest Portuguese city after Lisbon. While its seafront is rather urbanised, its inland remains mostly rural.

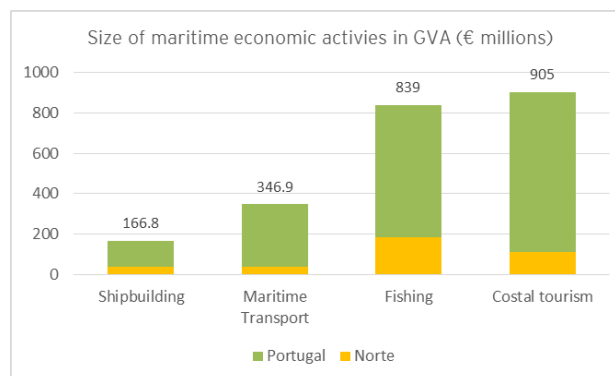
In 2015, the GDP of Northern Portugal was EUR 53 billion, making it the second region of Portugal in terms of economic importance after the Lisboa Region. It accounts for 36% of the national GDP. The Greater Porto area alone amounted to EUR 43 billion of the regional GDP in 2014.

The region is overall heavily industrialised and traditionally specialised in the footwear, clothing and furniture industries. The past decades saw the development of mid- high-technology industries, such as machinery, electronic materials, transport equipment, automotive components. The western part of the region is where secondary and tertiary economic activities predominantly focus on the service sector and the manufacturing of goods, while inland Northern Portugal is mostly characterised by primary industry (wine, pork and poultry produces). Porto is the headquarters of several large Portuguese companies (Altri, Bial, Cerealis, BPI, Lactogal, Sonae, Unicer, etc.).

Northern Portugal is an important trading partner in the EU, both in terms of exports and imports, especially with Spain, France, United Kingdom and Germany. It accounts for around 40% of the national exports (mostly clothing and furniture); exports of mid-tech goods have been increasingly growing over the past years. The regional trade balance is largely favourable, as the region only accounts for 20% of the national imports.

The maritime activities of the region are centred around the Greater Porto area and Viana do Castelo, where the two main ports are located. Ports benefit from the region's strong hinterland in terms of commerce and industry. The port of Leixões in the north of Porto attracts 24% of all goods loaded and discharged in continental Portugal.

Economic activities linked with the Atlantic are diversified, the graphic below provides a quantitative overview of their size (2014).



The region contributes to 21.5 % of the national shipbuilding activity, to 12 % of the country's deep- and short-sea shipping, to 22 % of the country's fishing activity and to 12 % of leisure and tourism activity.

Northern Portugal is also active in the field maritime renewable energy with projects in ocean renewable energy and offshore wind exploited in the vicinity of Aguçadoura.

2. Regional maritime strategy

While the region had a specific Action Plan for the Sea for the previous programming period, no specific strategy dedicated to the sea was developed for the current programme period. This policy area remains a prerogative of the central state, the regional efforts in the field are therefore framed by the “**National Ocean Strategy 2013-2020**” (*Estratégia Nacional para o Mar*). The Strategy aims at the development of a long-term sustainable model for blue growth based on knowledge, technological progress and the optimisation of the use of the maritime territory.

At the national level, the different aspects of the Action Plan are also covered by several sectoral strategies, such as the “**Portugal Digital Agenda**” (*Digital Agenda Portugal*) for innovation and ICT in the maritime sector and “**Tourism 2020**” (*Turismo 2020*) for the development of maritime and coastal tourism. The “**Ports Competitiveness Strategy 2026**” (*Estratégia para o aumento da competitividade portuária 2026*) sets the objectives for the development of the country’s port infrastructure up to 2026.

Maritime spatial planning is framed by Law 17/2014 for Planning and Management of the National Maritime Space, however, maritime spatial plans remains to be adopted with the development of the portuguese Situation Plan. Territory development along the coast is primarily framed by the “**National Strategy for Integrated Coastal Zone Management**” (*Estratégia Nacional para a Gestão Integrada da Zona Costeira*) adopted in 2009 . For the purpose of territorial management, the regional coastal area is part of the “**Coastal Planning Plan of Campinho - Espinho**” (*Plano de ordenamento da orla costeira Campinho - Espinho*) .

Protection of the coastal and maritime environment is specifically framed by the “**Action Plan for the Protection and the Valorisation of the Littoral 2012-2015**” (*Plano de Ação, de Proteção e Valorização do Litoral 2012-2015*), which includes 303 actions for a total cost of 41 € millions to protect and improve the coastal area. In Northern Portugal the identified actions are: restructuration and consolidation of the coastal protection (Caminha, Castelo do Neiva), protection of dune systems (Ofir, Granja), redevelopment and qualification of the coastal front.

While there is no regional maritime strategy, the different aspects of the AAP are nevertheless already in several documents.

