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GEOGRAPHY OF INSHORE FISHING AND SUSTAINABILITY (GIFS)

GIFS Activity 1.1 FINAL REPORT
Coastal zone governance and Inshore Fishing

http://www.gifsproject.eu

GIFS (Geography of Inshore Fisheries and Sustainability) is funded by INTERREG IVA 2 Seas and aims to understand the socio-economic and cultural importance of inshore fishing to better inform fisheries policy, coastal regeneration strategies and sustainable community development.

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The GIFS project

The *Geography of Inshore Fishing and Sustainability* (GIFS) is an INTERREG IVa 2 Seas project that aims to capture the socio-economic and cultural importance of inshore fishing to better inform fisheries policy, coastal regeneration strategies and sustainable community development through a range of research projects, regeneration activities and case studies across the 2 Seas region. Figure 1 outlines the 2 Seas region of southern England, northern France, Flanders (Belgium) and the southern Netherlands. The GIFS project works along three main activities and supporting research topics:

- Coastal zone governance and inshore fishing,
- Fishing places & community,
- Economy and regeneration in fishing communities.

In each activity, GIFS partners worked with local stakeholders and communities to record the geographical diversity and similarities of fishing places and people along the Channel and Southern North Sea.

The main focus of GIFS is the inshore sector, however, definitions of 'inshore' vary greatly between the Member States. Defining inshore fishing is not easy – do we define it by the length or power of the vessel, days at sea, gears used, distance from port travelled or by the target species? At the EU level the term small-scale fisheries is used to distinguish operators working at a small-scale from industrial operators. In 2011 the European Parliament published a study called 'Characteristics of Small-Scale Coastal Fisheries in Europe' (Macfadyen *et al.,* 2011). This study explains the difficulties of trying to establish a common definition across all Member States and suggests the most specific description available is 'vessels under 12m in length not using towed gear'. However, some of the traditional fishing practices along the Southern North Sea and English Channel that are considered typically 'coastal or 'inshore' fisheries (such as brown shrimp bottom trawlers and sprat or herring pelagic trawlers), actually use towed gear. **For the purposes of the GIFS project, we broadly defined** inshore fishing as fishing activity carried out by vessels operating within 12 nautical miles of the coast (as well as shellfish harvesting conducted on foot or, in one instance, on horseback)**.** Even though achieving a single definition was not possible, we wanted to include consideration of fishing activity that was applicable in the context of different Member States while acknowledging a broad distinction between 'small-scale' and 'industrial' fishing operations.

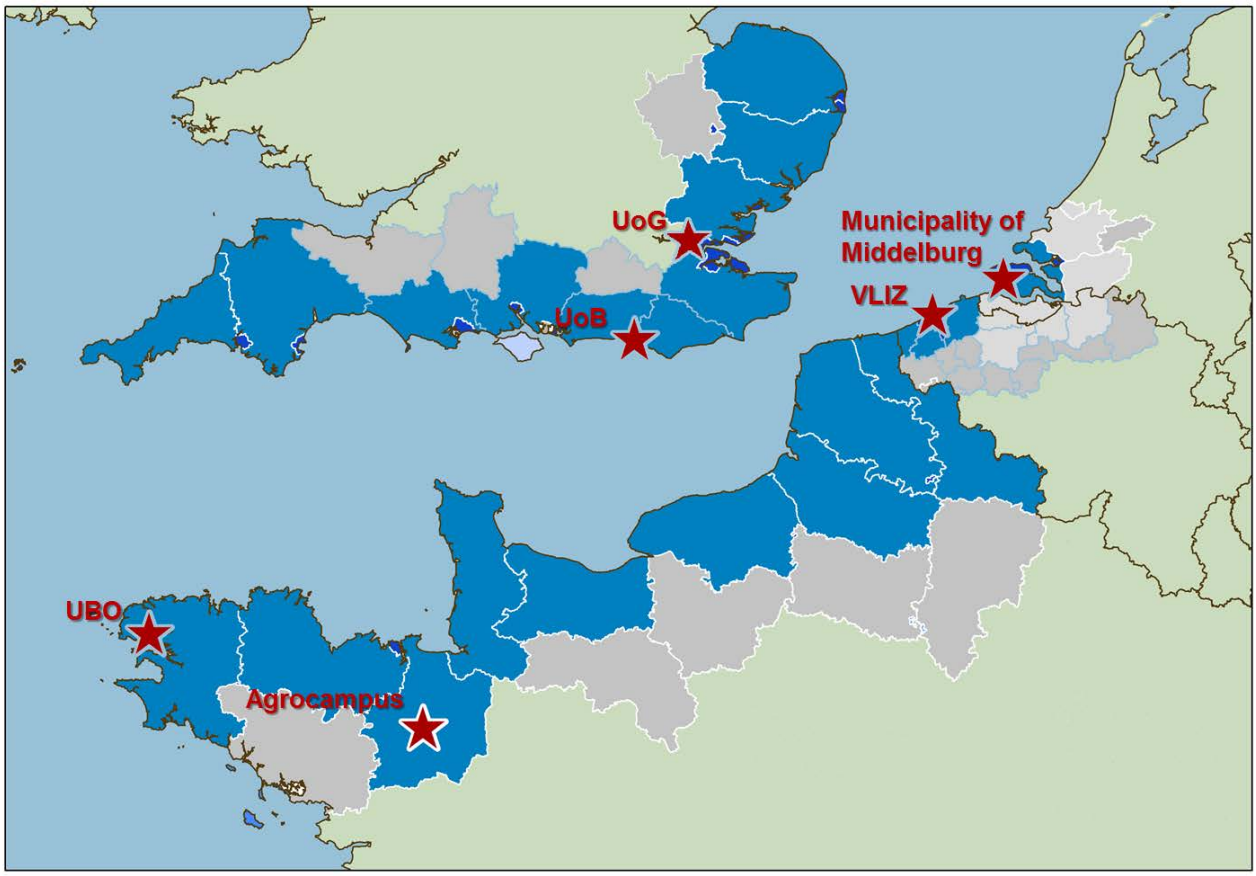

Figure 1. The 2 Seas region and location of GIFS partner institutes (University of Greenwich (UoG), University of Brighton (UoB) in England, Flanders Marine Institute (VLIZ) in Belgium, Municipality of Middelburg in the Netherlands, Agrocampus Ouest and Université de Bretagne Occidentale (UBO) in France) (Source: VLIZ, 2014).

The current report addresses the '**Coastal Zone governance and Inshore Fishing'** activity. Coastal zones are subject to an array of different policy and management regimes. Inshore fisheries are both affected by these policies *and* play an important role in putting these management regimes into practice. Integrated coastal zone management (ICZM), local development plans, marine spatial planning (MSP), coastal habitat and species marine protected area (MPA) management are a few examples of management regimes that both affect and involve inshore fisheries. In addition to the plethora of formal management regimes there is also a widely acknowledged need to introduce the ecosystem approach in fisheries planning and management in order to comply with EU policies and international conventions. There is increasing recognition that more devolved and participatory management structures are required to achieve this approach. Yet, achieving successful practices in this field is not straightforward and requires an understanding of the different legal, social, economic and political arrangements that exist across the area and the way that inshore fishing is incorporated into these.

This element of the GIFS project has been developed to explore how inshore fisheries (IF) in the GIFS partner regions interact with policy-making and key decision-makers at multiple scales of governance (locally, nationally and Europe wide) in terms of integrated marine and coastal governance. An in-depth understanding of governance mechanisms for inshore fisheries requires both top down and bottom up approaches:

In a **first phase** - further referred to as activity 1.1 - a description and exploration of the features of formal fisheries governance mechanisms and structures that are in place in the different regions is analysed by means of questionnaires that were designed to capture a range of expert views on IF governance within a broader coastal and marine management context. The outcomes of these questionnaires is supported by a literature background study providing information about formally established instruments (legislation, policies & plans, formal organisations and mechanisms). However, each IF is unique in its socio-political and economic context and the history of the complex interactions between these different sectors. To take account of the influence of these variables and the wider context in which they have developed in-depth case studies with semi-structured interviews with a range of stakeholders were used in a **second phase** of the research. This case study approach was used to analyse the role of local fisheries management and key ways in which the existing infrastructures and governance processes engage positively with economic, environmental and socio-cultural sustainability issues. The purpose of this approach was to better understand the social and political processes of governance (such as power, social capital, participation and identity) and the specific fisher and community engagement in place in the different localities. **The current report - further referred to as GIFS Activity 1.1 Final Report – is a standalone product of the GIFS project, while serving the purpose of providing the broader context for the second phase (Activity 1.2.). Note: To access the final report for Activity 1.2., consult the GIFS website: http://www.gifsproject.eu/en/themes/coastal-zone-governance-and-marine-fishing.**

The results of the two phases together provide a valuable insight into and understanding of the different formal and informal management frameworks and approaches that exist for inshore fisheries in the GIFS partner areas. The research conclusions identify opportunities for wider integration of fisheries management in coastal management; appropriate governance structures for different areas depending on fishery type, scale and stakeholders; and examples of best practice in coastal zone governance and inshore fishing that raise the possibility of win-win situations for the fishing sector in its interaction with the wider coastal community.

PART 1: LITERATURE BACKGROUND

1.1 Inshore fisheries

Inshore fisheries (including small-scale and traditional fisheries in coastal waters) make a considerable contribution to the socio-economic wellbeing and cultural identity of coastal communities. They contribute to local development, job preservation/creation, supplies of fresh fish and the preservation of traditional local cultures (EU Parliament Resolution, 2004/2264(INI)). Inshore fisheries also play a crucial role in the management and conservation of coastal marine resources.

However, in spite of their importance to coastal communities and the coastal marine environment, inshore fisheries may often stay unnoticed or invisible to (fisheries) scientists and managers, policy and decision-makers, as well as to the wider society (Urquhart *et al.,* 2011). Inshore fisheries (IF) may take many diverse forms and expressions in terms of fishing techniques, vessels and gear, target species and inshore fishers may take a flexible approach according to the season and time of year. Because of this diversity, IF may either be difficult to capture in regular fisheries statistics, or not be subject to reporting at all. Also, even when reporting is mandatory, it may be a challenge to seize the difference between inshore and offshore fishing activities in terms of employment, fishing effort, vessel type, gear(s), target species, economic value, fishing area etc. This challenge to capture and describe the extent, intensity and diversity of inshore fisheries, as compared to the total fishing activity, is also applicable in the southern North Sea and Channel area. It is one of the challenges of the GIFS project to capture the diversity and dimension of Inshore fisheries in the Southern North Sea and Channel area, and its contribution in terms of social and cultural values, economic importance and environmental concerns.

In **the UK**, the inshore fishing fleet refers to vessels under 10 metres in length, that generally operate in coastal waters out to 6 nautical miles where the inshore management regime applies, although they can work out to the 12 nautical mile territorial waters limit. In 2012, 82% of the English fleet was made up of vessels of 10 metres and under in length over all (LOA); these 2562 vessels ≤10 m LOA have an average of 55 kW and 3.5 GT. The remainder 551 vessels with an LOA > 10 m have an average 304 kW and 96 GT (Radford, 2013). The entire fleet spent a total of 407.9 thousand days at sea in 2011 (The 2012 Annual Economic Report on the EU Fishing Fleet (STECF-12-10). Although under 10 metre vessels make up around 82% of the English fleet, they only account for about 6.5% of the catch volume (MMO, 2011).

At the beginning of 2013, the **Belgian commercial fishing fleet** consisted of 83 vessels that spend a total of 12,917 days at sea in 2012, the fleet has a total engine capacity of 47,554 kW and 15,053 GT. 42 vessels belong to the Large Fleet Segment with an engine power of more than 221 kW. The large fleet segment consists of 3 vessels using trammel nets or passive fishing gear, 8 using otter trawl and 31 large beam trawl vessels with >662 kW and a maximum of 1200 kW. The Small Fleet Segment consists of 41 vessels with a maximum engine power of 221 kW, including 2 vessels fishing on the river Scheldt, 20 inshore fishing vessels including 10 shrimp fishers, 18 eurocutters and 1 vessel using ordinary beam trawl. There are no vessels < 10 m in the Belgian commercial fleet, and all vessels < 10m are not subject to reporting (FIVA, 2013; Roegiers *et al.,* 2013).The legal definition of inshore/coastal fleet from February 2006 onwards is all fishing vessels that have an engine power of 221 kW or less, including any additional power and a tonnage of no more than 70 GT and that undertake trips with a maximum period determined by the Minister (currently 48 hours). Vessel owners need to actively register to be included in the coastal fleet segment (Tessens and Velghe, 2011a, Tessens and Velghe, 2011b).

In **France**, in terms of legislation, fishing is categorized into *petite pêche* (time out of harbour less than 24 hours), *pêche cotière* (time out of harbour between 24 and 96 hours); *pêche au large* (time out of harbour between 96 hours and 20 days); and *grande pêche* (time out of harbour more than 20 days). Ifremer (French Research Institute for Exploration of the Sea) defines the fleets slightly differently, recognizing the inshore fleet as vessels operating in territorial waters up to 12 nautical miles offshore for more than 75% of the time. For administrative purposes, inshore fishing is defined as vessels at sea for less than 24 hours. In 2011, there were 4,642 vessels in France, with most of these (3,685) being vessels under 12m (SIH, IFREMER).

In **the Netherlands**, the definition of inshore fishing is fishing within the 12 miles zone with ships no longer than 24m long and with a maximum capacity of 300 HP or 221 kW (Source: Zeeuwse Visveilingen NV in Flushing. Holland). The Dutch fleet comprises mainly of 393 cutters (mostly beam trawlers). The average vessel power is 745 kW, and around 15% of companies own more than one vessel. There are 79 registered shellfish harvesting vessels used for mussel culture and 33 cockle dredgers (Source: FAO, Fishery and Aquaculture Country Profiles, Consulted May 2014). According to the 2012 Annual Economic Report on the EU Fishing Fleet (STECF-12-10), there were 16 Dregdes vessels <10m (DRB VL0010), 207 vessels <10m using Passive gear (PGV0010) and 27 demersal trawl and demersal seiner vessels being <10m (DTSVL0010) in The Netherlands in 2010.

In spite of the importance of inshore fisheries, there is a lack of clarity and uniformity in defining inshore fisheries in Europe. Different criteria are in use, for example vessel size, trip length, activity patterns, fishing gears and target species (Symes and Phillipson, 2001).

The European Commission recognizes this complexity of defining 'Inshore Fisheries' (IF) across the EU and while embracing the diversity of IF, it proposes a minimum **set of criteria** that need to be taken into account to define IF (EU 2004/2264(INI)):

(a) Small-scale inshore fisheries;

(b) The length of vessels;

(c) The distance from the home port within which vessels operate, having regard to the different geographical and maritime conditions in the Member States;

(d) A maximum length of time during which the vessel is away from home;

(e) Vessels which return to port daily and sell their catch fresh;

A common definition for IF across the countries in the Southern North Sea or the GIFS partner regions does not exist. In each of the four countries within the GIFS-project, a different definition applied:

The **definitions of IF as used in the GIFS project** and in this report are:

- United Kingdom: Vessels under 10m, operating in coastal waters typically out to 6 nautical miles (nm), but can be up to 12 nautical miles (nm), and to which the inshore management regime applies;

- France: *Petite pêche côtière* is fishing practised by means of boats of which the LOA is <12m, not using towed gear and of which the time at sea/ time out of harbour does not exceed 24 hours;

- Belgium: All fishing vessels that have an engine power of 221 kW or less, including any additional power and a tonnage of no more than 70 GT, according to the "Official list of Belgian fishing vessels", as maintained by the Department of Maritime Transport of the Federal Public Service Mobility and Transport, and that undertake trips with a maximum period determined by the Minister (today being 48 hours) with start and end in a Belgian port. Vessel owners need to actively register to be included in the coastal fleet segment. It is important to note that, although this IF is allowed to fish outside the 12 nm, for the larger fleet component it is explicitly prohibited to fish within the 12 nm, reserving the territorial sea for the coastal fleet.

- The Netherlands: Fishing within the 12nm zone with ships <24m LOA and with a maximum capacity of 300 HP (=221 kW) (www.pvis.nl/visserij/kustvisserij/).

As definitions vary between GIFS partner regions and there is a need for comparisons across the GIFS data, for the purposes of the GIFS project, we broadly defined inshore fishing as fishing activity carried out by vessels operating within 12 nautical miles of the coast (as well as shellfish harvesting conducted on foot or, in one instance, on horseback). In this respect, a clear link with the spatial use of the marine waters is included in the definition. This broad definition allows consideration of fishing activity applicable in the context of different member states while acknowledging a broad distinction between 'small-scale' and 'industrial' fishing operations.

Next to the challenge of defining IF, often reliable statistical data in terms of fleet size, employment, catches and fishing effort are absent, or inaccessible. The fragmentation of the IF sector - with irregular small deliveries of diversified catches to a wide number of disperse landing points - makes it difficult to report landings and estimate the size of IF (Symes and Phillipson, 2001). Therefore, there has been is a tendency of underestimating IF in the past. It is estimated that inshore fishing accounts for 80 % of the European Community fishing fleet (EU Parliament Resolution 2008/2014(INI)) and 25% of its current production (Symes and Phillipson, 2001).

The problems IF are facing are also highlighted in the **European Parliament resolution of 15 June 2006 on inshore fishing and the problems encountered by inshore fishing communities** (EU Parliament, 2006). This resolution calls for a preservation of the cultural traditions through IF and points out the importance of IF to the local economy and the social fabric of coastal communities. Also, it points out that IF must play a constructive role in the protection and conservation of the coastal marine environment. This demonstrates that IF is not only about economy, but also deals with social aspects and has cross-sector links (culture, tourism, environment and nature). The resolution also calls for specific educational and training programmes to encourage young people to perpetuate coastal fishing activities and traditions, to encourage new entries to the sector and also to provide adequate funding in order to ensure the full implementation and success of those programmes.

The European Parliament resolution (European Parliament, 2004) also stresses the importance of providing accurate data on inshore fisheries activities and calls for harmonising data on IF management, while safeguarding the characteristics of the individual national and regional fisheries. The resolution underlines that coastal management plans have positive effects on the sector.

Although reliable statistical data on inshore fisheries are not available, a study commissioned by the EC (Macfadyen *et al.,* 2011) analyses the characteristics, structure and economic performance of small-scale coastal fisheries (SSF) in Europe. In this study SSF are defined as those under 12m LOA and not using towed gear. The outcomes of the study can therefore not be fully compared to the "inshore fisheries" as defined in the GIFS project (vessels operating within 12 miles of the coast). The results of this study are nevertheless considered to partially overlap and therefore relevant to set the stage for the current report.