- The Regional Coordination and Development Commission of Northern Portugal established the “**Norte 2020 Strategy**” which sets the overall framework for the development of the region in the 2014-2020 period, aligned with the EU programming period. The strategy focuses on i) competitiveness, ii) sustainability and iii) governance. The documents identifies Knowledge and Innovation as key drivers for economic growth, competitiveness and regional development. Maritime activities are not specifically addressed.
- Entrepreneurship and innovation is addressed at the regional level through the “**Regional Innovation Strategy for Smart Specialisation**” adopted in 2015, which objective is to ensure that research and innovation reaches a critical mass. Optimisation of the use of marine resources is identified as one of the eight priority sectors for smart specialisation and different actions are set out to improve their economic valuation through the creation, the expansion and the promotion of economic activities associated with the sea.
- The “**Regional Plan for Spatial Planning**” (*Plano Regional de Ordenamento do Território*) developed by CCDR-N is the relevant regional strategy addressing territorial management. Coastal areas are addressed in an effort to support developments along the coast while ensuring

a certain level of protection of the environment.

- In the “**Integrated Strategies for Territorial Development**” adopted by the different Intermunicipal communities (Porto, Alto Tamego, Ave, Cavado, Douro, Tâmega e Sousa, Terras de Trás-os-montes, Alto Minho), the main observed focus is on improved competitiveness through increased innovation and support to SMEs. The strategy of Alto Minho extensively focuses on the importance of the maritime activities for the regional development, mainly through the improvement of sea resource valuation and maritime infrastructure.

3. Local maritime ecosystem

Public authorities

Based in Porto, the **Regional Coordination and Development Commission of Northern Portugal (CCDR-N)** is a decentralised service of the State in the region. It is endowed with administrative and financial autonomy and tasked with the regional development of Northern Region. In charge of the management of EU funds in the region, the CCDR-N developed the Norte 2020 strategic framework for the development of the region in the current programming period. The CCDR-N is also the managing authority of the Atlantic Area Interreg. The development of sea-related economic activities is one of the nine priority areas of the organisation.

The **Regional Direction for Agriculture and Fishing in Northern Portugal (DRAPN)** is the decentralised authority of the Ministry of Agriculture, Forestry and Rural Development in the region, with six delegations in the different sub-regions of Northern Portugal. Its role is to participate in the formulation and implementation of the national policies in the areas of agriculture, agri-food production, rural development and fisheries.

The **Metropolitan Area of Porto** is an association of 17 municipalities with the purpose of promoting the planning and management of the economic, social and environmental development strategy of the territory of Porto Greater Area. In the Integrated Strategy for Territorial development adopted by the Metropolitan Council of Porto in 2016, the development of maritime activities is not a specific area of focus, even though the port of Leixões is in its territory.

The **Intermunicipal Community (ICM) of Alto Minho** is an association of 10 municipalities in the north of the region. Considering the port of Viana do Castelo is in its territory, its Integrated Strategy for Territorial development adopted in 2016 focuses quite extensively on the development of the maritime economy, especially focusing on the valuation of sea resources and the improvement of the port infrastructure.

The **Association of Tourism of Porto and North of Portugal** is a regional agency aiming to develop and externally promote the region as a tourist destination, especially as regards the promotion of regional products and increasing nautical, coastal and cruising tourism.

Two **Fisheries Local Action Groups** are active in the region: **Litoral Norte FLAG** and **Area Metropolitana do Porto FLAG**. They contribute to the valorisation of the region's maritime and fishing resources and customs, while supporting new opportunities with economic development potential.

Research and innovation

The **Interdisciplinary Centre of Marine and Environmental Research (CIIMAR)** is a research and advanced training institution of the University of Porto. Its mission is to develop high-quality research, promote technological development and support public policies in the area of Marine and Environmental Sciences. With 430 researchers, the centre generates around 300 publications per year. One of its main focus is to foster the translation of research into tangible application beneficial to

the society as a whole.

The **University of Porto** is home to several research centres and laboratories dealing with the development of maritime technologies. The **Underwater Systems and Technology Laboratory (LSTS-ISR)** which specialises in the design, construction, and operation of unmanned underwater, surface and air vehicles and on the development of tools and technologies for the deployment of networked vehicle systems. The **Institute of Science and Innovation in Mechanical and Industrial Engineering (INEG)** focuses on bridging the Research / Industry gap, by developing a competitive model based on knowledge, product and process with high technological content and on technological innovation. One of its market focus is the economy of the sea with the development and application of biotechnologies, energy technologies, robotics). The University collaborate with the private sector through its business incubator "*Parque da Ciencia e Tecnologia do Porto*",

The **Autonomous System Laboratory** of Porto Polytechnic has a specific research line focusing on the development of underwater robotics.

Ports and harbours

The **Port of Leixões** in the municipality of Matosinhos in Porto Greater Area is the second most important port of the country. It attracts 24% of Portuguese freight. Increased short-sea shipping traffic in the past years created a concern as regards capacity. Cargo traffic has been steadily increasing over the past 20 years, from 12 632 thousand tons in 1996 to 18 315 thousand tons in 2016. Passenger traffic has exponentially increased over the same period from 8 206 to 71 799 PAX. With the new cruise terminal that opened in 2015, the port now has a foreseen PAX of 130 000 per year.

With an installed capacity of 900 000 tons of cargo per year, the **Port of Viana do Castelo** in the ICM of Alto Minho, is a key element of the regional economic fabric. In 2010 the ICM of Alto Minho adopted the "Plan of Action for the Modernisation and Improvement of the Competitiveness of the Port" to reinforce its role and improve its importance in international shipments, as cargo traffic has been decreasing over the past ten years (561 093 tons in 2006 to 391 277 tons in 2016).

Both are managed by the **Administration of Ports of Douro, Leixões and Viana do Castelo, SA (APDL)**, a private company owned by the State.

Private sector

Forum Oceano is an association of 125 members active in the maritime economy looking to further develop this sector in the north of Portugal. This grouping of diverse stakeholders makes the organisation very-well placed to receive Cohesion funds. The association implements a number of projects focusing on its four strategical orientations: i) to strengthen dynamics of strategic cooperation between players, ii) to promote the competitiveness of the main value chains that utilise the sea and marine resources as the central elements of its activity, iii) to contribute, in a sustainable way, to economic growth and the growth of exports and employment; iv) to increase the maritime economy's importance to the national economy.

With around 600 employees the **Estaleiros Navais de Viana do Castelo** was the biggest shipyard in the country, specialised in the construction of mid-size vessels (barges, tugboats, ferry boats, fishing vessels, general cargo and bulk carriers, container ships, oil and chemical tankers, LPG's, cement carriers and war vessels). However, the company is currently under liquidation.

Off the coast of Aguçadoura, several renewable energy projects have been developed. **Aguçadoura Wave Farm**, located five kilometers off the coast, was the first wave farm installed, capable of converting the motion of the ocean surface waves into electricity for a total of 2.25 MW in total installed capacity. Open in 2008, the project was however shut down after two months due to technical issues. **WindFloat Agucadoura** is a floating offshore wind turbine installed and certified in 2012 and now in the final stage of technology demonstration.

The **Commercial Association of Porto (ACP/CCIP)** is the leading business organisation of the region bringing together a variety of representatives from the different sector of the economy to pursue the economic development of the region and ensure its representation at the national and international level.

4. Relevance of the Atlantic Action Plan for the region

The Atlantic Action Plan is overall consistent with the main priorities of the region as regards the development of its maritime activities. Interviewed stakeholders insisted the key focus for the region was bridging the gap between research and the industry, which is broadly reflected in Priority 1.

Entrepreneurship and Innovation as identified in **Priority 1** of the AAP is very high on the agenda of the region. Considering the effects of the 2009 financial crisis in the country and the region, the competitiveness of SMEs through increase Knowledge and Innovation is amongst the salient priorities of the region. The region has a strong research community focusing on marine and the maritime operational environments; however, interviewed stakeholders were of the opinion that the economic application of the developed technologies is lacking due to the difficulties of translating them into viable business models. CIIMAR, from the academic side, and Forum Oceano, from the private sector side, are two organisations aiming at providing viable economic solutions.

As regards **Priority 2**, the preservation of the maritime environment is identified as an action of the “National Ocean Strategy 2013-2020” and was followed by the adoption of Law 17/2014 for Planning and Management of the National Maritime Space. The implementing Situational Plan is, however, still in development. The “Regional Plan of Spatial Planning” developed by CCDR-N foresees several measures to ensure the protection of the littoral through effective monitoring, requalification and integration.

With the Port of Leixões (Porto) identified as a node of the Atlantic Core Network Corridor, accessibility and connectivity, **Priority 3**, is key for the region. The “Ports Competitiveness Strategy 2026” foresees that up to EUR 426,5 million will be invested at Leixões for the construction of a new container terminal, the extension / improvement of existing terminals. Connections between the littoral and the inland could, however, be improved. For instance, the “Integrated Strategy for Territorial Development” adopted by the ICM Douro lists the improvement of the maritime connections along the Douro river as area with potential for improvement. Such infrastructure enhancements are not provided for in the OP Norte 2020.

Even though Northern Portugal’s GDP is the second largest of the country, it ranks last in terms of GDP/capita with EUR 18 700 compared to the average of EUR 22 300 euros in continental Portugal in 2015; the development of sustainable of regional development (**Priority 4**) that would benefits not only coastal Northern Portugal, but also its inland, is the overarching mission of the CCDR-N. The region is taking efforts to increase its attractiveness, in line with the “Tourism 2020” plan.