According to the European Commission, there is no universally accepted definition of small-scale fisheries, however this concept encompasses a set of common characteristics on which there is a broad measure of agreement and which have been confirmed by several scientific studies (European Parliament Committee on Fisheries, 2012). 'Small-scale fisheries' covers fleets, fishing gear, and types of fishing that can vary quite widely, depending on the Member States and fishing zones concerned. In spite of the differences, these elements have a number of shared characteristics and on that basis can be grouped together and distinguished from what is customarily termed large-scale fishing (including industrial fishing).

The typical features of small-scale fisheries (European Parliament Committee on Fisheries, 2012) are to a large extent also applicable to inshore fisheries:

- Small-scale fisheries are closely linked to the economy, social structure, culture, and traditions of coastal localities and communities;
- Fishing is carried out fairly close to the coast and involves less time at sea;
- The direct human labour component is more substantial, that is to say, a greater quantity of labor is used for every fish caught;
- Fuel consumption per fish caught is lower;
- The gear used is more selective and likely to have a lower impact on living marine resources;
- Fishers have a stronger bond with resources and with the community to which they belong, and are therefore more likely to realize the importance of conserving stocks;
- Marketing structures are simpler and supply chains shorter, the fish being intended primarily to be eaten fresh;
- The highest proportion of operators is made up of micro-, small-, and medium-sized enterprises or family businesses

During the last 10 years, there is a trend of 20% decline in Europe in numbers of vessels less than 12m (Macfadyen *et al.*, 2011).

1.2 Governance

Coastal zones are subject to an array of different policy and management regimes. To effectively situate the role of inshore fisheries into a broader sustainable development framework requires an understanding of coastal governance and the legal, social, economic and political arrangements used to manage fisheries. This refers to existing sectoral governance mechanisms for inshore fisheries including both top-down and bottom-up community approaches to management, and an analysis of the role of local fisheries management approaches in achieving sustainability goals, such as fisher-led conservation programmes, co-management of resources and the integration of local ecological knowledge and industry data to strengthen scientific assessments.

The term governance in GIFS has been used in the context of the definition given by the FAO:

> The term "governance" covers both: (i) the activity or process of governing; (ii) those people charged with the duty of governing: and (iii) the manner, method and system by which a particular society is governed. In fisheries it is usually understood as the sum of the legal, social, economic and political arrangements used to manage fisheries. It has international, national and local dimensions. It includes legally binding rules, such as national legislation or international treaties as well as customary social arrangements (FAO).

*The term **governance** is widely used nowadays to cover institutions, instruments and processes ranging from short term operational management to long term policy development and planning and from conventional forms of administration to modern forms of participative decision-making processes. Although these activities represent a continuum from the higher to the lower scales of the fishery sector, they tend to be divided in **policy** (high level governance) and **management** (medium to low level governance)* (Source: FAO, website consulted May 2014).

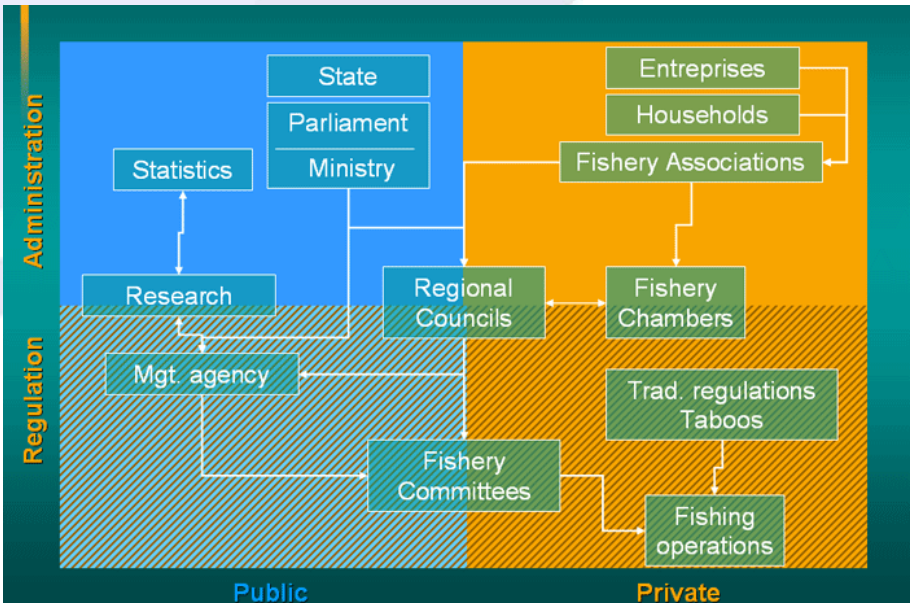

Figure 2. Governance as a systemic function of a complex fisheries administration (Source: FAO, website consulted May 2014)

In the context of macro policy changes in the industry (i.e. Common Fisheries Policy reform and the increased focus upon Integrated Coastal Zone Management and Marine Protected Areas) the role of co-management and collaborative/ participatory governance is becoming increasingly relevant (Bavinck *et al.,* 2013). Co-management (also referred to as co-governance) has been defined in various ways but typically includes *"a range of arrangements, with different degrees of power sharing for joint decision-making by the state and communities (or user groups) about a set of resources or an area"* (Berkes, 2009).

Meanwhile solutions to the crisis in fisheries management are increasingly framed in calls for the re-structuring of traditional hierarchical models of management and policy-making by introducing a more interactive governance approach (involving greater multiple stakeholder inclusion, deliberation, adaptive learning, and self-correction) (Kooiman *et al.,* 2005; Linke and Jentoft, 2013). Interactive governance is *"built on ideas of inclusivity of representation, interactive learning and partnership building"* and principles of *"rationality, efficiency and performance"* (Symes, 2014). Such models it is argued, are better able to govern the complexity of fisheries systems so that they might contribute positively to *"ecosystem health, social equity, employment, food security, and safety"* (Symes, 2006).

Studies repeatedly tell us that top-down hierarchical centralised governance models are often detrimental for small-scale fisheries (Arthur, 2005; Jentoft, 2003) and that the varying co-management and interactive governance models that encourage increased multiple user group participation in the management process have been shown to:

- increase regulation compliance (Carter, 2014; Kaplan and McCay, 2004);

- increase local community empowerment with (potential) implications for social justice and equity (Berkes, 2009);

-improve the quality, legitimacy and relevance of local management plans (Berkes, 2009; Garaway and Arthur, 2004);

- increase social learning, conflict resolution and the availability of locally specific ecosystem knowledge (Berkes, 2009);

- assist in building an understanding of the linkages between social and ecological systems that are so essential for developing sustainable fisheries (Carter, 2014).

Similarly, there is also a widely acknowledged need to introduce a broader ecosystems based approach to fisheries management (EBFM or Ecosystems Approach to Fisheries EAF, see also 28 The Ecosystem-Based Approach to Fisheries Management (EBFM)) coupled with an integrated coastal zone management (ICZM) approach to wider marine/coastal planning in order to comply with European policies (such as the Common Fisheries Policy and Marine Strategy Framework Directive). These approaches are seen as important governance mechanisms to securing social, economic and environmental sustainability goals (Rodwell *et al.,* 2013). The definition of ecosystem-based approach to fisheries management by the new regulation of the CFP ((EU) No 1380/2013) is given in The Ecosystem-Based Approach to Fisheries Management.

However, it is also widely acknowledged that successfully achieving such an integrated system approach to fisheries governance is a complex objective that has proved challenging to implement (FAO, 2009; Pitcher *et al.,* 2009; Rodwell *et al.,* 2013; Symes, 2014). In recent years both policy and research have made clear that to achieve EAF requires an understanding of the human dimensions of this approach that starts with the premise: *"EAF is a human pursuit and human beings, their objectives, their behaviour and their institutions, are key to successful implementation of EAF."* (FAO, 2009: xvi). In this way the FAO (2009) advises fisheries to take better account of human dimensions (including: *"policies, legal frameworks, social structures, cultural values, economic principles and institutional processes"* (ibid:V) in their management. Efforts to secure this approach has led to an increasing recognition that in addition to familiar top-down centralized, science led approaches (typified by the Common Fisheries Policy) (Carter, 2014; Rodwell *et al.,* 2013), more devolved, collaborative and participatory management structures (such as co-management, integrated or interactive governance) are required to secure sustainable outcomes for both the fishing communities and the marine environment (Berkes, 2009; Gray, 2005; Linke and Jentoft, 2013; Rodwell *et al.,* 2013). This approach has gained increased purchase following recent CFP reform (EU No 1380/2013; effective from January 2014) that now indicates that Member States take account of social, economic and environmental factors in the distribution of quota (see also Article 17 in the EU No 1380/2013, EC COM, 2013):

Article 17 - Criteria for the allocation of fishing opportunities by Member States

"When allocating the fishing opportunities available to them, as referred to in Article 16, Member States shall use transparent and objective criteria including those of an environmental, social and economic nature. The criteria to be used may include, inter alia, the impact of fishing on the environment, the history of compliance, the contribution to the local economy and historic catch levels. Within the fishing opportunities allocated to them, Member States shall endeavour to provide incentives to fishing vessels deploying selective fishing gear or using fishing techniques with reduced environmental impact, such as reduced energy consumption or habitat damage" (EC, 2013).

Examples of interactive governance, and other integrated or co-management approaches, have been explored by fisheries researchers over the last decade through detailed case studies and also in terms of the development of theoretical frameworks to help structure and evaluate such approaches (see: Arthur, 2005; Bavinck *et al,* 2005; Bavinck *et al*, 2013; Gray, 2005; Jentoft, 2003; Kooiman *et al,* 2005; Symes, 2006, 2014; Wilson *el al.,* 2003).

For more detail on different approaches to fisheries governance and their limitations, challenges and opportunities see Activity 1.2 Report covering eight case studies of local fisheries governance from Belgium, The Netherlands, France and England. [Activity 1.2 report]

1.3 Relevant policies

1.3.1 European policies

1.3.1.1 Common Fisheries Policy (CFP)

Fisheries by the European Member States fleets and in EU and foreign waters are managed by the Common Fisheries Policy (CFP) implemented by the Directorate-General for Maritime Affairs and Fisheries (DG MARE) from the European Commission (see also CFP User's Guide and Overview European legislation regarding CFP).

The CFP was formally created in 1983 and is part of the sustainable development as set out in the European Union Strategy for Sustainable Development (COM(2001) 264) and the World Summit on Sustainable Development in Johannesburg (2002). An important realization within the CFP is the establishment of Regional Advisory Councils (RAC's) (2004/585/EC)). More information about RAC's see "Regional Advisory Councils (RACs)".

The CFP is a set of rules for managing European fishing fleets and for conserving fish stocks. It aims to ensure that fishing and aquaculture are environmentally, economically and socially sustainable and that they provide a source of healthy food for EU citizens. Since 1 January 2014, a new CFP entered into force (*Regulation 1380/2013*), after an extensive reform process (see *COM (2009) 163*, *SEC (2010) 428* and *COM (2011) 417*). Some of the elements included in the revised CFP, concern a landing obligation (ban on discards), achieving a MSY of the fish stocks by 2015, the implementation of transferable fishing concessions (choice of implementation by the Member States), and the focus on regional management (website DG MARE, *Regulation 1380/2013*). In order to achieve this goal, the EU introduced a number of conservation measures, which can be divided into 4 groups (website DG-Mare, User's Guide of the CFP, 2009):

- Europe defines the **Total allowable catch** (TAC) that can be caught of specific fish stocks within a certain period. These TACs are divided among the Member States by means of quota. The quota can be swapped among the Member States. During the World summit on sustainable development in Johannesburg (2002), the international community committed to change to a new management system for the fish stocks based upon the Maximum Sustainable Yield (MSY) concept, at the latest by 2015 (User's Guide of the CFP, 2009). At this moment, the MSY cannot be determined for all species (e.g. for rays) . For fish stocks without a management plan or determined MSY-value, ICES gives a quantitative advice to Europe based upon all available information. Therefore, ICES classifies all available scientific information in 6 categories, in order to apply advisory rules to them (Source: www.ices.dk).

  In some Member states- e.g. in Belgium - the current fleet - mainly focuses on mixed fisheries, catching species from sustainably managed fish stocks as well as non-targeted species. In order to face this challenge, the fisheries management evolves towards a 'multi-species management'. This issue is discussed in the ICES Working Group on Mixed Fisheries Advice for the North Sea (WGMIXFISH). On the other hand, attention is paid to the effects of excessive selective fishing and there is pled for a balanced fisheries where fish are caught, corresponding to their natural occurrence (Garcia *et al.*, 2012).

- **Technical measures** have been introduced, such as a minimal mesh size, selective fishing gear, closed areas, minimal sizes for the landings of fish and a gradual introduction of a ban discards.

- The **fishing effort** is limited by restricting the number of days when fishing boats can fish at sea. Besides, the fishing effort is reoriented by closing certain zones (temporarily) for fishing activities.

- **Fleet measures** are set, defining the number and the type of vessels that are allowed to fish, as well as defining the reference levels. However, the efficiency of the EU measures dealing with the overcapacity of the fishing fleet is questioned (studie van de Europese Rekenkamer, 2011).

The EC aims for a long term management, in which specific multi-annual plans are elaborated for important commercial fish species. Europe also tackles the problem of discards (User's Guide of the CFP, 2009). An overview of the European legislation concerning the CFP is provided on the Eurlex website. The ecological, economic, social and governance impacts of the CFP were investigated in the study commissioned by the EC (European Commission, 2010).

Since 1 January 2010, the control on the compliance of the CFP was settled by Regulation *1224/2009/EC* which relates to *Regulation 1005/2008/EC* and enforced by the current 'discard ban' to prevent, deter and eliminate illegal, unreported and unregulated (IUU) fisheries. The fishing activities of all fishing vessels can be monitored by means of a satellite tracking system, the so-called 'Vessel Monitoring System' (VMS). All ships also have to be equipped with an electronic logbook, in which fishermen need to report the date, place and size of the catch, per species (website DG-MARE). However, these regulations do not apply to small vessels (<12m). In order to organise the collaboration and coordination between the Member States (MS) on the control and inspection of fisheries, the European Fisheries Control Agency (EFCA) was founded in Vigo in 2006 (User's Guide of the CFP, 2009).

The EC has developed reform proposals, that need to generate a radical switch in the fisheries policy after 2013 (see green paper reform CFP (COM(2009) 163) prior to the reform proposals, consultation CFP reform *(SEC (2010) 428), COM(2011) 417*). Some of the elements in the reform proposals referred to a landing obligation (ban on discards), achieving a MSY of the fish stocks by 2015, the implementation of transferable fishing concessions (choice of implementation by the Member States), and the focus on a regional management (website DG-Mare).

The Regulation of the new Common Fisheries Policy ((EU) No 1380/2013) entered into force as from January 2014.

The new CFP states that it should contribute **to increased productivity and to a fair standard of living** for the fisheries sector including small-scale fisheries. The CFP shall also **promote coastal fishing activities**, taking into account socio-economic aspects. In view of the precarious economic state of the fishing industry and the dependence of certain coastal communities on fishing, it is necessary to ensure the relative stability of fishing activities by **allocating fishing opportunities** among Member States, based on a predictable share of the stocks for each Member State.

Whereas the Green paper on the reform of the Common Fisheries Policy (22.4.2009 – COM(2009) 163) suggested arrangements for the small-scale segment by direct allocation of quotas/ effort/collective schemes, it also suggested that public funding could help the small-scale segment strengthen their economic viability and maintain their contribution to the life of coastal communities. The Green paper put forward the idea of differentiated management regimes as a way of introducing social objectives. SSF and large scale fisheries (LSF) differ enormously in their environmental, social and economic impacts, therefore the Green paper recommended one management regime for LSF with capacity adjustment and economic efficiency and one for SSF in coastal communities with a focus on social objectives. Specific decisions concerning small-scale fleets should be taken as close as possible to the coastal community. However in the new CFP this is not mentioned.

The restriction of fishing opportunities in the 12 nm zone, which reserves Member States' inshore areas to their national fleets, have operated satisfactorily. Whereas the Green Paper (22.4.2009 – COM(2009) 163) questioned if this specific regime could be stepped up to a specific regime for small-scale fishing vessels in the 12 nm zone, the current CFP **Regulation states that *Member States should endeavour to give preferential access for small-scale, artisanal or coastal fishermen*.**

The CFP establishes a framework for managing all capture fisheries in the EC, including therefore inshore waters. The dimension of the former CFP to inshore fisheries was discussed in Coffey and Dwyer, 2000. Although the study's conclusions refer to the previous CFP, it still largely applies to the current situation of IF and SSF:

- The Total Allowable Catches (TACs) mainly cover 'shared' stocks between Member states. However many TACs apply to stocks which belong partly within the 12-mile zone. This means that inshore fishers will have quotas for all these species as well as offshore fishers.
- Member States are required to limit fishing effort of the total fishing fleet. Vessels under 12 meters in length, with the exception of trawlers, can be exempted from these reduction rates, but overall the fishing effort has to be limited by restricting the number of days when fishing boats can fish at sea. This limit could be a significant constraint upon the future viability of some IF as small-scale fisheries has been in decline over the past years.
- Not only inshore waters have an inshore access restriction, access is also limited to other geographical areas or 'boxes', to protect species which are of special importance to that region and which are biologically sensitive. Existing boxes that include areas within the 12 mile limit are used to protect, for example, mackerel, plaice, anchovy, Norway pout, hake and Irish Sea cod.
- Several technical conservation measures (TCM) have been developed to control how fishing is carried out: restrictions on the types of gear, minimum mesh and landing sizes. In the UK and Irish coast restrictions on beam trawling within 12 nm are part of these TCMs.

The European Maritime and Fisheries Fund (EMFF)

In order to help finance these measures, the EC founded the European Fisheries Fund (EFF) for the 2007-2013 period (*Regulation 1198/2006/EC*) (User's Guide of the CFP, 2009). The fund was financed by European money and funding of Member States. An overview of the interim national evaluation report of the EFF is given in 'Interim evaluation of the European Fisheries Fund (2007-2013)'. The European Maritime and Fisheries Fund (EMFF) is the new fund for the EU's maritime and fisheries policies for 2014-2020 (2011/0380 (COD), COM(2013) 245) and aims to achieve the objectives of the reformed CFP and of Integrated Maritime Policy (IMP). It is the follow-up of the European Fisheries Fund (EFF). In view of the importance of small-scale coastal fleets for coastal communities, the EMFF proposes a higher aid intensity rate and introduces some special measures eligible only for these fleets. The measures include professional advice on business and marketing strategies; business startups outside fishing and special support for innovation. The EMFF also aims to support small-scale fishermen training and networking contributing to their professional development.