5. Implementation of the Action Plan

Overall, the evaluation did not find evidence to substantiate the claim that the Action Plan was directly translated into or had influence over regional or local decisions. Despite its relevance, considering how fitting its priorities are with regional context, the alignment of the regional strategic orientations and of the main stakeholders’ focus on the priorities of the Action Plan is mostly coincidental. Strategies framing the regions’ orientations indeed mostly predate the Plan. While interviewed stakeholders did not acknowledge any influence of the Plan over their priorities, they explained that

they stem from the priorities identified in “**National Ocean Strategy 2013-2020**” or simply from their deep knowledge of the regional context.

Even though the 2014 Atlantic stakeholder platform was organised in Porto in January 2015, subsequent implementation of the Action Plan did not concretely happen in the region.

Stakeholders in the research and innovation sector and public authorities are generally aware of its existence and their priorities are mostly in line with the Action Plan. However, stakeholders from the private sector are for the most part unaware of its existence, unless they recently applied for EU funds. Nevertheless, a low level of awareness partly explains the lack of effectiveness of the Action Plan. While the Plan is rather coherent with other EU instruments (Norte 2020 OP, Atlantic Area Interreg), considering the large scope of its four priorities, its added-value was put into questions by interviewed stakeholders. The lack of an actual funding instrument is considered to have been detrimental to its implementation.

The Atlantic Assistance Mechanism does not appear to have been highly effective in the region. Based in Lisbon, the implementing team has a limited workforce and cannot effectively communicate on the existence of the Plan throughout the country. In Northern Portugal, the interviewed stakeholders shared that most of relevant actors were unaware of the existence of the National Unit. It is also understood that the Assistance Mechanism’s networking role lacked effectiveness as interested stakeholders made use of their own, already established networks instead of consulting with the Assistance Mechanism.

Regardless of the Action Plan, a number of EU-funded projects dealing with maritime activities have been developed in the region, either through the National Operational Programme, the OP Norte 2020 or the Atlantic Area Interreg.

6. Lessons learnt & good practice

Several lessons can be drawn from this exercise:

- The Atlantic Assistance Mechanism, due to a lack of direct presence on the ground in the region, has been mostly ineffective in supporting the implementation of the Action Plan. Considering that very well established and working networks already exist between stakeholders in the region (research, specialised industries, etc.), its added-value was limited. However, developing broader communication on the Action Plan and already existing projects aligned with its priority would prove useful in raising awareness and fostering connections between regional policy-makers, regional authorities and already existing specialised networks
- Local stakeholders identified the lack of financial instrument attached to the Action Plan as its main shortcoming.
- Integrating the Action Plan as the framing document of the Atlantic Area Interreg would create an incentive for project promoters to fully take advantage of it.
- Development of activities linked with the Atlantic are linked with the implementation of Directive 2014/89/EU on Maritime Spatial Planning, in Portugal, the Situation Plan is currently being developed with a view to increasing transparency and legal certainty. This is key for the development of the region on the Atlantic front.

5.6.5 France – Brittany

1. Relationship between the region and the Atlantic

With over 2 700 kilometers of Atlantic coast, the peninsular region of Brittany has the longest seacoast of all French regions. The region was for a long time relatively isolated in infrastructural terms and has retained a distinct cultural and linguistic identity coming from the Celtic roots of the Breton people.

The influence of the sea on Brittany's economy, environment and quality of life for its inhabitants makes Brittany a maritime region par excellence. According to the Brittany Regional Council "*Brittany has a special relation to the sea. From this relationship, it draws all the characteristics that it is known and recognized for in the domains of its economy, culture, identity and ecology*".

Concerning economy, Brittany's GDP represents 4.1 % of the French GDP. The unemployment rate in Brittany is lower than in other French regions and it is usually around 6% - 7% of the active population. Because of the global financial crisis starting in 2008, unemployment has risen to 8.7% in the Region Brittany in 2011-2012 and has kept this level until today. However, these results remain under the French national rate (9.7% at the same period).

Brittany's economy is essentially turned toward four main sectors of activity:

- **Agribusiness** is the leading Breton industrial sector. It has experienced a boom over the past twenty-five years: processing animal protein (meat, fish, milk), vegetable production, animal feed. The number of Breton exploitations tends to diminish, but as a result, they are merged into very large estates.
- The establishment of Citroën in Rennes in the 1960s led to the development of the **automotive industry** in Brittany around a large network of equipment manufacturers and subcontractors,
- **Shipbuilding**, both commercial and military, is a well-developed industry in Saint-Nazaire, Lorient and Brest. The activity employs around 9 000 people, and more than 60 firms are active in this sector.
- The establishment of research centres, French and foreign industrial groups and many SMEs in Brittany has made the Region the second national pole in **telecommunications** in France.