The European Fisheries Fund (EFF) (2007-2013), is continued as from 2014 as the European Maritime affairs and Fisheries Fund (EMFF) (2014-2020) to support the *CFP* and *IMP*.

In-depth research and scientific information is needed to underpin the *CFP*. At the European level, the fisheries research is regulated by detailed directives (Data Collection Framework, DCF) stipulating which information Member States should gather. In 2014, the DCF was replaced by the Data Collection Multi-Annual Programme (DCMAP), complementing the new *CFP*. The DCMAP is a 7-yearly program, combining several activities carried out in the Member States, such as control, data collection and studies. The funding of the new DCMAP is covered by the European Maritime and Fisheries Fund (EMFF). Advice regarding the *CFP* on the basis of scientific information is provided by several organisations (see also section 1.4.2 Management bodies; User's Guide of the CFP, 2009):

- The International Council for Exploration of the Sea (ICES) gives biological advice for proper management of fisheries in Europe, by means of international collaboration with fisheries biologists. The conclusions of the ICES working groups dealing with fish stock evaluations are processed in the deliberations of the Advisory Committee (ACOM).

- The Scientific, Technical and Economic Committee for Fisheries (STECF) is the regular advisory body of the EC with regard to fisheries. This committee was founded in 1993 (*93/619/EC*) and renewed in 2005 (*2005/629/EC*) and consists of a group of independent scientists, established in order to advise the EC on all aspects of the fisheries policy.

Except for the measures that are specifically oriented towards supporting and strengthening the economic and social structures of IF and SSF (above), MS can also take measures oriented to spatial management of fisheries within the 12 nm. As an example, MS can take non-discriminatory measures to minimise the effects of fishing on the conservation of the marine ecosystem within 12 nm of their coast, if the Community has not adopted measures specifically for this area. Any measures proposed within the 12 nm must be no less stringent than existing Community legislation and must be in line with the CFP. Member States are free to take measures for conservation and management of stocks in waters within their 12 nm, under the conditions mentioned above, if they apply solely to their own fishing vessels (see also 'Natura 2000'). The spatially explicit management measures in the 12 nm directly affect IF that are bound to the coastal waters or territorial sea (see also 1.3.1.2 Integrated Maritime Policy (IMP) and 1.3.1.4 Marine Spatial Planning (MSP)).

Initiatives and projects relevant to inshore and small-scale fisheries

In 2012 the project 'Maximising Yield of Fisheries while Balancing Ecosystem, Economic and Social Concerns' (MYFISH) started. Myfish contributes to the revised CFP by defining management measures. The concept of Maximum Sustainable Yield (MSY) is extended and integrated with the economic and social components of the society. Myfish aims at developing new MSY indicators that can ensure high levels of fishery yield while respecting ecological, economic and social sustainability thus contributing to achieve the Good Environmental Status (GES) as defined by the Marine Strategy Framework Directive (MSFD) (Source: www.myfishproject.eu).

LIFE (Low Impact Fishers of Europe) is the first pan-European platform representing small-scale fishermen. LIFE has started out with the objective of representing, supporting, developing and defending low impact fishing operations in coastal waters. The organization aims to represent, support, develop and defend low-impact fishing operations in coastal waters, with all members agreeing to be bound by a requirement to fish responsibly without damaging the marine environment, to use selective fishing gear and to avoid undersized fish (Source: www.myfishproject.eu).

The first symposium on sustainable small-scale fisheries in the Mediterranean and Black Sea was held in Malta in November 2013 (see also "1.4.1.1 Co-management: First Regional Symposium on Sustainable Small-Scale Fisheries" for more information).

Too Big to Ignore is a global partnership for small-scale fisheries research. The partnership, partners and researchers from 27 countries, was established to elevate the profile of small-scale fisheries (SSF) in Africa, Asia and Oceania, Europe, Latin America and Caribbean, and North America. Too Big to Ignore argues against the marginalization of SSF in policies and help to develop research and governance capacity to address global fisheries challenges.

1.3.1.2 Integrated Maritime Policy (IMP)

The Integrated Maritime Policy for the European Union (the Blue Paper, COM(2007) 575 final) was proposed by the Commission in October 2007 and, since then, endorsed by the European Council and the European Parliament. The primary objective of the EU Integrated Maritime Policy (IMP) (1255/2011/EC) is to develop and implement integrated, coordinated, coherent, transparent and sustainable decision-making in relation to the oceans, seas, coastal, insular and outermost regions and in the maritime sectors. It focuses on issues that do not fall under a single sector-based policy e.g. "blue growth" (economic growth based on different maritime sectors) and issues that require the coordination of different sectors and actors e.g. Marine Knowledge.

To the Integrated Maritime Policy it is important to take account of the inter-connectedness of industries and human activities centred on the sea because decisions in one area can affect all the others. The IMP also encourages authorities to share data across policy fields and to cooperate rather than working separately on different aspects of the same problem. Many countries are recognising the need to a close cooperation between decision-makers in the different sectors at all levels of government (national maritime authorities, regional and local authorities, and international authorities, both inside and outside Europe). The IMP encourages countries to move towards more structured and systematic collaboration between the different sectors (Source: European Commission, Integrated Marine Policy. Consulted May 2014).

Within the IMP two instruments are mentioned to support this policy: Integrated Coastal Zone Management (ICZM) and Maritime Spatial Planning (MSP). Both instruments are of direct relevance to IF because of the explicit spatial references.

The Marine Strategy Framework Directive (MSFD) is the environment pillar of the IMP. Its overarching aim is to achieve good environmental status (GES) for EU marine waters by 2020 by applying an ecosystem-based approach.

IMP also covers Integrated maritime surveillance and sea basin strategies to promote growth and development strategies that exploit the strengths and address the weaknesses of each large sea region in the EU.

1.3.1.3 Marine Strategy Framework Directive (MSFD)

The Marine Strategy Framework Directive (MSFD, 2008/56/EC) adopted in June 2008, aims to protect more effectively the marine environment in marine waters across Europe. A key element of the MSFD is the achievement of the Good Environmental Status (GES) of the EU marine waters by 2020. Regarding fisheries, the MSFD recommends the CFP to take into account the environmental impacts of fishing and the objectives of MSFD. The reformed CFP is now acknowledged by the majority of Member States to be the one of the important mechanisms for achieving GES.

Qualitative descriptors for determining GES specifically or indirectly related to fisheries are the following:

- Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock (more information: Piet *et al.*, 2010).
- All elements of the marine food webs, to the extent that they are known, occur at normal abundance and diversity and levels capable of ensuring the long-term abundance of the species and the retention of their full reproductive capacity (more information: Rogers *et al.*, 2010).
- Sea-floor integrity is at a level that ensures that the structure and functions of the ecosystems are safeguarded and benthic ecosystems, in particular, are not adversely affected (more information: Rice *et al*., 2010).
- Contaminants in fish and other seafood for human consumption do not exceed levels established by Community legislation or other relevant standards (more information: Swartenbroux *et al.*, 2010).

Furthermore, the information on the structure of fish populations, including the abundance, distribution and age/size structure of the populations, physical damage of the seabed caused by fishery activities and biological disturbance by selective extraction of species, including incidental non-target catches (e.g. by commercial and recreational fishing) are included in the list of characteristics, pressures and impacts. MSFD also stresses the need for a monitoring program for the chemical contamination of commercial fish species.

There are strong links between the Marine Strategy Framework Directive (MSFD) and the Water Framework Directive (WFD). In coastal waters, MSFD is only intended to apply to those aspects of Good Environmental Status which are not already covered by WFD (e.g. noise, litter, aspects of biodiversity).

1.3.1.4 Marine Spatial Planning (MSP)

Marine Spatial Planning (MSP) is a planning process in which public authorities integrate and organize human activities in marine areas in space and time in order to achieve ecological, economic and social objectives. MSP provides a way and assessment framework to achieve political objectives in the context of the growing demand for space at sea (European Commission, 2008).

Originally MSP arose from the need for defining marine protected areas worldwide. In recent years, the focus is also on actively planning and management of multipurpose use especially where major conflicts are situated. The European Commission (EC) set out the guidelines for the future 'Integrated Maritime Policy' (IMP) for the European Union in October 2007 (see annex legislation: COM(2007) 575) and linked the Action Plan (SEC (2007) 1278) relying on a common vision and principles that all Member States embraced. This vision is explained in the 'Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU' (COM/2008/791). With the roadmap, the EC encourages Member States to apply the principles at national level, this in coordination with a common approach in regional seas and European waters. MSP is an important tool to achieve the objectives of the IMP: it promotes coordination of administrative levels and the various activities that take place in the marine ecosystem. With this approach, the EU wants to develop maritime activities following an "ecosystem-based" management approach. In March 2013, the Commission proposed legislation to create a common framework for maritime spatial planning and integrated coastal management. In July 2014 (23/07/2014), the EU's General Affairs Council adopted the new Maritime Spatial Planning Directive which will help Member States develop and coordinate various activities taking place at sea so that they are as efficient and sustainable as possible. The Directive is a cornerstone in the EU's Blue Growth strategy. Each relevant EU Member State must transpose the Directive into their national legislation and to nominate a Competent Authority in charge of its implementation by September 2016. Although national maritime spatial plans must comply with a number of minimum requirements set by the Directive, countries are free to tailor the content of the plans to their specific economic, social and environmental priorities, as well as to their cultural traditions and legal context (see DG MARE website)

Key principles of the 'Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU' (COM/2008/791) are the following:

Principle 1: Using MSP according to area and type of activity

Principle 2: Defining objectives to guide MSP

Principle 3: Developing MSP in a transparent manner

Principle 4: Stakeholder participation

Principle 5: Coordination within Member States — Simplifying decision processes

Principle 6: Ensuring the legal effect of national MSP

Principle 7: Cross-border cooperation and consultation

Principle 8: Incorporating monitoring and evaluation in the planning process

Principle 9: Achieving coherence between terrestrial and maritime spatial planning —

relation with ICZM

Principle 10: A strong data and knowledge base

MSP and implications for Fisheries

MSP aims to consider explicitly the plans and actions of all economic sectors and uses (e.g. energy, transport, fisheries, and watershed management) in terms of the spatial and temporal pattern of proposed development and capital investments. MSP can have major implications for fisheries, and vice versa (Dahl *et al.,* 2009).

In November 2013 (14/11/2013) the "Fishing for Space" workshop on MSP and Fisheries in the Baltic Sea was held. During this workshop amongst others, the integration of fisheries and MSP in practice was discussed. Findings about the integration of fisheries and MSP are the following;

- The involvement of the fisheries sector in MSP should be prepared and facilitated through good practices such as pilot projects, cross-border fora, discussions and data compilations.

- Fisheries spatial measures (e.g. seasonal, gear type) could be discussed as part of MSP i.a. in order to enhance fish resources.

- Synergies between fisheries and other activities and potential co-uses should be emphasised and to this end be mapped integrated into the planning process.

- Recreational fisheries need to be taken into account in MSP. Dividing recreational fisheries into commercial tourist and local population (subsistence) components might be beneficial for MSP purposes ("Fishing for Space" workshop findings on MSP and Fisheries in the Baltic Sea).

MASPNOSE, the Maritime Spatial Planning in the North Sea facilitated two case studies on the North Sea: a case study of the Thornton Bank in the southern North Sea, and one case study about the development of an international fisheries management plan for the Dogger Bank in the central North Sea (MASPNOSE Final Report (D1.3.3)).

For more information about MSP in the GIFS partner countries see "1.3.2 Implementation of fisheries policy at national level".

1.3.1.5 Integrated Coastal Zone Management (ICZM)

There is a widely acknowledged need to introduce an Ecosystems Approach to Fisheries (EAF) coupled with an integrated coastal zone management (ICZM) approach to wider marine/coastal planning in order to comply with European policies. These approaches are seen as important governance mechanisms to securing social, economic and environmental sustainability goals (Rodwell *et al.,* 2013).The Integrated Coastal Zone Management (ICZM) concept dates from the early 1990s. ICZM stands for a continuous process with as overall objective, achieving sustainable development in the coastal zone through optimal management of human activities in order to improve the state of the coastal environment and maintain its diversity (European Commission 1999). In the EU, the focus on ICZM was originally through a recommendation (non-legally binding instrument) that aimed to develop a shared vision in the drafting and implementation of national strategies for ICZM (EU 2002/413/EC). Of the 20 EU coastal Member States, nine countries – representing 64% of the European coastline – already had a national ICZM strategy in place in 2005.

The 8 ICZM principles, as stated in the EU recommendation on ICZM (2002/413/EC) are the following.

Principle 1: A broad overall perspective (thematic and geographic) which will take into account the interdependence and disparity of natural systems and human activities with an impact on coastal areas.

Principle 2: A long-term perspective which will take into account the precautionary principle and the needs of present and future generations.

Principle 3: Adaptive management during a gradual process which will facilitate adjustment as problems and knowledge develop. This implies the need for a sound scientific basis concerning the evolution of the coastal zone.

Principle 4: Local specificity and the great diversity of European coastal zones, which will make it possible to respond to their practical needs with specific solutions and flexible measures.

Principle 5: Working with natural processes and respecting the carrying capacity of ecosystems, which will make human activities more environmentally friendly, socially responsible and economically sound in the long run.

Principle 6: Involving all the parties concerned (economic and social partners, the organisations representing coastal zone residents, non-governmental organisations and the business sector) in the management process, for example by means of agreements and based on shared responsibility.

Principle 7: Support and involvement of relevant administrative bodies at national, regional and local level between which appropriate links should be established or maintained with the aim of improved coordination of the various existing policies. Partnership with and between regional and local authorities should apply when appropriate.

Principle 8: Use of a combination of instruments designed to facilitate coherence between sectoral policy objectives and coherence between planning and management.

The other Member States (together 18% of the EU coastline), do not have an ICZM strategy but perform additional actions for achieving an ICZM in the context of existing policies and legislation. The ICZM recommendation of 2002 was subject to an evaluation and review after 2006 and on March 12, 2013 the EC approved a draft proposal for a Directive establishing a framework for MSP and ICZM. The proposed instrument will require Member States to draft ICZM strategies, building on the principles and elements of the Council Recommendation on ICZM in 2002.

The European Parliament resolution of 2 September 2008 on Fisheries and Aquaculture in the context of Integrated Coastal Zone Management in Europe [2008/2014(INI))(2009/C 295 E/01] stresses the need for representatives of the fishing and aquaculture sectors to be involved in activities linked to the planning and development of ICZM, bearing in mind that their involvement in sustainable development strategies will increase the added value of their products.

The resolution also calls for closer cooperation between relevant bodies at regional level through exchanges of information relating to the state of coastal zones and the adoption of joint strategies to improve the environmental situation of local marine ecosystems. Next to that the resolution also considers for both the fisheries and aquaculture sectors must be included in a cross-cutting approach to all maritime activities taking place in coastal zones, in order to achieve sustainable development in accordance with the new maritime policy guidelines.

In March 2013, the Commission proposed legislation to create a common framework for maritime spatial planning (MSP) and integrated coastal management (COM(2013) 133 final). MSP and ICZM, both identified as integrated management tools under the IMP, connect in their geographical coverage (transition area from land to sea) and in their overall objective (to manage human uses in their respective areas of application). Despite these similarities and although there are strong connections between them at the land-sea interface, the two concepts have to a great extent been developed separately. Although there are strong arguments for the benefits of a joint approach on MSP and ICZM at EU level and integrate both process tools into a streamlined maritime planning and coastal management process, the idea of a joint MSP-ICZM directive did not prosper. The need for developing a separate ICZM instrument within the EU is to be further evaluated (SWD(2013) 65 final).

1.3.1.6 Natura 2000

Natura 2000 is the centrepiece of EU nature & biodiversity policy. The aim of Natura 2000 is to assure the long-term survival of Europe's most valuable and threatened species and habitats. For each biogeographical region, the Commision selects a list of Sites of Community Importance (SCI) which then become part of the Natura 2000 network. Afterwards, the SCI are designated at national level as Special Areas of Conservation (SAC) under the 1992 Habitats Directive 92/43/EEC. Member States select the most suitable sites and designate them directly as Special Protection Areas (SPAs) under the 1979 Birds Directive 79/409/EEC.

Most Natura 2000 areas are located in territorial sea or near offshore areas. This, together with economic activities such as offshore wind farming, will pose further impediments to inshore fisheries (Fock, 2011).

A first link between the CFP and Natura 2000 was established in 2008, in the guidelines for fisheries measures in Natura 2000 sites. The implementation of certain fisheries management and control measures depends on the conservation objectives of the marine SPAs and sites of Community Importance (SCI). Member States are encouraged to ensure a good coordination between fishery and environmental authorities at Member State level and with stakeholders.

Different procedures apply depending on the jurisdiction in which the Natura 2000 site (SPA or SCI) is located (guidelines for fisheries measures in Natura 2000 sites) :

a) The site is located within 12 nautical miles:

Member States can take non-discriminatory measures to minimise the effects of fishing on the conservation of the marine ecosystem within 12 nm of their coast, if the Community has not adopted measures specifically for this area. Any measures proposed within the 12 nm must be no less stringent than existing Community legislation and must be in line with the CFP. Member States are free to take measures for conservation and management of stocks in waters within their 12 nm, under the conditions mentioned above, if they apply solely to their own fishing vessels.

b) The site is located offshore, i.e., beyond 12 nautical miles:

In this case the proposed measures fall under the scope of the Common Fisheries Policy, for which the EC has exclusive competence. Therefore, Member States must address a formal request of adoption of such measures to the Directorate General of Fisheries and Maritime Affairs (DG MARE) of the Commission.

Fock (2011) identifies four key issues in the relationship between the EU CFP and the use of Natura 2000 as a network of MPAs:

- the difficulty of involving all relevant groups in the management process in a well-defined procedure.
- the differences in national conservation strategies and the setting of priorities is problematic.
- the need to establish a protocol to resolve the environmental impact of fisheries at the ‘métier’ level.
- the need to count with a uniform definition of the spatial dimension of fisheries: **The definition of fishing grounds, particularly the inshore fishing grounds, is essential to support the CFP goal of strengthening the coastal fisheries.**

1.3.1.7 EU policies in support of socio-economic development

EU policies and instruments in support of socio-economic development includes the Competitiveness and Innovation Framework Programme (CIP), continued under the Programme for the Competitiveness of enterprises and SMEs (COSME) (2014-2020); the Structural Funds, including the European Regional Development Fund (ERDF) that finances the INTERREG programme (III, IV, 2 Seas);the European Agricultural Fund for Rural Development (EAFRD);and other instruments for external support (Development aid), regional support and support for maritime affairs and fisheries. An overview of the European financial instruments and mechanisms is available on the website: www.eutrainingsite.com/eu_funds.php.

Community-led local development (CLLD) is a tool for involving citizens at local level in developing responses to the social, environmental and economic challenges we face today. CLLD is an approach that requires time and effort, but for relatively small financial investments, it can have a marked impact on people's lives and generate new ideas and the shared commitment for putting these into practice (http://ec.europa.eu/regional_policy/informing/dialog/pdf/clld_guidance_2013_04_29.pdf). The Commission expects CLLD to facilitate implementing integrated approaches among the European Structural and Investment Funds concerned to achieve at local level the 11 thematic objectives of the proposed Common Provisions Regulation 2014-2020[1]. The Commission encourages the use of CLLD as it also allows local communities to take ownership of the objectives of the Europe 2020 strategy. In line with the Commission's proposal for the Common Strategic Framework2: "Member States shall promote the development of local and sub-regional approaches, in particular via community-led local development [...]".

1.3.2 Implementation of fisheries policy at national level

1.3.2.1 Belgium

In Belgium, the Flemish Government has the exclusive authority with regard to sea fisheries. The regulation for recreational fishing is stipulated by the *Royal Decree of 14 August 1989* and the *Ministerial Decree of 21 December 2012*. The policy for commercial fishing is developed by the Flemish Ministry of Agriculture and Fisheries (Beleidsnota landbouw, visserij en plattelandsbeleid 2009-2014, Peeters K., 2009). The Agriculture and Fisheries Department is responsible for the preparation of the policy on Flemish and European level. Within this department, the Agriculture and Fisheries Policy Division is responsible for the implementation of the European policy, the formulation of policy proposals, the development of regulations, as well as for the execution of the fisheries policy. This concerns the implementation of the European (European Fisheries Fund, EFF) and Flemish (Financial Instrument for the Flemish Fisheries and aquaculture, FIVA) policy for investments and actions in support of fisheries. In this regard a management authority has been established in the context of the Operational programme in implementation of the National Strategic Plan for the Belgian fisheries sector 2007-2013 (Anon.,2008b). The implementation of the policy also implies: policing activities, data collection and the reporting of the data in yearly reports. The Sea fisheries service is part of the latter section and guarantees the coordination, execution and enforcement of the fisheries policy.

The policy is also supported by the Institute for Agricultural and Fisheries Research (ILVO) and the Flanders' Agricultural Marketing Board (VLAM).

The Strategic Advisory Council for Agriculture and Fisheries (SALV) advises the Flemish government and the Flemish Parliament concerning the policy and the development regulations on the economic, ecological, social and societal aspects of the (agriculture and) fisheries policy. This advice is prepared by the Technical Fisheries Working Committee of the SALV. The Environment and Nature Council of Flanders (Minaraad) provides advice in a number of fisheries-related cases as well. The *Rederscentrale* (Shipowners' Federation) is recognised as the organisation of producers of fisheries products and as the professional association representing the employers. The Foundation for Sustainable Fishery Development (SDVO) aims to represent the interests of the Belgian sea fisheries cluster and to support them in all domains that contribute to sustainable fisheries. The redercentrale as well as the SDVO are represented in the RACs that are relevant for the Belgian fisheries. The Belgian fisheries policy is discussed in more detail in Vanderperren & Polet (2009) (CLIMAR project phase 1 and phase 2 BELSPO), the National Strategic Plan for the Belgian fisheries sector 2007-2013, the Operational Programme in implementation of the National Strategic Plan for the Belgian fisheries sector 2007-2013 and the Visserijrapport (VIRA) (2012). An extensive overview of the legislation concerning the fisheries is given in the coastal codex, theme fisheries.

Fisheries Local Action Groups (FLAGs) are funded by the European Fisheries Fund (EFF) with Axis 4 funds (a program that supports the sustainable development of fisheries areas) in order to support a range of projects proposed and carried out by a wide variety of local stakeholders.

In Belgium, the FLAG, also called the 'local group', 'Plaatselijke Groep Belgisch Zeevisserijgebied', is a partnership between socio-economic stakeholders in the fisheries sector, NGOs and public authorities that play a crucial role in the implementation of the proposed development strategy. The lead partner of the Belgian FLAG is the Province of West Flanders. The main focus of the FLAG strategy is to add value to local fisheries products and increase local consumption. Belgian landings represent only 10% of fisheries products consumed in Belgium, leaving the remaining 90% to be met by imports. Therefore there is a considerable potential for discovering and developing local markets. It will also support diversification, innovation, the involvement of women and efforts to promote the sustainable management of the marine environment (Source: FLAG factsheet - Belgium - West Flanders).

In the Royal Decree of July 20, 2012 (C-2012/24308), the foundation of marine spatial planning in Belgium was made: the Law on the protection of the marine environment and the integration of Marine Spatial Planning in marine areas under the jurisdiction of Belgium. In this decree marine spatial plan is defined as a plan that integrate the desired three-dimensional spatial and temporal structure of the human activities based on a long-term vision and on the basis of clear economic, social and environmental objectives. This plan focuses on the coordination of decisions that have spatial impact on the marine areas and ensures that each stakeholder are involved in the process.

[1] *Proposal for a regulation of the European Parliament and the Council laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund covered by the Common Strategic Framework and laying down general provisions on the European Regional Development Fund, the European Social Fund and the Cohesion Fund and repealing Council Regulation (EC) No 1083/2006, COM (2011) 615 final , amended proposal COM(2012) 496 final.*

The marine spatial plan was developed using the following structure:

- a spatial analysis of the Belgian marine areas;
- a long-term vision on the spatial use of the Belgian marine areas;
- clear economic, social, environmental and safety objectives, at least the following components;
- Effective objectives;
- The indicators that provide a reliable indication to achieve the desired objective, or a desired change in behavior;
- The measures, instruments and actions to implement the marine spatial plan.

The marine spatial plan is binding and will be evaluated and improved every 6 years if necessary. By means of the Royal Decree of 13 November 2012, an advisory commission was established by the King.

From July until September 2013 public consultation took place based on the draft Marine Spatial Plan. At the moment (January 2014) the final marine spatial plan is being composed taking the public recommendations received from the public consultation in account (Ontwerp van koninklijk besluit tot vaststelling van het marien ruimtelijk plan, 2013).

The Marine Spatial Plan has a direct impact on IF through its programme of measures that are to a large extent spatially explicit. In the draft of the Marine Spatial Plan, as proposed by the Minister of the North Sea, there are restrictions for commercial and recreational fisheries in four zones in the Habitats Directive area 'Vlaamse Banken'. It will also provide space for a transition to passive fisheries and the use of alternative less sea-floor damaging fishing techniques. In the territorial sea (the area from the mean low water mark to 12 nm), fishing is regulated by national legislation (Act August 19, 1891). This legislation provides that fishing vessels operating between 0 and 12 nm may not have engine power above 221 kW, and between 0 and 3 nm ships tonnage must remain under 70 GT. However in the Draft Royal Decree establishing the marine spatial plan, the zone of 3nm is expanded to 4.5 nm which is seen as positive for inshore fisheries. Recreational fisheries are not allowed if it damages the seafloor. In the territorial sea, fishing is exclusively reserved to Belgian fishers, though under certain conditions also French and Dutch fishers are allowed based on multilateral agreements (Douvere & Maes 2005, GAUFRE project BELSPO): the Treaty establishing the Benelux Economic Union (1958) attributes unlimited rights to Dutch fishermen for fishing in the Belgian territorial zone. French fishing boats are, under certain conditions, allowed to catch sprat and herring in the zone between 3 and 12nm from the baseline as determined by the Belgian-French convention on 'ijle haring' fisheries and European sprat in the French and Belgian territorial waters (1975). The fishing activities are also prohibited at the level of the 'Paardenmarkt' where munition (WWII) is stored (Maes *et al.,* 2000) and in areas designated for wind farms. In addition, the Royal Decree of April 11, 2012 prohibits regular shipping (and thus *de facto* fishing) in a safety zone of 500m around the wind farms. However the advice on the preliminary draft of the Marine Spatial Plan of the Strategic Advisory Council for Agriculture and Fisheries (SALV) (Advies Ontwerp van koninklijk besluit tot vaststelling van het marine ruimtelijk plan 2013-2019, 2013) argues that fisheries, under certain conditions, should be allowed in the windmill parks. For example marine aquaculture should be possible within the energy production zones which exclude all forms of regular passage.

Particular for inshore fisheries, the advice on the preliminary draft of the Marine Spatial Plan (2013) recommends for an inshore fisheries policy during the further elaboration of the Marine Spatial Plan. This policy could be cooperation between all stakeholders (federal and national governments, NGOs, the fishery sector and research). SALV also calls for financial support and/or compensation for the inshore fisheries sector if access to the fishing grounds is limited or not accessible. For each activity in the Belgian part of the North Sea, linked to concessions, multifunctional use should be provided. The concessions could include that the activities should be linked to the production of fish.

See the Compendium for Coast and Sea for more information about fisheries and policies and marine spatial planning in Belgium (Lescrauwaet *et al.,* 2013).

1.3.2.2 The Netherlands

The Ministry of Economic affairs has jurisdiction over the Dutch fisheries sector, regulations for fisheries are based on the Fisheries law of May, 30 1963.

The Fisheries Management board of the Ministry has the task to manage matters concerning the production, marketing, price setting and processing of fisheries products within the CFP framework. The Fisheries Management board translates, together with the Ministry's Legal Planning Office, policies into national fisheries policies. In this legislative process, the Government and Parliament together determine the constitutionality of proposed laws under consideration (Venema, 2001).

The Community Board of Fish and Fish Products (Productschap Vis), is an economic sector of the sectoral organisation under public law (publiekrechtelijke bedrijfsorganisatie, PBO), until recently dealt with management of quotas, fish trade and fish processing in the Netherlands. Tasks concerning the enforcement of EU and national control measures are given to the Dutch general inspectorate, Algemene inspectiedienst (AID).

In the Dutch territorial sea (between 0 and 12 nm), fisheries is partly regulated by the Common Fisheries Policy (CFP) and mainly regulated by a national policy (Source: http://www.pvis.nl/visserij/kustvisserij/). Inshore fisheries are all fishery activities taking place in inshore waters; the Eastern and Western Scheldt, the Wadden Sea, the Dutch part of the Eems-Dollard estuary, the Brouwershavense Gat, the Zeegat and Goeree. Also the Voordelta and the Grevelingen lake are, as inland waters, part of the inshore fisheries policy. All the waters within the 12 nm zone, not described above are fishing zones. Within the 12 nm zone, only vessels with an engine power of <221 kW are allowed. (Source: http://www.pvis.nl/visserij/kustvisserij/)

Unlike offshore fisheries, the Dutch coastal fisheries are mainly subject to national policy the goals of which are: to regulate fisheries in relation to other marine functions, including the most important ecological function, to regulate fisheries vis-à-vis each other, and the leasing of shellfish farming plots (Symes and Phillipson, 2001). The Netherlands have a devolved management giving the Dutch fisheries sector responsibility to develop a balance between fishing activity and nature through self-management (Symes and Phillipson, 2001). Since 1992 the Netherlands introduced a co-management system, the so called 'Biesheuvel group', that regulates national quotas. This co-management system promotes resource-user participation in fisheries management by means of creating incentives for fishermen to voluntarily organize themselves via producers' organizations (PO) into regional groups of corporate personality (Venema, 2001).

The Biesheuvel groups consists of private fisher associations (cooperative groups of cutter fishermen) formed by the Steering Committee Biesheuvel (former Prime Minister Barend Biesheuvel). There are eight Biesheuvel groups in the Netherlands; Group Delta/Zuid, Group Texel, Group Nieuwe Diep, Group PO-Oost, Group PO-Wieringen, Group Nederlandse Vissersbond I, Group Nederlandse Vissersbond II; and Group Nederlandse Vissersbond III. 97% of all beam trawl fishers joined the co-management system (Van Hoof, 2010). The management groups are administered by a board that mainly consists of fishers and is chaired by an independent chairman. The main task of the management groups is to manage and control the quota of their members. Within these groups, individual fishers pool their individual quota and their days at sea. Fishers can communicate with each other and rent and/or barter their individual quotas and sea-days (Venema, 2001, Van Ginkel, 2009, van Hoof, 2010).

Other fishing organisations involved with inshore fisheries are the Nederlandse Vissersbond (Dutch Fishermen's Association) and Visned (Vissers met toekomst, fishermen with a future). Visned is the National Association of Producer Organisations in Dutch Demersal Fisheries. As an overarching organisation, VisNed is the interlocutor for those involved in the fish market, NGOs, scientists, the Dutch government and the European Commission, RACs and the European Parliament. VisNed strives for a stable environment, an important condition for sustainable fisheries. That means not only political and social security, but also a fair price for the fish so that everyone in the fishery sector, from fishermen to fish merchant can earn a living (Source: www.visned.nl). The Nederlandse Vissersbond (NVB) was founded in 1934 by seven local fishing companies under the name 'Bond der Nederlandsche Visschersverenigingen. Since 1936 the organisation is known under its current name 'Nederlandse Vissersbond'. At present, the Vissersbond has an active membership of 280 members, mainly fishing companies. The Vissersbond is a lobby for the Dutch commercial fishermen, ship owners and crew. Their main service is focused on the sustainable development of the Dutch fishing companies. The members of Vissersbond are active in coastal, sea and inland fisheries as well as aquaculture (musselfarming). All members of Vissersbond are obliged to be part of the producers' organization (PO) of the Nederlandse visserbond. This PO counts 3 management groups that shape the private fisheries management. The fisheries management groups are part of a national legislation. Fisheries management includes monitoring and maintaining of the quota and seadays of the board members. Also the control and enforcement of the legally authorized vessels engine power is carried out by the board members. The board is actively responding to the demand and supply of members to and from quotas and seadays, by setting up rent, exchange and sale transactions in the Netherlands and abroad (http://www.vissersbond.nl/).

The Netherlands have created an Integrated Management Plan for the North Sea 2015 (Integraal beheersplan Noordzee 2015), originally driven by the need for spatial planning of offshore wind farms. This forward-looking plan introduces an integrated assessment framework for all activities requiring a permit. Opportunity maps have been created for maritime uses that are bound to fixed locations and from which the strongest growth is expected. Joint initiatives of parties that combine the use of marine space will be supported. It provides the private sector the flexibility to develop offshore initiatives and projects. From a fisheries point of view, Pim Visser, chief executive of VisNed held a plea for a bottom-up approach, for an active stakeholder engagement, and for sufficient monitoring and scientific support in Spatial planning in the North Sea in his talk "Fishing on a postage stamp during the MSP Symposium hosted by the EC on 26 March 2012

The Dutch fishing zone is located between the border of the 12 nm zone and the outer limit of the Netherlands Continental Shelf. Within the 3 nautical miles zone, the Dutch and Belgian fishers are allowed to fish (according to the Benelux-convention), between the 3 and 12 nm, English, Belgians, French, Danes and Germans have historical rights. Within the 12 nm zone and in the 'Scholbox', north of the Wadden Sea Islands and in the German Bight, fishing is only permitted for vessels with a maximum engine power of 300pk (221 kW). These 'Eurokotters' fish in coastal waters, mainly on sole, plaice and shrimps. In coastal waters, there are areas where beam trawlers are not allowed, or areas with other fishery-restrictive or fisheries closed areas. Those areas are called the 'accentnatuurgebieden' in the Voordelta. In 2008 the Dutch Law on Spatial Planning was expanded with the EEZ. In parallel, the existing maritime spatial plan for the Dutch part of the North Sea was revised. The revised maritime spatial plan no longer exists in itself, but it integrated into the Dutch National Water Plan (Nationaal Waterplan 2009-2015). In principle, fishing and recreation have unrestricted access to all areas as long as they do not interfere with activities of national importance.

The importance of recreation and certain forms of fishing (e.g. stationary fishing lines, mussel collection, prawns) is partly the reason why the 12nm zone is kept free from permanent construction, which is taken into account in decision making regarding activities within the 12-mile zone.

Actions that are currently being undertaken to make the fishing sector more sustainable will lead to considerably less bottom trawling and hence more possibilities for marine aquaculture. Fishing activities taking place in conjunction with other functions would, for this reason, seem a viable option. (http ://www.unesco-ioc-marinesp.be/spatial_management_practice/the_netherlands)

Fishery in protected areas is regulated by the VIBEG (Visserij In Beschermde Gebieden) agreement. The VIBEG is an agreement for the regulation and development of fisheries and nature conservation in the North Sea Coastal Zone and Vlakte van de Raan Natura 2000 sites. Focus is on sustainable fisheries with innovation and implementation of sustainable techniques, future oriented and zoning. The VIBEG has reached agreement on zoning of protected areas

and the regimes of measures for each individual zone (more information see VIBEG). The VIBEG agreements also include perspectives on shrimp fisheries.

1.3.2.3 England (contribution of J. Orchard-Webb)

The Marine Management Organisation (MMO) is responsible for regulation and licensing of fishing in England. English inshore fisheries management (operating within six nautical miles) is policed and managed by the IFCAs (Inshore Fisheries and Conservation Authorities). There are 10 inshore fisheries and conservation districts in England. Each inshore fisheries and conservation district is served by a corresponding Authority (IFCA). The IFCAs co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCAs are funded through local authorities, but report to the Department for Environment, Food and Rural Affairs (Defra). IFCAs replaced the sea fisheries committees in April 2011, with an important expanded socio-economic remit to *"lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry" (*Defra, 2010). IFCA's are tasked with the sustainable management of inshore sea fisheries resources in their local area. They are made up of representatives from the constituent local authorities (who provide funding for the IFCA) along with people from across the different sectors that use or are knowledgeable about the inshore marine area, such as commercial and recreational fishers, environmental groups and marine researchers, who offer their time voluntarily. The annual reports describe how the IFCAs performed over the previous year and the progress made against aims and objects for the year (e.g. the The Kent & Essex IFCA Annual report 2012-2013). The duties and powers of the IFCAs and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of the European Union instrument for fisheries management the recently amended Common Fisheries Policy (EC COM, 2013). The Marine and Coastal Access Act, establishes the marine planning regime for the UK including underlying ICZM principles and the designation of a network of Marine Protected Areas (MPAs) (and in England Marine Conservation Zones (MCZs). Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders in helping inform Defra on their planning for these sites. UK fisheries management and marine planning is informed by the work conducted by Cefas (Centre for Environmental, Fisheries and Aquaculture Science), who are an executive agency responsible for carrying out research and monitoring of fish and shellfish stocks.