In addition to these sectors, some other sectors of activity are crucial to the economy of Brittany:

- Facing complex challenges, **fishing** nevertheless remains an important activity in Brittany. Brittany is home to the largest fishing fleet in France. Fishing and aquaculture represent 7 217 jobs at sea and in shellfish farming (edible shellfish farming, oysters, mussels...).
- Brittany is one of the most visited regions in France. **Tourism** is particularly important for the seacoast and represents 5% of the employment of the region.

As previously described, the economic links between Brittany and the Atlantic are very important. According to the CESER report entitled "*Innovation and marine economy*",

Brittany represented 19% of the maritime employment in France in 2012.

Over and above the economic aspects, Brittany's development, history and identity are closely linked to the Atlantic. Bretons consider the coast as a regional heritage and a major asset of their region. For these reasons, the Brittany Region has always been very involved in reflection about Atlantic.

2. Regional maritime strategy

Aware of its unique maritime characteristic, the Brittany Region has been working to develop an integrated maritime policy. In 2007, **the Brittany Coastal Areas Charter** allowed to federate the maritime actors on a shared maritime ambition. It aimed at defining a common vision for the future of the region, becoming aware of all the maritime dimensions and capabilities and implementing a long term strategy in favour of the sustainable development of Brittany.

Ten years later, in 2017, the Brittany Region has developed a **regional strategy for the sea and coastline**, which is structured around three axes:

- **Structuring the integrated maritime policy of the Region**, by strengthening governance institutions and support for maritime projects;
- **Reinforcing the attractiveness of the marine sector**, by focusing on the women and men who work in this sector. Special attention will be paid to training, access to employment, professional careers and working conditions in the marine field; and
- **Supporting the development of the maritime economy** in particular towards sustainable models.

It is important to also stress that the development of local ports is high on the agenda of the Brittany region. Indeed, commercial ports are crucial to a peripheral region like Brittany, so much so that in recent years an important financial support has been awarded by the regional council to projects relating to ports. For example, the Region has made major investments in the ports of Brest, Lorient and Saint-Malo for accompanying the development of their various trade activities, ship repair, fishing and leisure.

3. Local maritime ecosystem

Public authorities

The Brittany Regional Council is a major actor in the maritime space and has provided critical impetus to the development of an integrated maritime policy (see previous section). In France, a significant amount of powers have been devolved to the regions.

Brest Metropole is an intercommunal structure, centred around the city of Brest. It is particularly involved in the development of maritime projects in Brest. In the framework of the Atlantic urban network, it notably welcomes the international week of marine science and technology with the support of the Regional Council.

Research & innovation actors

Belonging to the UBO (University of Western Brittany), the **European Institute for Marine Studies (IUEM)** is an interdisciplinary centre with the objective of spreading knowledge of the marine world, studying and observing its interactions with the atmosphere and continental areas, training

researchers and staff in these fields, and contributing to the observation of both natural and human-instigated changes to these environments.

The SHOM (Service hydrographique et océanographique de la marine) ensures the national hydrographic service, performing general hydrography duties for all seafarers to meet France's international obligations. It also supports defence - within its areas of competence SHOM provides all necessary defence expertise and operational support – and supports government maritime and coastal policies

Ports & harbours

The Chamber of Commerce and Industry (CCIMBO), under the supervision of Regional authorities, is responsible for Breton harbour planning, management and maintenance.

Economic actors

Technopole Brest Iroise aims to mobilize and support innovators to boost the development of the Brest metropolitan area. It coordinated the consortium that won the call for tender launched by the European Commission in November 2013 for assistance in the implementation of the Action Plan Atlantic.

Brittany's regional development and innovation agency encourages Breton economic stakeholders to work together and plays a role in the leadership and coordination of regional economic development and innovation strategy. It supports the emerging fields in Brittany, some of which can be linked to maritime issues (example of Marine Renewable Energies). However, it does not specifically target the maritime industry branch.

The Mer Bretagne Atlantique cluster is a driving force for economic development and maritime innovation. To strengthen its network of economic players, the cluster launched a Partners' Club in 2014. The club is open to companies looking for an opportunity to participate in blue growth. In 2017, it brings together 352 members, 60% of whom are SMEs.

4. Relevance of the Atlantic Action Plan for the region

Whether or not they were familiar with the Action Plan before the interview, all the stakeholders interviewed during the field visit of Brittany considered that the four Action Plan priorities were fully relevant. According to them the wide scope covered by the Action Plan lines up with the wide ranging Atlantic issues of the Brittany.

Moreover, many stakeholders underlined how much it was relevant to develop a common strategy for the Atlantic area. Indeed, they consider that the regions of the Atlantic coast are facing common economic, environmental and social issues that require a common political answer at the European level. Indeed, they have already developed many trans-regional and trans-national cooperations along the Atlantic coast.

With regards to **Priority 1** of the Action Plan, innovation and entrepreneurship are high on the agenda of the Brittany region. Indeed, the maritime sectors occupy an important place in the economy of Brittany (agrobusiness, shipbuilding, fishing, etc.). One of the key issue facing by the Brittany region is to stimulate the blue economy by supporting research and sharing information between maritime stakeholders.

Priority 2 of the Action Plan, entitled "Protect, secure and enhance the marine and coastal environment" is also an important issue for the Brittany region. Between 1999 and 2005, Brittany gained 25 000 inhabitants per year and it is the coastline that has welcomed a large part of the newcomers. The density of the population in Breton coastal municipalities is greater than 260

inhabitants / km², while on the regional level this number is only 107 inhabitants / km². This evolution has raised new issues for the Brittany region in terms of land-use planning and environmental protection.

Priority 3, related to ports accessibility and connectivity, is of particular relevance to Brittany. Indeed, flows of trade in goods are essentially transiting by roads. This has bad consequences in terms of congestion, saturation, pollution and costs of construction and maintenance of infrastructure. Thus the exchanges between Brittany and the countries of the Union are 70% by road, and only 17% by sea. The road transport is even greater for trade flows between Brittany and the neighboring French regions. The sea could, however, be better used, especially for the freight transport. Recent efforts to develop maritime highways are therefore very important for the Brittany region. Similarly, the conservation of structures, their maintenance in operational conditions and the modernization of infrastructures are crucial to Brittany to allow the development of port traffic in connection with the economy of the territories.

Priority 4 of the Action Plan, aiming at creating a socially inclusive and sustainable model of regional development, is also relevant to the Brittany region. Indeed, even if the Breton unemployment rate is relatively low compared to the French national rate, the region is still facing a number of socio-economic challenges in both urban and rural context, making the Specific Objective 4.1 of the Action Plan “fostering better knowledge of social challenges in the Atlantic area” relevant to its situation. Concerning the Specific Objective 4.2 “preserving and promoting the Atlantic's cultural heritage”, it raises important issues for the Brittany region where the most visited sites are directly connected to the ocean or located on the coast (ex: Océanopolis in Brest, the Acquarium of St Malo, or natural sites like Pointe du Raz, Pointe du Grouin or Cap Fréhel).

5. Implementation of the Action Plan

Most of the stakeholders interviewed had at least a general awareness and understanding of the Atlantic Action Plan. They often know the scope of the Action Plan, as well as its main objectives. Concerning the institutional players, they were fully aware of the Action Plan. They often underlined the fact that they were fully involved in the preparatory works led by the DG MARE in order to develop the EU maritime strategy. For example, they were systematically invited to the events organized by the DG MARE in the framework of the Atlantic strategy and the Atlantic Action Plan (ex: Atlantic Forums). They globally have the feeling that they had time and opportunities to give their opinion about the main Atlantic challenges and to bring to the attention of their European partners key subjects for the Brittany region. Concerning the economic players, the findings of the field visit are more mixed. The maritime cluster (Pôle Mer Bretagne) was fully aware of the Action Plan and actively involved in its preparation. It was also part of a consortium bidding for the Assistance Mechanism contract (without success). However, Brittany's regional development and innovation agency seemed less informed about the Action Plan. However, it works only indirectly on maritime subjects. Concerning the scientific players, they were aware of the Action Plan and convinced that its priorities were relevant. However, they didn't know the precise content of the Plan.

Overall, the evaluation did not find evidence to suggest that the Action Plan had achieved influence on local decisions or priorities or otherwise exercised influence on stakeholders. Indeed, as the scope of the Action Plan is particularly wide, the vast majority of the Atlantic projects identified during the field visit can be considered as linked to one of the four priorities. However, the causal link between the Plan and the projects financed is far from obvious. Many stakeholders (managing authorities, project directors...) stated that the Action Plan was an additional incentive, but not a decisive factor in their decision to run a project linked to Atlantic issues.

If the representative of the Assistance Mechanism is well identified by regional stakeholders,

the role of the Assistance mechanism is relatively unclear for most of the interviewees. They were often unable to describe its role, scope and means of intervention. Nevertheless, some stakeholders underlined that the Assistance Mechanism was doing a good job in bringing together many stakeholders involved in Atlantic issues on the occasion of some events dedicated to Atlantic issues.

The following sections provide an overview of the implementation of the strategy by priority.