NUTFA (the New Under Ten Fishermen's Association) is a UK organisation specifically dedicated to the support, survival and development of the under ten metre fleet. NUTFA is a non-profit making organisation and represents its members in the under 10m and non-sector at local, UK and EU levels. It represents all under ten sectors, quota and non-quota, trawlers and netters, liners, shell fishermen and all other licensed marine fishermen (Source: NUTFA, consulted July 2014).

Since 2012, Greenpeace and NUTFA have been collaborating on CFP reform. In July 2014, An action plan for the regeneration of the UK's inshore waters, fisheries and coastal communities "Championing coastal waters and communities" was prepared by Greenpeace and NUTFA. In this plan, Greenpeace and NUTFA recommend 5 actions that are needed to regenerate the UK's inshore waters (Source: Championing coastal waters and communities, 2014):

- Redistribute quota to the under 10 metre sector
- Restore fish stocks
- Protect the marine environment
- Prioritise access for low impact fishermen in the UK's 0-12nm zone
- Regionalise fisheries management

The United Kingdom will implement MSP partially through MMO and partially through existing authorities. In England, the inshore and offshore waters have been split into 11 plan areas. Each plan focuses on a specific area, considers economic, environmental and social issues, encompasses all sectors, and is forward-looking with a clearly set out 20-year vision supported by objectives and policies. The first marine plans for England were published on 2 April 2014 and considers the East Inshore and East Offshore Marine Plans. The South marine plan areas began early 2013.

1.3.2.4 France (contribution of D. Picault)

The objective of fisheries management in France is to ensure the sustainability of fishery resources but also that of the businesses that exploit them (Source: Ifremer, Consulted February 2014). Fisheries management is based on various international agreements (United Nations Convention on the Law of the Sea (1982), United Nations Agreement (1995) on fish stocks whose migrations take place as much inside as they do beyond Exclusive Economic Zones (straddling stocks) and highly migratory fish stocks) and falls under the Common Fisheries Policy (CFP) framework of the European Union (EU). The latter has an exclusive competence in terms of the conservation of the biological marine resources[2] by defining fishing rules to control and limit the harvesting of fish stocks. The management mechanisms in place are designed to match fishing effort and harvested volumes to the available resource; on the basis of scientific recommendations. Today, the fisheries policy revolves around main axes such as the management and conservation of fisheries, international policy, markets and trade policy and the financing of the policy (Source: European Commission, CFP. Consulted February 2014).

The Community management of fisheries is based on equal access opportunities to all waters and resources of the EU. Vessels registered in the fishing fleet Community file must comply with the management rules of the European Union

[2] Article 3 of the Treaty on the functioning of the European Union, consolidated version in force since 1 December 2009 (Lisbon Treaty), amended by decision 2011/199/EU of the European Council of 25 March 2011 (stability mechanism

(EU) (EC Regulation No 1380/2013). However, a management exemption exists for the twelve nautical miles area of the Member States (territorial waters). This exemption allows Member States to reserve these waters to the activities of their nationals (with the exception of historical rights of certain vessels registered in EC Regulation Annex No 1380/ 2013). The EU delegates the definition of management rules that are better suited to the local context provided they are consistent with the Community fisheries regulations ("residual" duties). This is the principle of subsidiarity in territorial waters (12 mile band). In terms of governance in this coastal zone, the French State has chosen a system of co-management directly involving fishermen and their representatives. In a co-management system, the resource management initiative originates primarily from the local users represented here within Committees for Maritime Fisheries and Marine Fish Farms that are professional organisations representing fishermen in France. If the management remains governmental (Ministry of Ecology, Sustainable Development and Energy), decision making is participatory, thus giving all stakeholders the opportunity to voice their positions. Fishermen thereby enjoy some degree of autonomy because they hold some control over the management of the fishery (Ferracci, 2011). However, for specific measures, the French authorities can make management decisions on their own.

For species of Community interest, measures of a general nature developed by the European Commission may set "total allowable catches" (TACs – maximum quantities not to be exceeded) per species and per fishing ground, or technical measures (gears, mesh size, etc.). For these species, the European system of management is therefore predominant and applies to all fishing grounds including inside the 12-mile band. The State may exercise decisive powers by implementing, through co-management, a specific fishing regime distinct from the general regime (Boude, 2004).

- **The role of the authorities**

In 2014, it is the Ministry of Ecology, Sustainable Development and Energy that is responsible for fisheries management in France. The legislative provisions regarding this sector are integrated into the ninth book of the Rural Code and of maritime fisheries (available on http://www.legifrance.gouv.fr/).

Within this Ministry, it is the Directorate for Maritime Fisheries and Aquaculture (Direction des Pêches Maritimes et de l'Aquaculture - DPMA), which is under the authority of the Deputy Minister in charge of Transport, the Sea and Fisheries himself under the Ministry of Ecology, Sustainable Development and Energy, that ensures the economic and regulatory monitoring of maritime fisheries, thereby contributing to the sustainable management of aquatic resources (Source: http://www.developpement-durable.gouv.fr/-Les-peches-maritimes-et-l-.html). The DPMA is in charge of the management of commercial fishing at sea and in freshwater as well as of maritime and continental aquaculture. Its roles are to (Anon., 2010):

- translate and establish European regulations at the national level,
- design, develop and enforce regulations in the field of maritime fisheries and aquaculture (management of the fleet, of fishing opportunities, ...),
- define the fishery resources conservation policy at the national, Community and international level (resource management, decrease in fishing capacity, ...),
- define the maritime fisheries control policy of (at sea as well as during landings and on land, collection of declaratory documents, ...),
- limit the impacts of fishing on the environment.

Within the same Ministry and the Directorate General for Infrastructure, Transport and the Sea (Direction Générale des Infrastructures, des Transports et de la Mer - DGITM), there is another directorate which is related to the fisheries sector: the Directorate for Maritime Affairs (Direction des Affaires Maritimes - DAM). For the fisheries sector, its missions notably pertain to monitoring, safety at sea and the running of the decentralised services of the State.

At the regional/interregional level (NUTS 1 and 2), the French State has created Interregional Directorates for the Sea (Directions Interrégionales de la Mer - DIRM) which are decentralised services dedicated to the users of the sea for the maritime coastlines[3]. The DIRMs are in charge of the conduct of State policies in terms of the sustainable development of the sea, the management of marine resource and the regulation of maritime activities at the regional level. They are under the authority of the region prefect, custodian of the State authority in the region. At the level of the management of fisheries in territorial waters, they have an important role in being in charge of adopting, or not adopting, regulation projects originating from fishermen and following the procedures detailed below.

At the departmental level (NUTS 3), the State is present through the Departmental Directorates for the Territories and the Sea (Directions Départementales des Territoires et de la Mer - DDTM). Within the DDTMs, the Delegations to the Sea and the Coastal Zone (Délégations à la Mer et au Littoral - DML) are notably responsible for the compliance and controls of fisheries. They are under the responsibility of the DIRMs and the department Prefect.

- **Fishermen organisations**

The professional organisation of fisheries in France is composed of the Committees for Maritime Fisheries and Marine Fish Farms. These are structures which are based on the Law on the Modernisation of Agriculture and Fisheries[4]. These are legal persons of private law with public powers prerogatives (compulsory membership, contributions, resource management competences). Professional organisations have missions of representation and defence of the interests of

[3] Decree No 2010-130 of 11 February 2010, pertaining to the organisation and the missions of the interregional directorates for the sea
[4] Law No 2010-874 of 27 July 2010 on the modernisation of agriculture and fishing - LMAP – French Republic Official Journal of 28 July 2010 pages 3 to 90

the fishing sector for the following themes: production, marketing, social, training, environment. They are composed of elected fishermen representatives and permanent employees hired by the Committees. Professionals can participate in the development of national regulations pertaining to (according to the ninth book of the Rural Code and of maritime fisheries):

- the management of fishery resources for species that are not subject to TACs or catch quotas in application of a European Union regulation,
- the usage of gears and the coexistence of maritime trades,
- the implementation of economic and social actions in favour of the sector professionals,
- regional public policies for a sustainable management of maritime fisheries and marine fish farms,
- the participation in environmental public policies,
- the provision of scientific and technical support for professionals.

Committees for Maritime Fisheries and Marine Fish Farms exist at different territorial scales. At the national level, the National Committee for Maritime Fisheries and Marine Fish Farms (Comité National des Pêches Maritimes et des Élevages Marins - CNPMEM) is the national representative for governmental and elected official interlocutors. Regional Committees for Maritime Fisheries and Marine Fish Farms (Comités Régionaux des Pêches Maritimes et des Élevages Marins - CRPMEM), present in maritime regions, are the regional representatives of the sector and work in collaboration with the departmental committees (Comités départementaux - CDPMEM) or the regional Committee offices that act locally. The CRPMEM sets the missions and competences that they can delegate to these committees. They all enjoy legal and financial autonomy. This territorial organisation has been so modified following the reform of Law No 2010-874 and Decree No 2011-776[5]. One objective of the law is to limit the number of structures, to create an inter-profession by extracting the downstream sector from the committees and to set the limits of competences between the Fisheries Committees and the Producer Organisations (POs). Only the regional committees and the National Committee have the opportunity to adopt legally enforceable proceedings if they are subsequently approved by the administrative authorities. Just as the CNPMEM and CRPMEMs, the departmental committees or regional committee offices composed of representatives elected or appointed by sector professionals (producers) have retained an advisory power and fundamental impetus for the management of fisheries in territorial waters (Source: Comité Régional des Pêches Maritimes et des Elevages Marins de Bretagne, Consulted February 2014). Fishermen communities therefore rely on this system of co-management (authorities/fisheries committees) for the development of the regulation specific to their trade and to the region. The State then validates or invalidates the proposals put forward. It is the fisherman who is therefore a force of proposal.

Producer Organisations (POs), another player in the management of fisheries, are associations that, according to EC Regulation No 1379-2013, have the objective to ensure rational fishing activities and the improvement of sales conditions of their members. There are about twenty producer organisations in France (Official Journal of the European Union of the 8th March 2013). The POs have two main missions. The first concerns the management of species under European quotas among their members, and their monitoring. The second concerns the development of commercial strategies, the marketing of seafood and the management of landings. At the level of the management of fisheries in territorial waters, they therefore only intervene on species under quotas.

- **The main management tools**

Various management tools and measures may apply to inshore fishing in French territorial waters. To regulate it, a system of specialised commissions was established within the fisheries committees. At the national level, specific working committees were created after the 1992 reform for fisheries management within the CNPMEM. They are composed of fishermen who are appointed by the trade unions or professional associations represented within the CNPMEM. They aim to develop and put forward proceeding projects to the CNPMEM on specific issues relating to the working conditions of the trades they represent. They are a force of proposal but not of decision. Proposals originating from these commissions can optionally be made mandatory by the Deputy Minister to the Minister of Ecology, Sustainable Development and Energy, in charge of Transport, the Sea and Fisheries (decree or ministerial orders). They enable the supervision of fisheries that have national resonance, and national coordination.

At the local/regional level, which is the case of inshore fisheries in territorial waters, the system is quite identical. In direct relationship with the fishermen and the departmental committees or local offices of the CRPMEM, there are specialised regional commissions related to a fishery or a species. Within these structures, the local and/or regional representatives of fishermen can advise on management measures of local stocks.

This is the first step by which fishermen may make their voice heard and transmit their requests up the ladder to the CRPMEM. These commissions, always chaired by a professional, are provisioned by legal statutes and the internal procedures of the CRPMEM to which they are attached. It is a place of exchange between specialised fishermen. They may involve Ifremer scientists who provide their scientific expertise on the issues at hand. They have no decision-making power but a key role of proposal. Ultimately, these commissions put forward proceeding projects that will subsequently be submitted to the board (composed of elected officials) of the CRPMEM. If the latter adopts them, then they will be transmitted to the regional administrative authority (DIRM) which may adopt it by delegated authority from the regional prefect. After a control of the legality, the proceeding project will be translated into a prefectoral order. The pattern of adoption of proceedings is summarised in figure 3.

[5] Decree No 2011-776 of 28 June 2011 setting organisation and functioning rules of the National Committee for Maritime Fisheries and Marine Fish Farms as well as that of regional, departmental and interdepartmental committees for maritime fisheries and marine fish farms

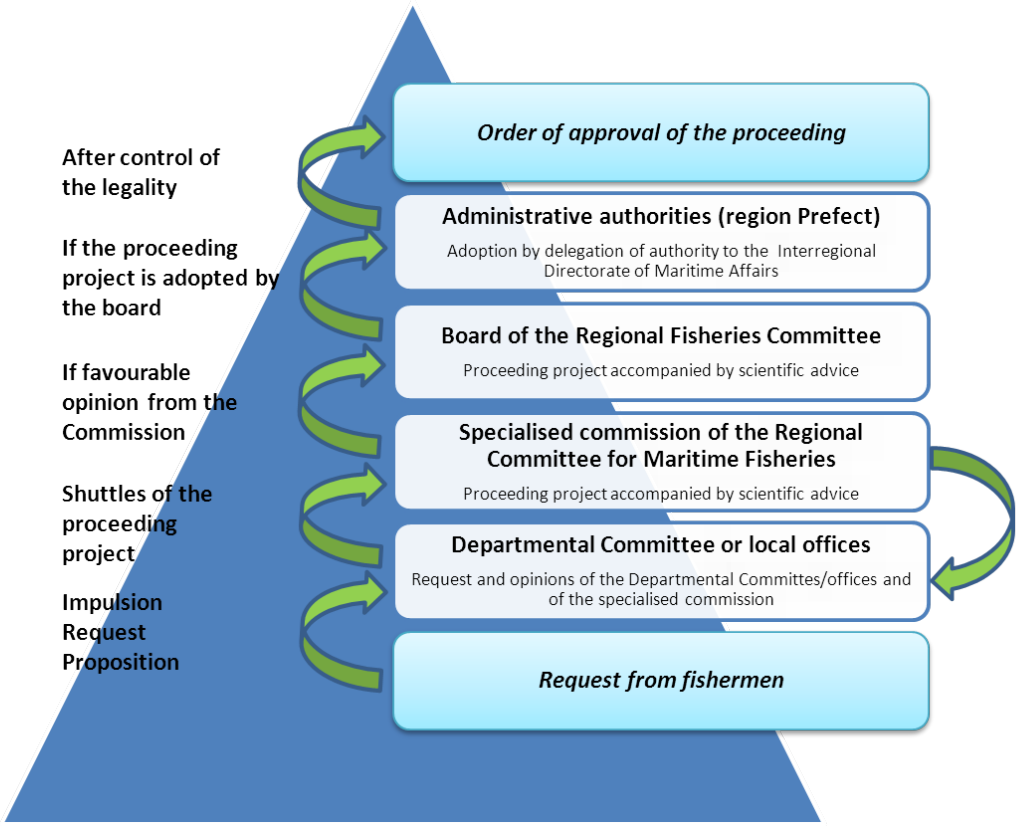

Figure 3. Adoption schematic of CRPMEM proceedings

Fishermen, in the framework of co-management, have primarily chosen to set up a control system of the access to resource through licences, for inshore fishing in territorial waters. They are assigned to the pair owner/ship to allow a modulation of the number of vessels exploiting the resource, in order to preserve it.

This system applies to the majority of trades and species that are not subject to quotas (Boude, 2004). The general framework for obtaining the licence is set at national level (via the CNPMEM) and specific attribution conditions are set regionally, which allows for a more precise management of local stocks. It is the CRPMEMs that implement this management system with the goal of maintaining social and economic equilibriums through a sharing of resources. The licence may establish an annual *numerus clausus* of licences and a limit per departmental committee for marine fisheries and marine fish farms or per fishery. By its possession, it authorises, according to attribution conditions, the catch of the target species in a given area. It is issued by the CRPMEM which sets limits, attribution criteria, the practical arrangements for the campaign as well as the specific technical measures. The terms of attribution are subject to necessarily strict rules and procedures

- ### Fishing and Marine Spatial Planning

The schémas de mise en valeur de la mer (SMVM) are developed in France in 1983 as an instance of MSP. The scheme focuses on coastal zone development, includes measures such as zoning of activities, and identifies areas for particular maritime uses. The tool has existed in this form for nearly 30 years. There were twelve SMVMs launched from northern to southern France from which only four were initiated. The aim is to provide coastal zones with a planning tool specific to this particular environment and to give it a key role in urban planning policies. It helps determine spatial zoning, thereby defining potential development areas and conservation areas. The SMVM can extend out to the 12-nautical mile territorial water limit (Trouillet et al. 2011).

In 2009, representatives of the French government and of the whole society were brought together for the first time into the Grenelle of the Sea (Grenelle de la Mer). The aim was to prepare a working schedule in favour of environment, sustainable development and planning.

Commitments of Grenelle of the sea are published into the Blue Book of the Grenelle of the sea. The work of the Grenellle of the Sea (Oceans Round Table) has highlighted some courses of action concerning sea fisheries. Develop and enhance the image of sustainable fishing processes, improve the integration of fishing activities into the coastal economy whilst recognizing specific local factors, particularly in the overseas collectivities. Protect endangered species and sensitive areas. Design dedicated fishing ports and improve the management of leisure fishing. The conclusions of the Grenelle of the Sea provided a remarkable “toolbox” to explore and use. In 2009 a Blue Book on France’s maritime policy was developed, “Blue Book: a national strategy for the sea and oceans”.

The book consists of four priorities for French maritime policy, invest in the future, develop a sustainable economy of the sea, promote the maritime dimension of the French overseas territories and assert France’s place on the international scene. In the “sustainable economy of the sea” part of the book, sustainable fisheries and aquaculture is discussed. The commitments of Grenelle of the environment (2007) and the Grenelle of the sea (2009) were transcribed in the Grenelle’s laws (Grenelle 1 law and Grenelle 2 law), the National council for the sea and for the coasts (national strategy

for the Sea) and a Maritime Façade Council (strategic document for each Façade). (Source: Maritime Spatial Planning in France)

Member States of the European Union must take the necessary measures to reduce the impacts of activities on this habitat in order to achieve or maintain a good environmental status of the marine environment. To meet these EU commitments tied to the Marine Strategy Framework Directive (MSFD, 2008/56/EC), France must, by 2020, achieve the target of 20 % of marine protected areas in French waters (Grenelle de la Mer, 2009).

The enactment of Law No 2010-788 on national commitment for the environment, provides a legal and institutional framework for the management of the coastal zone. This law has also created the national Council of the sea and the coastal zone (Conseil national de la mer et des littoraux), which includes all the players of the maritime and coastal governance. It contributes, through its opinions and proposals, to the coordination of public actions in coastal territories.