Priority 1

With regards to Priority 1 of the Action Plan, innovation and entrepreneurship are high on the agenda of the region. Research and Development is a key sector for Brittany's economy, with the region dedicating EUR 1 100 million - 3.3% of regional expenditure - to it every year. Sharing information and bringing together local stakeholders on key maritime issues is also at the core of the activity of the *Mer Bretagne Atlantique* cluster, which brings together 352 companies, 60% of whom are SMEs, looking for an opportunity to participate in blue growth. It is also important to underline that Brest, City Chair of the Commission "Sustainable development and Blue growth" of the Atlantic urban network, welcomes the international week of marine science and technology with the support of the Regional Council. For the 10th edition, the main theme of "Sea Tech Week" was "Sea and Digital technologies", in direct link with the national label "French Tech" obtained in 2015. All these initiatives directly contribute to Priority 1 of the Action Plan.

Priority 2

Concerning Priority 2, environmental protection and conservation of Brittany's coastline is a major priority of the Region. In line with the Specific Objective 2.4 of the Action Plan - exploitation of the renewable energy potential of the Atlantic area's marine and coastal environment - the Regional Council has developed in recent years a very proactive policy in favour of marine renewable energies (MRE), which resulted in a new regional roadmap for their development elaborated in 2016. The objective is to acquire in Brittany, by 2030, 2.5 GW installed all MREs combined. Moreover, the Regional Council supports flagship projects like the "MerSur project" of the SHOM, which aims to deliver a free and accessible marine data services with high resolution coastal forecasts. This project will directly contribute to the implementation of Specific Objective 2.2 of the Action Plan, which aims to *"develop a European Atlantic ocean observing and predictive capability, based on existing structures, platforms and mechanisms to support the implementation of EU policies, reduce costs for industry, public authorities and research institutions, stimulate innovation and reduce uncertainty in the behaviour of the Atlantic ocean and the impact of climate change"*.

Priority 3

Priority 3 is also crucial to the Brittany region, which is particularly involved in the ambitious project of development of the port of Brest. The dredging operations combined with the new port areas developed, will allow to accommodate larger vessels and develop new industrial activities in the field of MREs. Concerning the port of Saint-Malo, the modernization of the passenger terminal of Naye is the main objective of the new concession negotiated in 2017.

Priority 4

Concerning the Priority 4 of the Action Plan, the numerous initiatives that have been launched by the Region in favour of the development of the social and solidarity economy could be underlined. Today, the social and solidarity economy represents 15% of the jobs in the Region.

6. Lessons learnt & good practice

A number of lessons and best practices can be drawn from this examination of the Action Plan in the Brittany region over the past years :

- **Prioritize Atlantic issues listed in the Action Plan to give a stronger political impetus to some key subjects** (especially in the absence of dedicate funding). Two options can be identified :
 - o Option 1: to limit the scope of the Action Plan to some key issues for a given period and to target an effective mobilization of all stakeholders of the Atlantic area around these selected issues.
 - o Option 2: encourage each Atlantic region to specialize in some key sectors (biotech, aquaculture, Ocean renewable energy, etc.) in order to allow the emergence of local “champions” that will have a positive effect on the whole area.
- **Identify clearly the projects that contribute to the implementation of the Action Plan priorities and improve, as a result, their access to European funding.** In practice, this might mean:
 - o Making it mandatory for the managing authorities to establish an “Atlantic criteria” when selecting projects for European Funds,
 - o Developing an adequate monitoring system for projects launched under the Action Plan (ex : identification system of maritime projects used by the Regional Council in order to measure the regional financial and human efforts to promote the Atlantic issues)
 - o If the previous recommendation was not followed, it might be necessary to review the question of specific funding for the Action Plan in order to enhance its impact. Indeed, if the projects launched under the Action Plan do not benefit from an easier access to European funding, the Atlantic stakeholders would lose incentives to promote projects in line with the Atlantic issues.
- **Strengthen the co-operation between European DGs in the area of the Atlantic issues, notably between DG MARE and DG MOVE, in order to improve the readability of the EU actions on these subjects and to pool European efforts and initiatives.**
 - o The stakeholders interviewed recommend to rely on existing tools rather than trying to set up new processes and tools specifically for the Action Plan
 - o For example, it would be interesting to use the platform developed by DG GROW in the framework of the Enterprise Europe Network. The EEN helps businesses innovate and grow on an international scale. It offers many business services like:
 - Bringing together 3,000 experts from more than 600 member organisations
 - Knowing the local business environment and has contacts for business opportunities worldwide.
 - Offering a targeted approach aimed specifically at each business sector.
 - o The EEN could easily be used to encourage the emergence of Atlantic projects by bringing together Atlantic stakeholders and providing them a personalized support.