This policy has resulted in the establishment of Marine Protected Areas (MPAs). The objective is to protect the environment with an objective of sustainable use, and provide it with a governance framework and suitable means. There are two main types of MPAs, established within the EEZ, for marine habitats that may influence the management of inshore fishing:

- The Marine Nature Parks (MNPs) have multiple objectives: healthy ecosystems, patrimonial or ordinary species and habitats, the good condition of marine waters, sustainable uses and activities and the preservation of the cultural maritime heritage (Khayati, 2011). MNPs already exist in France, including the Iroise Nature Park in which fishermen are stakeholders. Their impacts on the ecosystem are taken into account in the park's management decisions (establishment of no-take zones, monitoring of the no-take zone, limitation of certain fishing gears, ...).
- The Natura 2000 sites that have a marine part have objectives of conservation or restoration of natural habitats and populations of species of fauna and flora. In case of non-negligible impacts of fishing on natural resources, measures may be taken by the Natura 2000 site Committee (establishment of no-take zones, limitation of certain fishing gears, ...).

Both of these types of MPAs integrate inshore fishing as one of the players in these zones. These steps have an impact on inshore fishing because fishermen must measure the impact of their trade on the ecosystem so as to better protect it, which sometimes results in changes in practice. The governance of inshore fishing in these zones is no longer the same, as fishermen are not the only ones to put forward proceeding projects (in view of approval by the prefect) on the management of the fishery. Indeed, the management committees (composed of the users of the maritime area) of the MNPs or those of Natura 2000 sites can do it as well. Fishermen therefore no longer have complete authority on the management proposals for their trade.

- **Conclusion**

Fishing relies on fragile marine resources that are under multiple pressures. It is therefore necessary to control and regulate this economic activity in order to preserve it. The French State has introduced legislation to that effect as early as 1852 with the Decree of 9 January 1852 on the practice of maritime fishing. Although the concept of freedom is predominant in this text "maritime fishing, that is to say, free, without closure nor licence", a strict legislative framework exists with conditions of practice of the trade (Ficou, 2008). Since then, fisheries management has very much evolved, with the creation of the European Union. The governance and management of fishing in France depends on European regulation and the authorities must comply with the management rules imposed by the European Union.

With regard to fishing in territorial waters, the CFP enables the management of this activity by riparian states. France has decided to establish a mode of governance based on co-management. Fishermen, through the intermediary of their representatives, put forward management measures on certain stocks in territorial waters, always with the objective of sustainability of the resource and of their activity. The French State validates (or not) these measures and transcribes them legally. This co-management takes place on several levels: national, regional and local.

1.4 Management

Managing fisheries is challenging and concerns more than overfishing (Grafton *et al.*, 2010). Fisheries management uses a mix of regulations and practices. Top-down approaches to management that focuses on prohibitions and constraints on fishermen and fisheries-related stakeholders tend to be less successful unless combined with bottom-up approaches. These bottom-up approaches will try to match individual and community interests with broader societal goals(Grafton *et al.*, 2010).

In the following sections, different management tools and bodies regarding fisheries are presented, and a specific focus on inshore fisheries (if present), is discussed.

1.4.1 Management tools

1.4.1.1 Co-management

The definition of co-management, as adopted by the 1996 World Conservation Congress, is "*a partnership in which government agencies, local communities and resource users, nongovernmental organizations and other stakeholders negotiate, as appropriate to each context, the authority and responsibility for the management of a specific area or set of resources*" (IUCN, 1996). Co-management can also be discerned as a set of institutional and organizational arrangements (rights and rules) that define the cooperation between particular fisheries administration and its related user groups (van Hoof, 2010).

In order to apply co-management in fisheries, Wilson (2003) suggests that fishermen and scientific knowledge needs to be taken into account for mutual understanding, assuming that both are constructed. Wilson (2003) emerges that fisheries co-management must involve open communication and research functions that help stakeholders articulate their tacit knowledge (knowledge that people have but that is not (easily) expressed) and provide a reflexive understanding of interests in discourses. Scientific knowledge is sometimes influenced by policy conflicts and because of that it is more difficult to relate with fisheries co-management.

Local knowledge can supplement scientific knowledge, for example fishers know where and when fish congregate but sometime fishers do not want to provide their data because it may be used against them (Wilson, 2003). At this point it is important to mention the woman's role in fisheries co-management as they may have more data about gears, catches, etc. because they are the ones who do the bookkeeping and therefore have a non-negligible role in inshore fisheries management. Hence, they have to be recognised in co-management plans (Wilson, 2003; European Network AKTEA).

Examples of co-management initiatives in which inshore fisheries play a role, are in place in England, the Netherlands and France – for example for quota and resource management – and in England also for conservation initiatives.

In **Devon,** south coast of England, a voluntary fishery management system was implemented by inshore fishers called the 'Inshore Potting Agreement' (IPA). Established in 1987, IPA had to reduce the conflicts between static-gear (pot and net) and towed-gear (trawl and dredge) fishers. This management system allowed fishers from both sectors to operate profitably on traditional fishing grounds (Blyth *et al.*, 2002).

In **Ramsgate** (southeast of England) a pilot project started in 2013 ran by the Fish Producer Organisation and the National Federation of Fishermen's Organisations (NFFO) has provided 26 percent more quota to small boat fishermen as well as helping to reduce discards (Source: Fishupdate, 2013).

In the **Netherlands** quota are managed by the so called 'Biesheuvel groups' (see section 1.3.2.2 Implementation of fisheries policy at national level: The Netherlands").

In **France**, the Grenelle de la Mer and Prud'homies de pêcheurs are successful examples of co-management. The Prud'homies de pêcheurs (the tribunal of wise or reputable men, elected by the fishing community; from the Latin, probi homines) already exist since the 10th century and was officially recognized in 1859. At the moment there are 33 Prud'homme committees along the Mediterranean coast, representing 1,650 fishermen. The Prud'homies are represented at national and EU level and give their voice in local developments or wider policy changes The Prud'homme often forbid large-scale fishing techniques, and strive for a low catching capacity. Fishermen fish in territorial sea with small boats from 6 to 12 m using long lines, nets and traps (Source: Prud'hommes de la Pêche, Consulted May 2014; ICFS, In the Balance : France: Fishermen's Tribunals, Consulted May 2014)..

In April 2009, the Grenelle de la Mer (Grenelle Ocean) was established in order to carry out the 'Grenelle de l'environnement's' commitments to the ocean and coast, which were outlined in 2007. The Grenelle de la Mer includes the objective of developing co-management regimes, where administration, industry, scientists, and civil society decide together the management needed for sustainable exploitation of fisheries. The Grenelle resulted in the creation of 138 commitments (Gutiérrez, 2013).

Also, the Fisheries Local Action Groups (FLAGs) (see 1.4.2.4 Fisheries Local Action Groups (FLAGs)) which exist in all GIFS regions, represent a form of co-management for local development policies regarding fisheries and apply community led local development. Again it must be noted that FLAGs do not limit their activities to inshore fisheries.

In November 2013 the First Regional Symposium on Sustainable Small-Scale Fisheries was held in Malta. Small-scale fishermen were invited to the meeting of the regional fisheries management organization. During this symposium, co-management was seen as a unique opportunity to ensure a sustainable future for fish and fishermen. By means of co-management, management measures will be designed and implemented by all fisheries related stakeholders and this is believed to make a difference (Source: Fishupdate, 2014). The main conclusions of the symposium are summarised below:

- the establishment of a Task Force aimed at supporting Mediterranean and Black Sea countries in the implementation of the Voluntary Guidelines for securing sustainable fisheries in the context of food security and poverty eradication facilitated by FAO;
- the launch of a regional project fostering knowledge on SSF;
- the organization of a second Regional Symposium on small-scale fisheries;
- the need to integrate SSF in MPAs;
- support to co-managed fisheries and the promotion of a strategy underpinning the valorisation of opportunities and products of SSF for the benefit of local communities and stakeholders (see: Outcomes of the Symposium).

1.4.1.2 Quota distribution

The TACs (Total Allowable Catches) were designed as one of the first conservation measures of the Common Fisheries Policy (CFP). In 1983, the European Union divided the fishing opportunities in the form of quotas among Member States. The distribution of the total allowable catches for the EU is based on a number of factors, including the "historic rights". Those are catches the fleet of a country had achieved in the past. This allocation is still used and is also known as "relative stability". This relative stability guarantees Member States a fixed percentage of the fishing opportunities for commercial species (Roegiers, 2011).TAC are set each year by the Council of Ministers following negotiations on catch options that are provided by the Advisory Committee (ACOM) of the International Council for the Exploration of the Sea (ICES). For the main North Sea stocks these options also take into account the terms of a management agreement between the EU and Norway. Once a TAC is agreed for each stock and fishing area, it is then allocated as quotas to individual Member States in accordance with fixed percentages based on historic fishing rights (Radford, 2013).

The TACs are declining significantly in recent years, and with the transition to a Maximum Sustainable Yield (MSY) in mind, it is expected that the TAC will continue to decline in the coming years. MSY is the optimal catch that may be taken from a fishing stock year after year without endangering its capacity to regenerate for the future (MSY Fact Sheet).

The EU Common Fisheries Policy, and policies in many Member States, tended to favour the large offshore fishing companies over the small owner-operator fishing vessels.

In the UK for example, the offshore fleet represents <10 % of vessels, but has > 90% of quotas (Gascoigne and Willsteed, 2009). Recently (July 2013) the high court in London ruled that fishing quotas could be redistributed by the government in favour of smaller vessels. This means that the fishing rights that have been unused or under-used by the offshore vessels will be reallocated to smaller vessels

Belgian fishing vessels that are registered as part of the 'coastal fleet' (which is only part of the fleet fishing in inshore waters, with engine power <221kW and tonnage <70GT) are, at the level of individual fishing vessel, not subject to catch restrictions and quota, as determined by the ministerial decrees with regard to allocation of catch restrictions (not from the perspective of the collective resource utilization system nor as part of an individual quota system). Notwithstanding the conditions above, the 'coastal vessels" are restricted to catch restrictions applicable to pelagic species and the species that are subject to recovery plans at the moment at which the vessel enters the coastal fleet segment. The corresponding quantities as quantified in the collective utilization system for pelagic species and for species that fall under recovery plans will be doubled for fishing vessels with <221kW motor engine power (Source: Ministerial decree of 16th December 2005).

In France, national quotas are distributed between the maritime regions and thereafter subdivided among maritime districts and the Producer Organisations (POs) but not allocated to individual vessels. This means that there are no quota set aside for the exclusive use of the inshore fleet. As a result inshore boats fishing for quota-regulated species must compete with the other units for their share of the regional allocation (Symes and Philipson, 2001).

In the Netherlands quotas are managed by the so called Biesheuvel groups (see above and 1.3.2.2 Implementation of fisheries policy at national level: The Netherlands).

1.4.1.3 Quality labels

Labels and product certification mechanisms are tools that can be used to support fisheries management. In general, product labels can either be binding or voluntary and may refer to different kinds of product characteristics including the product's composition, product quality or form, as well as environmental or social aspects of the product's production process or method (Wessells *et al*., 2001).

Quality labels are certifications for products that show some characteristic of the products, depending on the types of labels, to the consumers. There are different types of labels such as brand labels, collective trademarks, "certificates of origin", and "other" quality labels but all are used to guarantee the quality of products (Martinez *et al.*, 2005). Quality label means that the product complies with given standards and that this compliance has been certified (Velčovská *et al.,* 2012). Eco-labels are different from other quality labels because they help to identify products and services that have a reduced environmental impact with the aim of obtaining environmental sustainability (Source: European Commission, Ecolabels. Consulted May 2014).

The eco-labelling objectives are to protect the environment, encourage the environmentally sound innovations and leadership and create a consumer awareness of environmental issues (Global Eco-labelling Network: Introduction to Eco-labelling).

The European Commission recognises the following labels; Protected Designation of Origin (PDO) is used for agricultural products and foodstuffs whose preparation, processing and production takes place in a known geographical area and which have quality or characteristic properties from that determined zone; Protected Geographical Indication

(PGI) is used for agricultural products and foodstuffs which at least are partially manufactured (prepared, processed or produced) in a determined geographical area and which have a quality or characteristic properties from that zone; Traditional Speciality Guaranteed (TSG) is used for those products which have a traditional character in terms of their composition or production (Source: European Commission, Agriculture and Rural development, Consulted May 2014).

The Marine Stewardship Council (MSC) is used to ensure to consumers that fish comes from a certified sustainable source as communicated on the Marine Stewardship Council Website. The FAO has established some principles to fisheries labelling. Labelling has to be consistent with the Code of Conduct for Responsible Fisheries; it should be voluntary; transparent; non-discriminatory and based on scientific knowledge in order to get a good labelling scheme. There are some initiatives such as the Nordic Technical Working Group on Eco-labelling Criteria (Source: FAO website, Eco labelling in fisheries management. Consulted May 2014). One of the first reasons to create quality labels in fisheries were ecological and environmental concerns, for example 'Dolphin Safe' to prevent the accidental catch of dolphins. Kaiser and Edwards-Jones (2005) investigated the role of eco-labelling in fisheries management and conservation. They recognise the lack of consumer awareness for marine fishes and sustainable fisheries. This lack could be explained by the different social and cultural situations in which consumers live. There are also some problems with fishermen who do not have their benefits of labelling guaranteed. Therefore modifications for wider participation in the labelling scheme are needed (Kaiser and Edwards-Jones, 2005).

Also in fisheries, labelling requires a special mention due to the characteristics of the fisheries products. For example, one of the main problems in fisheries quality labels is that the fish quality is affected by processing at sea. For small-scale fisheries that do not spend too much time at sea, this may provide a good opportunity and advantage compared to offshore fishing in order to set up quality labels. Although IF cannot operate sophisticated systems at sea, the landed fish have a known date and area and can be labelled ashore (Source: FAO 2000. The State of world fisheries and aquaculture. Consulted May 2014).

Quality labels in inshore fisheries are present for example in the Irish Quality Oyster Scheme. This label guarantees that oysters are maintaining low stocking densities and choosing growing sites in areas of clean waters resulting in excellent quality and good growth rates. The Irish Quality Eco-Mussel Standard guarantees assurance that the mussels have been produced with care for the environment (Source: Bord Iascaigh Mhara, consulted May 2014).Other examples of quality labelled inshore fisheries products that allow the consumer to be aware of their origin, are the scallops of the department Côtes d'Armor, in the Bay of Saint Brieuc, northern Bretagne (France) (Boude *et. al.,* 2000).

"Goede vissers", "Good Fishermen" is a Dutch foundation established in 2012 by Slow Food Amsterdam and the National arc Commission, a restaurant owner (Restaurant Merkelbach) and the fishermen's chairman. The foundation realizes a short supply chain of fish from participating 'good' fishermen in which the consumer is informed about the origin of the fish.

This creates an added value for the fishermen and serves as an incentive for further sustainability. The consumer can easily find the origin of the fish and how the fish is caught. All fish from Good Fishermen are marked with the ship number from the fishermen who caught the fish. Via the Good Fishermen website, consumers can enter the ship number and see by whom and how the fish is caught (Source: www.goedevissers.nl).

Another example of a Dutch sustainability label is Waddengoud, "Wadden gold" label. Wadden gold is an individual label given to fish companies in the Wadden Sea area that fish on a sustainable manner. The Wadden gold label put demands on the origin and quality of the product (Source: www.goedevissers.nl).

During the French fishing industry regression early 1990, groups of commercial fishermen were looking for a manner to add value to their output. Commercial sea bass fishermen of western Bretagne formed an association to emphasise the quality of their catches. This association, "Ligneurs de la Pointe de Bretagne" want to make consumers aware of the distinction between farmed bass and wild caught lined sea bass. To achieve this, the association chose a collective label for their wild caught sea bass, "Bar de ligne de la pointe de Bretagne'' (Charles *et al*., 2003). Today the association includes 200 members who annually catch about 500,000 specimen of sea bass (Source: Seafood Choices Alliance. Consulted May 2014).

1.4.1.4 Local Ecological Knowledge (LEK)

Local ecological knowledge in fisheries is about stocks and the structure of stocks of certain fish species, their migration patterns, their seasonal variations, their spawning and breeding grounds, feeding patterns and predator behaviour. LEK could also provide possible explanations for changes in the ecosystems. In literature, other terminology for ecological knowledge then local ecological knowledge is used. For example Traditional Ecological Knowledge (TEK), Indigenous Ecological Knowledge (IEK) and Scientific Ecological Knowledge (SEK).

LEK is dynamic and not uniform within one population. There are some elements that can have an effect on the knowledge of local ecosystems by fisherman (Maes *et al.,* 2012):

- Geographical location of fish together with bio-physical and ecological conditions that may vary in time and place.
- Fishing techniques and target species
- Type of fishing: commercial or recreational
- Fishery performance and duration of the fishing career

Also cultural and social elements have an influence on the knowledge of fishermen for example the fisherman's position in the family structure and in the fisheries community; the way knowledge is obtained and transferred such as by observation, education, experiments, use of technology such as GPS, relation and interaction within and between groups of people, formal and informal rules, scientific input, the market.

Several education programmes exists in the GIFS partner regions. For example PROSEA is a Dutch organisation that has been working with Dutch professional fishermen and students at Dutch fishing colleges since 2003. The organisation provides courses about sustainable fishing to future fishermen. The course for future fishermen deals with responsible fishing and why sustainability issues are important in current fisheries.

RESPONSABLE, a project of IFREMER and ARS Bretagne about Shellfish Harvesting-related Risks and Communication. Harvesting shellfish, pêche à pied is practiced a lot in Bretagne. The website of RESPONSABLE (http://en.pecheapied-responsable.fr/) advises harvesters about the quality of harvested sites, regulations and sustainability aspects.

In England, Seafood Cornwall Training started in 2009, provides safety courses and further training for fishermen and onshore workers and also educational visits to classrooms (http://www.seafoodcornwalltraining.co.uk/). IFCA's also give safety training, awareness raising related to specific conflicts; for example the Eastern IFCA made a Cromer Pier Voluntary Code of Conduct for angling which includes guidelines for angling on Cromer Pier.

It is increasingly recognised that fishing can be the heart and soul of a community and the glue that binds people together, including transfer of fisheries knowledge within fishing communities. Inshore fisheries are often small family business with transfer of local knowledge from generation to generation. At this point it is also important to mention the woman's role in fisheries management as they may have more data about gears, catches, etc. because they are the ones who do the bookkeeping and therefore have a non-negligible role in inshore fisheries management.

The LECOFISH project was the first Belgian study to translate commercial as well as recreational fishermen's local ecological knowledge over a period of 50 years (1950-2000) into spatial maps for the Belgian Part of the North Sea (BPNS). The objectives of this project were to improve the knowledge of local ecosystems in the Belgian Part of the North Sea; the creation of new and additional information in order to fill in the knowledge gaps that exist in the scientific Ecological knowledge (SEK) and to achieve a better understanding of the complex marine ecosystem (Maes *et al*., 2012).

Another project about local knowledge that was conducted in Belgium, is the "Zee van toen" that started in 2007. This project reconstructed the ecological history of the southern North Sea over a period of 50 years (1930-1980) by means of oral history. In this project old fishermen were interviewed regarding relevant ecological data and their point of view about the changes during time. The project gathered better insights in the historical-ecological synthesis in context of Belgian fisheries; information about fishing grounds, fishing techniques, commercial and non-commercial fish species,... (Rappé, 2008). An example from Italy is the CLODIA project and CLODIA database on sustainable development and which allows trend analysis of the fishery in the coastal environment over the long-term.

1.4.1.5 The Ecosystem-Based Approach to Fisheries Management (EBFM)

The ecosystem approach is widely used in marine management (Farmer *et al.*, 2012) and forms the basic concept of the integrated maritime policy (IMP).

Ecosystem-based fishery management (EBFM) is a new direction for fishery management, essentially reversing the order of management priorities to start with the ecosystem rather than the target species (Pikitch *et al.,* 2004). In both large- and small-scale fisheries, fishing activities usually affect other components of the ecosystem in which the harvesting is occurring for example by catch, sea floor damage,... In the context of ecosystem approach fisheries management must consider the broader impact of fisheries on the ecosystem as a whole, taking biodiversity into account.

The objective is the sustainable use of the whole system, not just a targeted species (FAO technical guidelines for responsible fisheries 2003).

There is widespread agreement about the need to implement EBFM because the historic focus on single species management has had the unintended consequence of declining populations of many other species (Nguyen, 2012).

The definition of Ecosystem-based approach to fisheries management by the new regulation of the CFP ((EU) No 1380/2013) states that…'Ecosystem-based approach to fisheries management' means an integrated approach to managing fisheries within ecologically meaningful boundaries which seeks to manage the use of natural resources, taking account of fishing and other human activities, while preserving both the biological wealth and the biological processes necessary to safeguard the composition, structure and functioning of the habitats of the ecosystem affected, by taking into account the knowledge and uncertainties regarding biotic, abiotic and human components of ecosystems'.

A practical set of guidelines for implementing the ecosystem approach to fisheries is worked out in the FAO technical guidelines for responsible fisheries 2003.

In 2001, 57 countries issued the Reykjavik Declaration on Responsible Fisheries in the Marine Ecosystem which included a declaration of their intention to work on incorporating ecosystem considerations into fisheries management. The 2002 Plan of Implementation of the World Summit on Sustainable Development called for, amongst other things, the application of the Reykjavik Declaration by 2010 as one of the steps essential for ensuring the sustainable development of the oceans (FAO website). However Pitcher *et al.,* 2009 evaluated 33 countries for their ecosystem-based management (EBM) of fisheries in three fields (principles, criteria and implementation) using quantitative ordination including uncertainty. The countries chosen for this analysis represent the top 90% of world fish catch, including GIFS partner countries United Kingdom, France and the Netherlands received "fail" rates for EBM of fisheries in the 'principles, criteria and implementation' fields.

One of the reasons for ineffective implementation is that it is easier to publish good intentions for EBM principles than to actually achieve its goals and objectives in practice. Another reason is that EBM implementation may require a lot of resources.

1.4.2 Management bodies

1.4.2.1 Scientific, Technical and Economic Committee for Fisheries (STECF)

The Scientific, Technical and Economic Committee for Fisheries (STECF) was established in 1993 by the Commission of the European Communities (Commission Decision 93/619/EC) to assist the implementation of the CFP. Members of STECF are highly qualified scientists in the fields of marine biology, marine ecology, fisheries science, fishing gear technology and fishery economics. The committee of the STECF is nominated by the Commission. The Committee produces an annual report on the situation as regards fisheries resources and on developments in fishing activities. It also reports on the economic implications of the fishery resources situation (Source: European Commission, STECF. Consulted May 2014). STECF has stakeholders in the Advisory Committee on Fisheries and Aquaculture (ACFA) and participates in RACs. The STECF may require information or opinion from ACFA and RAC in order to formulate its advice (STECF rules and procedure).

1.4.2.2 International Council for the Exploration of the Sea (ICES)

ICES was established in 1902 as an intergovernmental organization. The ICES Convention from 1964 (Convention for the exploration of the Sea, 1964) outlines the fundamental purposes of ICES:

- to promote and encourage research and investigations for the study of the sea particularly related to the living resources thereof;
- to draw up programmes required for this purpose and to organise, in agreement with the Contracting Parties, such research and investigations as may appear necessary;
- to publish or otherwise disseminate the results of research and investigations carried out under its auspices or to encourage the publication thereof.

Under this Convention, ICES is concerned with the Atlantic Ocean and adjacent seas, primarily the North Atlantic.

ICES fulfils its functions through an Annual Science Conference, about a dozen committees, almost 150 expert groups (working (WG) and study groups (SG)), several annual symposia, and a wide range of publications. The 7 goals of the ICES Strategic plan are (ICES strategic plan 2014-2018):

1. Develop an integrated, interdisciplinary understanding of the structure, dynamics, and the resilience and response of marine ecosystems to change
2. Understand the relationship between human activities and marine ecosystems, estimate pressures and impacts, and develop science-based, sustainable pathways
3. Evaluate and advise on options for the sustainable use and protection of marine ecosystems
4. Promote the advancement of data and information services for science and advice needs
5. Catalyse best practices in marine data management, and promote the ICES data nodes as a global resource
6. Foster the science, advisory, data and information services through the work of the Secretariat
7. Ensure an efficient and effective organization

There is no specific WG or SG on inshore or coastal fisheries, although some of the WG address research and management topics for species that are typically coastal or targeted by coastal fisheries.

1.4.2.3 Regional Advisory Councils (RACs)

The regulation on the conservation and sustainable exploitation of fisheries resources under the Common Fisheries Policy ((EC) No 2371/2002) provided for new forms of stakeholder participation in the CFP through the establishment of Regional Advisory Councils (RACs). The establishment of RACs requires that they correspond to management units based on biological criteria and that they are limited in number in order to offer meaningful advice and for practical reasons (2004/585/EC). Between 2004 and 2008, seven RACs were established, representing a significant step forward addressing fisheries management in Europe in a new, interactive way of governance (Linke and Jentoft, 2013). RACs were established for the following areas (2004/585/EC):

- the Baltic Sea
- the Mediterranean Sea
- the North Sea
- north-western waters
- south-western waters
- pelagic stocks
- high seas/long distance fleet

The North Sea Advisory Council (NSAC) prepares and provides advice on the management of fisheries in the North Sea on behalf of its members; fisheries organisations and other stakeholders including environmental organisations. The work of the NSAC is delivered by Working Groups. These groups meet to discuss current and emerging topics and to develop advice and policy on behalf of NSAC membership. The NSAC has 3 working groups: Demersal, Skagerrak & Kattegat and Spatial Planning working group. Each working group may be supported by a number of Focus Groups, smaller groups which are set up to address a specific topic.

Regional Advisory Councils provide the point of view of all stakeholders which establishes a dialogue between stakeholders and countries. Small scale fishermen are an important part of stakeholders and therefore the Small Scale Fishermen interests need to be taken into consideration in the decisions (2004/585/EC). However there is little comprehensive knowledge of who actually attends RAC meetings (Ounanian and Hegland, 2012).

Although RACs should improve the organization of small scale fishermen there is a lack of information about the small scale fishermen's presence in RAC meetings. Ounanian and Hegland, 2012 provides a profile of who attends these meetings and illuminate patterns or discrepancies in the North Sea, North Western Waters, Pelagic and South Western Waters' RAC participation.

The NFFO (The National Federation of Fishermen's Organizations) includes vessels from England, Wales and Ireland and aims to ensure the representation of small scale vessels and to involve them in representative structures. The NFFO is highly active in the RACs. However they keep in mind that in reality, many <10m vessels are not included in any organization and that the under tens are not enough involved in consultative processes. One of the solutions that NFFO has implemented to tackle this lack of <10 m representatives is a regional committee structure including fishermen's associations and individual fishermen.

NFFO also encourages the European Commission to do more effort for including more organizations with the aim of a better representation of the small scale vessels.

They recognize that there was a great success involving many organizations in RACs giving the opportunity for expression. They also indicate that the most important lesson to learn is that artificial division should be avoided (Source: Consultation on the future Advisory Councils, consulted May 2014).

The New Under Ten Fishermen's Association (NUTFA) represents the under 10m and non-sector fishing industry at Local, Regional Advisory Council (RAC), European Commission and Parliament meetings.

1.4.2.4 Fisheries Local Action Groups (FLAGs)

Fisheries Local Action Groups (FLAGs) are funded by the European Fisheries Fund (EFF) with Axis 4 (Sustainable development of fisheries areas) funds in order to support a range of projects proposed and carried out by a wide variety of local stakeholders. In 2013, more than 250 FLAGs in 21 EU Member States involve thousands of local stakeholders as project promoters and FLAG members. (Source: Farnet, FLAGs. Consulted May 2014).

FLAGs are public-private partnerships that are set up at local level. They are formed by different sectors depending on the situation of a determined area. In general FLAGs should consist of a Chairman with at least 10 members.

The Chairman has the duty to guide and lead to success, accepting the decisions of the majority. The public part of a FLAG should not be over 40%, gender balance not <30% and local, relevant and socio-economic representatives not <60% (Axis 4: 'A start up guide for fisheries local action groups. Sustainable Development of Fishery Dependent Area'). These partnerships between fisheries actors and other local private and public stakeholders work towards the sustainable development of their areas. Together, the stakeholders design and implement a bottom-up strategy that fits and addresses their areas needs to improve the socio- economic situation of the area and to increase its fisheries value, to maintain the environment in a good condition and the reconstruction of the fisheries sector in order to create employment and new jobs.

As mentioned before, the main function of FLAGs is to drive the Axis 4 funds developing and implementing an integrated local strategy, making decision about project in Axis 4 and supporting an administrative structure for Axis 4.

FLAGs develop a strategy, the so-called integrated local development strategies, that have to be integrated, taking into consideration all stakeholders, sustainable, consistent in terms of economy and complementary to other actions in the area. These strategies are intended to coordinate local and national priorities and to ensure the representation of local needs. With the aim of a better organization, FLAGs establish priority areas that are sub-areas within a region and which are overseen by local committees. These committees are essential to FLAGs because they are responsible of the project development in each zone at more local level then FLAGs. However this does not mean that they do not have representation in FLAGs, in fact they have a very important say the projects.

Fisheries local development measures are used by FLAGs to give priority for funding in their area. One example is Belgium whose FLAG strategy is to add value to local fisheries products and increase local consumption because in this country landings represent only a 10% of fisheries product consumption and 90% is imported (Source: Farnet, FLAGs. Consulted May 2014).

The new proposals for local partnerships in the EMFF offer support to local strategies, ranging from those which focus on fisheries to broader strategies directed at the diversification of fisheries areas. The FLAGs can be instrumental by supporting communities in adding value, creating jobs and promoting innovation at all stages of the fisheries and aquaculture supply chains. FLAGs can also support much broader local development strategies for the diversification and job creation in other sectors, enhance local environmental assets, mitigate climate change, and promote social wellbeing and local cultural heritage. They can also help strengthen the involvement of the fisheries sector in local development and marine governance, including in the development of Maritime Spatial Planning (Proposal for regulation on the EMFF Art.65.1.b., c. d. and e.)

1.4.2.5 Community-Led Local Development (CLLD)

Community-led local development (CLLD) is a tool for involving citizens at local level in developing responses to the social, environmental and economic challenges we face today. CLLD is an approach that requires time and effort, but for relatively small financial investments, it can have a marked impact on people's lives and generate new ideas and the shared commitment for putting these into practice (Source: Common guidance of the European Commission's directorates-general AGRI, EMPL, MARE AND REGIO on community-led local development in European Structural and investment funds, 29 April 2013).

The Community Led Local Development (CLLD) model is "based on the LEADER approach and concern[s] all the Funds covered by the Common Strategic Framework (European Regional Development Fund, European Social Fund, European Agricultural Fund for Regional Development, European Maritime and Fisheries Fund and Cohesion Fund) in the 2014-2020 programming period (the CSF Funds).

CLLD is a specific tool for use at sub-regional level, which is complementary to other development support at local level. CLLD can mobilise and involve local communities and organisations to contribute to achieving the Europe 2020 Strategy goals of smart, sustainable and inclusive growth, fostering territorial cohesion and reaching specific policy objectives" (DG REGIO, 2012:2).

In the context described above of collaborative and participatory models of governance that seek to better integrate fisheries into the broader coastal economy, the European Commission has developed a common methodology for future CLLD based on the LEADER programme approach to community led rural development. Future CLLD (as defined above and enabled through CSF funding) would seek to: focus on sub-regional territories; take a community led approach through local action groups that include a mixture of private and public sector stakeholders and represent a range of socio-economic interests; adopt a multi-sectoral (and collaborative where needed) approach to development opportunities that take a particularly local context and local needs focus (DG REGIO, 2012). In light of increasing use of CLLD in European funding and development strategy (FARNET, 2014) the case studies in Activity 1.2 (Report Activity 1.2) pay attention to the FLAG (Fisheries Local Action Group) as a model of community led local development (CLLD) employing an example of a local action group based, multi-sector collaborative approach to local fisheries development and governance. Following the adoption of the Lisbon Treaty and Europe 2020 Strategy there is a renewed focus upon the use of integrated and inclusive approaches – like CLLD - to tackling local problems.

As a development tool the intention is for future CLLD to: *'develop integrated bottom-up approaches'* to sub-regional challenges; *'build community capacity and stimulate innovation'* within territories to respond to these challenges; *'promote community ownership'* of development plans and projects through increased community participation; and *'assist in multi-level governance'* by creating routes to community participation and influence from local to European level (DG REGIO; 2012:3). Examples of the challenges communities face and solutions devised to help deliver successful CLLD are discussed in more detail in Activity 1.2 (Report Activity 1.2).

1.5 Data and information management

In order to underpin the CFP, in-depth research and scientific information about fisheries is needed. At the European level, the fisheries research and data collection is regulated by detailed directives (Data Collection Framework, DCF) stipulating which information Member States should gather. In 2014, the DCF – which expired by the end of 2013 - is replaced by the Data Collection Multi Annual Programme (DCMAP), complementing the new CFP. The DCMAP is a 7-yearly program, combining several activities that are carried out in the Member States, such as control, data collection, studies, etc. The funding of the new DCMAP is covered by the European Maritime and Fisheries Fund (EMFF). This new fund will replace the current European Fisheries Fund (EFF) and a few other instruments. The advice of the CFP on the basis of scientific information, occurs via several organisations (more information: User's Guide of the CFP, 2009):

The International Council for Exploration of the Sea (ICES) gives biological advice for appropriate management of fisheries in Europe, by means of international collaboration of fisheries biologists. The conclusions of the working groups within the ICES working on fish stock evaluations are processed in the deliberations of the Advisory Committee (ACOM). All advices and working group reports are available as downloads from the ICES website.

The Scientific, Technical and Economic Committee for Fisheries (STECF) is the regular advisory organ of the EC with regard to fisheries. This organ was founded in 1993 (93/619/EC) and renewed in 2005 (2005/629/EC) and consists of a group of independent scientists, established in order to advise the EC on all aspects of the fisheries policy (see above section 1.4.2.1).

Since the early 1960s the Fisheries and Aquaculture department of the **Food and Agriculture Organisation** (FAO) has developed and maintained a set of global fishery statistics databases. The collection of fisheries data has two main goals: support to fishery resources monitoring and assessment and constant review of the contribution of the fishery sector to the national economy and nutrition situation (Source: FAO, Global fishery databases. Consulted May 2014).

There are many statistics on the contribution of small-scale fisheries, but all are qualified in that they are not accurate. The basic statistics are often informed guesses, or in many cases simply not collected at all. The FAO tries to gather SSF information in an information system for small-scale fisheries. For small-scale fisheries the information requirements must cover harvesting and catches, processing, marketing, the fishing community and other sectors. All this information should be incorporated in a Fisheries Information System (FIS).

The development of a FIS warrants separate attention, as this is both a critical component in bridging the gap between research and action, and provides an effective framework for identifying needs of various information users (ranging decision-makers to individual fishers,…) (Source: FAO, A research agenda for small-scale fisheries. Consulted May 2014). FIS supports fisheries management decisions by developing a virtual application environment and providing integrated business solutions and data sources in a web browser interface (Source: NMFS, FIS. Consulted May 2014). However at the moment, the FIS database is still in progress.

Fisheries data is made widely available via the website of Sea Around us project, a project that started in 1999 with the aim to study the impact of fisheries on marine ecosystems of the world, and to offer mitigating solutions to a range of stakeholders. Data on catch time series starting in 1950, related series (e.g. catch value and catch by fishing gear or flag state) and fisheries-related information from every maritime country is available on the project website.

This project also offers information on special topics, e.g., the historic expansion of fisheries, the performance of Regional Fisheries Management Organizations, or the likely impact of climate change on fisheries.

Next to databases on fisheries statistics there are a number of taxonomic databases. For example FishBase, a global information system on fishes; the European Ocean Biogeographic Information System EUROBIS, an online marine biogeographic database compiling data on all living marine creatures; EMODNET, the European Marine Observation and Data Network.

Another tool to implement and monitor the CFP is het **Community Fishing Fleet Register**, also called the "Fleet Register" which was created in 1989. The EU Fleet Register database includes records of technical details (for example length, tonnage, power, fishing gear, etc.) and characteristics (administrative identifications, historical events and personal data) of EU fishing vessels based on the national registers of the Member States. However it is not clear if the SSF/ IF vessels are incorporated in the Fleet Register.

PART 2: Coastal zone governance and inshore fishing: regional and sub-national surveys

2.1 Aim of the report

This element of the GIFS research project has been developed to explore how inshore fisheries in the GIFS partner regions interact with policy-making and key decision-makers at multiple scales of governance (locally, nationally and Europe wide) in terms of integrated marine and coastal governance.

The aim of this explorative phase is to explore the role of inshore fisheries in relation to the main policy instruments that are of relevance for **integrated management** of the marine environment: Integrated Coastal Zone Management (ICZM) and Marine Spatial Planning (MSP) and the Marine Strategy Framework Directive (MSFD). **Integrated management** aims at integration of the sectors and of the different policy levels involved.