5.7 Overview of national & regional strategies analysed

Member	Short Description
--------	-------------------

State	
France	<p>France is establishing a National Strategy for the Sea and Coastal Regions. This strategy will be the blueprint for the protection of the environment, exploitation of marine resources and the integrated and coordinated management of activities related to the sea and the coast, with the exception of those activities whose sole object is defence or national security.</p>
Brittany (FR)	<p>The global marine strategy of the Brittany Region ('Charter of Coastal Areas'), launched in 2007 and recently updated in 2013, aims to develop fishing activities and aquaculture, marine security, ports activities, create jobs and encourage continuing education, in a sustainable environment where city growth and urbanisation are controlled. The main leading institution for these priorities is the Region of Brittany which carry most of the initiatives.</p> <p><i>No mention is made of the Atlantic Strategy and the strategy was adopted prior to the Action Plan. However, the documents refers extensively to the implementation of key EU policies.</i></p>
Ireland	<p>Harnessing Our Ocean Wealth – an Integrated Marine Plan for Ireland was adopted in 2012. The document sets out a vision of ocean wealth being a key element of the country's economic recovery and sustainable growth, generating benefits for all citizens, supported by coherent policy, planning and regulation, and managed in an integrated manner. It is further articulated around three objectives targeting i) a thriving maritime economy, ii) healthy ecosystems, and iii) engaging with the sea.</p> <p><i>The document notes that the priorities of the Atlantic Strategy have been taken into account in the document and cooperation with Atlantic neighbours is identified as a key enabler for the implementation of the strategy. The strategy also makes explicit reference to a broad range of EU policy frameworks. Ireland's newly published Marine Research & Innovation Strategy 2017-2021 also takes account of the Action Plan in addressing research funding requirements and focus of funding.</i></p>
Portugal	<p>The National Ocean Strategy 2013-2020 is the public policy instrument in Portugal for the sustainable development of the economic sectors related to the ocean. The Strategy seeks to The vision set forth in the Strategy is based on a sustainable and joined up approach, encouraging maritime enterprise and innovation, healthy and resilient coastal communities, employment, connectivity and cultural and natural heritage. The general objective is translated into three strategic pillars addressing: i) marine knowledge, ii) spatial planning, and iii) active promotion and defense of national interests and objectives.</p> <p><i>No mention is made of the Atlantic Strategy and the strategy was adopted prior to the Action Plan. However, the documents refers extensively to the implementation of key EU policies, notably maritime spatial planning and the MSFD.</i></p>
Spain	<p>Spain has not developed a single over-arching maritime strategy at national level. However, a number of different strategy documents and action plans in line with the Atlantic Action Plan priorities have been developed at national and regional level. National Strategy for Sustainable Coastal Management, Strategic Plan for Spanish Marine Aquaculture, National Plan for Adaptation to Climate Change,</p>

	<p>Renewable Energy Plan 2011-2020, National Scientific Research, Development and Technological Innovation Plan.</p> <p><i>No mention is made in documents reviewed of the Atlantic Strategy and the large part of these strategies and plans were adopted prior to the Action Plan. However, a wide range of different EU policy frameworks are mentioned.</i></p>
Cornwall (UK)	<p>The Cornwall Maritime Strategy was adopted by Cornwall Council in May 2012. This is the first time that a dedicated Maritime Strategy has been produced for Cornwall. The strategy was born of a desire to integrate maritime issues into Council policy and strategy and guiding the development of programmes across its operations. The vision set forth in the Strategy is based on a sustainable and joined up approach, encouraging maritime enterprise and innovation, healthy and resilient coastal communities, employment, connectivity and cultural and natural heritage.</p> <p><i>No mention is made of the Atlantic Strategy and the strategy was adopted prior to the Action Plan.</i></p>
Wales (UK)	<p>The Government of Wales published its Marine and Fisheries Strategic Action Plan in November 2013. The Action Plan is built around four thematic objectives, including: i) maritime spatial planning, ii) sustainable management of marine activities, iii) marine knowledge and iv) sustainability and profitability in the marine and fisheries industry.</p> <p><i>No mention is made of the Atlantic Strategy and the strategy was adopted prior to the Action Plan. However, the documents refers extensively to the implementation of key EU policies, such as Blue Growth, MSFD or the CFP.</i></p>
Scotland (UK)	<p>Marine Scotland has developed a 'Marine Scotland is a Directorate of the Scottish Government and is responsible for the integrated management of Scotland's seas. Marine Scotland developed its Vision document in April 2010 ('Making the most of Scotland's seas: turning our marine vision into reality'). The document sets out a framework for actions to achieve the Scottish Government's vision of clean, healthy, safe, productive and biologically diverse marine and coastal environments. Marine Scotland's work is also guided by a multi-annual Strategic Framework Document covering 2013 - 2016 focused on sustainable economic growth, maintaining and improving the marine and freshwater environment and supporting thriving rural and coastal communities. A number of other strategy documents have also been elaborated, such as the Scottish Marine Science Strategy (2010-2015).</p> <p><i>No mention is made of the Atlantic Strategy and the strategy was adopted prior to the Action Plan. The 2013 – 2016 Strategic Framework makes reference to the EU's Blue Growth Agenda and the implementation of key EU policies, such as MSFD and CFP.</i></p>

Catalogue number: KL-02-18-137-EN-N