The researchers explore how the inshore fishing sector is organized and managed, if there are separate policies and aims for inshore fishing, how it relates to other sectors and policies, how the sector is represented in consultation structures at local, national or international scale, if there are agreements or co-management arrangements with inshore fishers, if there are specific training, education and monitoring programs related to IF, if the local situation and local knowledge are considered, and if quality labels for IF exist.

Objectives

- Identify key stakeholders in each partner region;
- Design of questionnaire;
- Analysis of responses for each separate GIFS partner region;
- Comparison between GIFS partner region

2.2 Methodology and approach

The methodology was based on a **questionnaire** (see Annex 1), which was developed together with the GIFS partners. As the key aim of this explorative phase is to look at the role of inshore fisheries in relation to integrated coastal and marine management, the questionnaire was constructed from an integrated coastal zone management (ICZM) and marine planning (MSP) perspective. All key principles of ICZM and MSP (see 1.3.1.4 Marine Spatial Planning (MSP) and 1.3.1.5 Integrated Coastal Zone Management (ICZM)) were taken into account when designing the questions, without explicitly drawing the attention to the ICZM and MSP principles. The questions deal with the policies, organisation and management for IF, the relationship with other sectors and policies, the representation of IF in consultation structures at local, national or international scale, the existence of agreements, quality labels or co-management arrangements for inshore fishers, the presence of specific training, education and monitoring programs related to IF and the use of local assets and local knowledge.

The questionnaire was sent out to **experts** identified by the GIFS partners. The experts were selected on the basis of their direct involvement in and broad views on inshore fisheries governance. The respondents work for producer organisations, ministries or management organisations. The experts were asked to respond from their own personal professional viewpoint, and not as a representative of their organization. This approach was chosen so people good give their own appreciation of the real live situations in dealing with inshore fisheries. A questionnaire approach involving expert judgment is considered valuable in addition to a literature background study on inshore fisheries governance. A literature study alone will not allow to identify the appreciation of for instance how networks and relationships work, how well IF is taken into account, how IF is appreciated, etc. This questionnaire approach allows for a further understanding of the subjective aspects.

Of course, one has to be careful with the interpretation of the answers, as they are based on the personal views of the experts. Reporting on people's views through a questionnaire is different from understanding the governance mechanisms operating across different countries. The finding in this explorative method are backed up and validated with appropriate literature to add depth and create a more complete picture.

The questionnaire was designed as a self-explanatory document so respondents could respond without further help. The questionnaire starts with an introduction and a section setting the scene followed by the actual questions. The questionnaire was sent to experts working for producer organisations, ministries, or management organisations. Questionnaires were sent out to 29 persons (10 in UK, 7 in FR, 9 in NL, 3 in BE) in September 2012, and 19 answers were received by January 2013 (10 UK, 3 FR, 4 NL, 2 BE), with one interview conducted after this date (see overview table in 3.1.)

The respondents for Belgium, the Netherlands and France were contacted by e-mail by one central contact person in Belgium. The respondents were invited to answer in their mother tongue. To allow responses in French, the French GIFS-partners chose to facilitate the responses through telephone guidance, conducted by the French GIFS-contact persons. In the GIFS study area in the UK, GIFS-partners facilitated the responses through face to face interviews and/or telephone guidance.

The differences in methodology for gathering information in the regions (written contributions versus telephone or face-to-face guidance) lead to differences in details in answers. This was overcome by asking for additional information where relevant, or by adding information through literature study.

The number of responses is different in the different countries as the importance of the IF sector in the regions under study is variable. This has to be taken into account when analyzing the results. Non-responses were followed-up by sending reminders via e-mail and telephone contact. Some of the persons contacted claimed not to be able to respond from a personal viewpoint.

For the analysis of the results, a **thematic analysis approach** (TA) was used (see also Report Activity 1.2). Thematic analysis is the most common form of analysis in qualitative research. It emphasizes pinpointing, examining, and recording 'themes' within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question. The themes are then used as categories for analysis. For the literature study and the questionnaire, these themes were based on the ICZM and MSP principles, which allowed the researchers to draw conclusions exploring the role of IF in relation to ICZM and MSP.

Limitations to the methodology

- The responses are based on personal views and appreciation. Therefore, the responses have to be interpreted carefully;
- The number of responses is different and the importance of the Inshore Fishing sector is different in the regions under study. This has to be taken into account when analysing the results;
- The methodology for gathering information differed in the regions under study: written contributions versus extra guidance through telephone or face-to-face guidance. This leads to differences in details in the answers. This was solved by asking for extra information, or by adding information through literature review;

2.3 Results from the questionnaire

2.3.1 Overview of respondents

The questionnaire was sent to 29 persons (10 UK, 7 FR, 9 NL, 3 BE), working for producer organisations, ministries, management organisations or NGO's. Twenty answers were received (10 UK, 3 FR, 4 NL, 3 BE), see overview below.

The answers provided by the respondents are based on their individual knowledge and experience, and should not be interpreted as representative of the organisations they work for.

Inshore fisheries in the UK and France is more important than in the Netherlands. In Belgium IF is very limited, in terms of fleet and potential fishing area. Hence more actors are involved in UK, France, and the Netherlands, compared to Belgium.

Country	Person	Institute
B	Stephanie Maes	Coordinator Belgian FLAG
B	Jean-François Verhegghen	Sea Fisheries Service
B	Emiel Brouckaert*	Director Redercentrale (producers' organisation)
NL	Jaap Broodman	Provincie Zeeland, Coordinator FLAG Zeeland
NL	Foort Lokerse	Zeeuwse Visveilingen BV – directeur
NL	Fisheries Scientist	IMARES
NL	Cora Seip	Productschap Vis
UK	John Gargett	Customer Service Manager, MMO
UK	Beshlie Pool	Marine Officer, MMO
UK	Ulrika Gunnartz	Stakeholder Network Manager, MMO
UK	Will Wright	Kent & Essex IFCA
UK	Tim Robbins	Devon & Severn IFCA
UK	Steve Watt	Isles of Scilly IFCA
UK	Robert Clark	Sussex IFCA
UK	Eden Hannam	Eastern IFCA
UK	Jeremy Percy	New Under Tens Fishermans' Association
UK	Dale Rodmell	National Federation of Fishermen's Organizations
FR	Laurent Courcol	DIRM MEMN (the administration of the East Channel and the North Sea)
FR	Jacques Doudet	CRPMEM Bretagne (professional organization at Regional level)
FR	Delphine Ronçin	CRPMEM Nord Pas de Calais

Table 1: List of respondents to the questionnaire of Activity 1.

(*) Note: Due to timing of the interview, the answers of Mr. Brouckaert (BE) were not included in the present analysis. However, being in line with the outcomes from the other interviews, the recommendations and insights acquired during this interview were taken aboard during the research and fed into the conclusions and end products, in particular for the Belgian situation.

2.3.2 Conclusions from the comparison between the GIFS regions

A summary of the responses for each region studied is included in Annex 2. The key conclusions from the comparison of IF between the regions are described below, and is organised in the following 20 topics:

1. Organisation for IF management
2. Involving stakeholders in inshore fisheries governance
3. Signed agreements regarding inshore fisheries
4. Shared responsibility or co-management involving Inshore Fishers
5. Training
6. Link between the inshore fisheries administrative bodies and European and international bodies
7. Role of IF in consultation processes? by other sectorial policies
8. Inter-regional organization and co-operation structures for IF

1. Organisation for IF management

Organisation of IF management in each of the countries studied, varies. England and the Netherlands have a separate organisation for IF management. **English inshore fisheries management** (operating within six nautical miles) is policed and managed by the IFCAs (Inshore Fisheries and Conservation Authorities). The IFCAs co-operate with the MMO on several areas including fisheries enforcement and marine protected area management. IFCAs are funded through local authorities, but report to Department for Environment, Food and Rural Affairs (Defra). IFCAs replaced the sea fisheries committees in April 2011, with an important expanded socio-economic remit to "*lead, champion and manage a sustainable marine environment and inshore fisheries, by successfully securing the right balance between social, environmental and economic benefits to ensure healthy seas, sustainable fisheries and a viable industry*" (Defra, 2010). The MMO is responsible for regulation and licensing of fishing in England. The duties and powers of the IFCAs and the MMO are set out in the Marine and Coastal Access Act 2009 (UK) and this takes account of the European Union instrument for fisheries management, the recently amended Common Fisheries Policy (EC COM, 2013). For more information about the Fisheries management in England, see 1.3.2.3. Implementation of Fisheries Policy at national level: England (contribution of J. Orchard-Webb).

In **the Netherlands** IF is managed by the Cooperative producers organisations (CPO). Some focus on specific species, e.g. mussels, oysters, lobster, cockles, *Ensis*, shrimp. Others focus on specific fishing communities, e.g. Urk, Wieringen, Texel.(See Venema, 2001 and 1.3.2.2. Implementation of Fisheries Policy at national level: The Netherlands for more information about the POs)

In **Belgium** (See 1.3.2.1. Implementation of Fisheries Policy at national level: Belgium) and **France**, there are no separate organisations for IF and the interests and needs of IF are attended through the overall producers organisations (Figure 4). In France, the *Committees for Maritime Fisheries and Marine Fish Farms* exist at different territorial scales. At the national level, the National Committee for Maritime Fisheries and Marine Fish Farms (Comité National des Pêches Maritimes et des Élevages Marins - CNPMEM) is the national representative for governmental and elected official interlocutors. Regional Committees (14) for Maritime Fisheries and Marine Fish Farms (Comités Régionaux des Pêches Maritimes et des Élevages Marins - CRPMEM), present in maritime regions, are the regional representatives of the sector and work in collaboration with the departmental committees (12) (Comités départementaux - CDPMEM) or the regional Committee offices that act locally. The CRPMEM sets the missions and competences that they can delegate to these committees. They all enjoy legal and financial autonomy. The regional committees and the National have the authority to adopt legally enforceable proceedings if they are subsequently approved by the administrative authorities. Just as the CNPMEM and CRPMEMs, the departmental committees or regional committee offices composed of representatives elected or appointed by sector professionals (producers) have retained an advisory power and fundamental impetus for the management of fisheries in territorial waters (See also 1.3.2.4. Implementation of Fisheries Policy at national level: France (contribution of D. Picault).

The French government charged the Marine Fisheries and Aquaculture Committees with the mission of representing and defending the interests of the profession in all areas affecting the sector (production, market, social, training, environment ...). It participates in:

- the development of regulations on fisheries management and harvesting of marine plants for species that are not subject to TACs or catch quotas under a regulation of the European Union (EU) in the territorial waters,
- the development of regulations governing the use of fishing gear and the coexistence of maritime professions,
- the realization of economic and social actions for their members,
- regional public policy for the protection and enhancement of the environment so as to promote sustainable management of marine fisheries and mariculture,
- to provide scientific and technical support to their members as well as in safety, training and promotion of maritime sector.

These structures are the basis of the co-management system because the fisheries committees can draft legally enforceable measures. These comittees were established in France in 1991 (Law No.91-411 concerning the interprofessional organization of marine fisheries and aquaculture, and the organization of shellfish culture)- on the basis of former structures with similar role - in order to represent fishermen (since 1930 for the national committee)

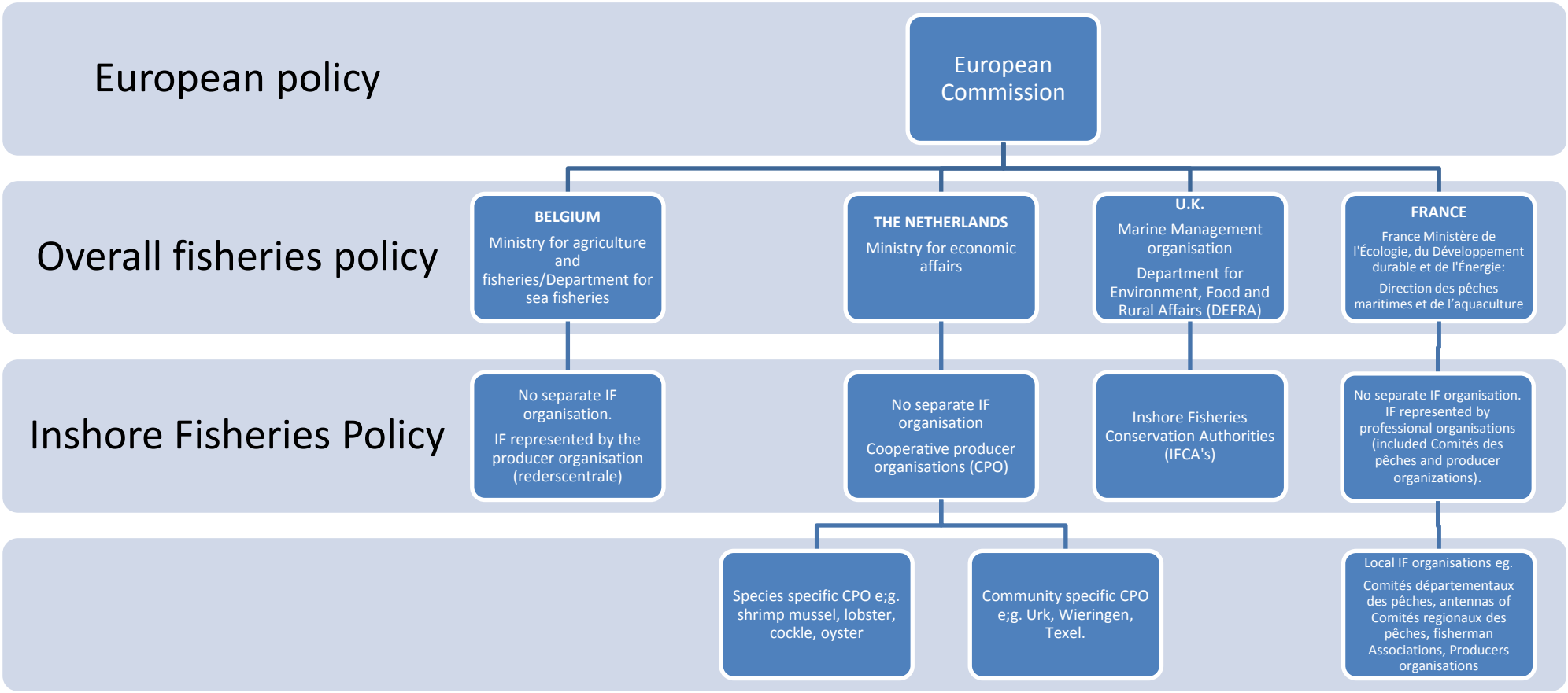

Figure 4: Overview of existing Governance structures for Fisheries at different governance levels and in the regions of the GIFS participation

2. Involving stakeholders in inshore fisheries governance

Especially in England, there is an awareness of the importance of involving a wide(r) range of stakeholders in inshore fisheries governance, not focusing on direct fisheries-related or stakeholders from the sector only. In England and the Netherlands, the importance of the nature conservation sector as stakeholders is clearly recognised. In both countries, environmental conservation policies have an important influence on the inshore fisheries policies and management. In the Netherlands, VISNED (Vissers met een toekomst, "Fishermen with a future") is an organisation that strives for a stable environment and important condition for sustainable fisheries (Source: www.visned.nl) and addresses the involvement of different stakeholders. In England, Natural England (an Executive Non-departmental Public Body that is responsible for advising the UK Government on the natural environment) works with relevant stakeholders, including the inshore fisheries, in helping inform Defra on their planning for Marine Protected Areas.

This importance of the nature conservation as stakeholders in inshore fisheries governance emerges less from the answers received from Belgium and France, where the nature conservation bodies have not been mentioned as key stakeholders by the respondents. The existence of an agreement ("Convenant Duurzame Visserij") between nature conservation NGO, the government and the producers organisation in Belgium (see below), was not mentioned by the respondents.

3. Signed agreements regarding inshore fisheries

In all areas, except in Belgium, signed agreements for IF are present. In Belgium an agreement was signed by Natuurpunt (Nature NGO), the Flemish government, ILVO (Institute for Agricultural and Fisheries Research) and the Rederscentrale (shipowners), however this applies to fisheries in general. Examples of signed agreements are provided by the respondents both in terms of voluntary as well as formally binding agreements. They are useful platforms for consultation. Examples include:

1) Covenants: for example the "Convenant duurzame Voordelta "Voordelta-agreement" in the Netherlands
2) Memorandums of Understanding: (MoU) are quite common forms of agreements in the UK, MoU of IFCA's with nature conservation bodies and the MMO and
3) local partnerships or platforms: the pan-European small-scale and artisanal fishers' platform or the Chichester Harbour Oyster Partnership Initiative.

The FLAGs and projects approved by the FLAG are, in spite of not being "agreements" as such, considered as stimulants for cooperation between sectors on a project basis. It is important to note that FLAGs do not limit their activities to inshore fisheries.

4. Shared responsibility or co-management involving inshore fishers

Initiatives of 'Co-management' (see 1.4.1.1 Co-management) involving inshore fishers, are in place in England, the Netherlands and France. Co-management schemes are implemented for quota and resource management (NL-UK-FR)- and also for conservation initiatives (UK). In the Netherlands the quota are managed by the Cooperative Producer Organisations themselves (See 1.3.2.2. Implementation of Fisheries Policy at national level: The Netherlands).

In Bretagne (FR) the fishers are aware of the importance of sustainable fishing and want to be involved in consultation processes: according to the French respondents, the engagement of IF in the management of natural resources is satisfactory. The success of co-management in France is also reflected in the Grenelle de la Mer, established in 2009 in order to carry out the 'Grenelle de l'environnement's' commitments to the ocean and coast, which were outlined in 2007. The Grenelle states that consultation with fishermen and stakeholder is necessary. Also it is indicated that fishermen should be involved in environmental surveillance (Le Grenelle de la mer, 2009). Since the 10th century, the French Mediterranean coast has a tribunal of wise or reputable men, elected by the fishing community, the so called Prud'homies de pêcheurs. The Prud'homies are represented at national and EU level and give their voice in local developments or wider policy changes (Decugis, 2008).

Also, the FLAGs (see 1.4.2.4 Fisheries Local Action Groups (FLAGs)) which exist in all the GIFS regions, are a form of co-management for local development policies regarding fisheries and CLLD (see 4.2.5 community led local development …). Again it is noted that FLAGs do not limit their activities to inshore fisheries.

5. Training

In England specific training and awareness raising programmes related to IF are present. It is a specific role of the IFCA's. Most of the training mentioned however, focuses on enforcement or safety, rather than on sustainability and chances for co-management. An example of training focused on safety is the 'Seafood Cornwall Training' that started in 2009 to provide safety courses and further training for fishermen and onshore workers and also offers educational visits to classrooms (Source: Seafood Cornwall Training, Consulted May 2014).

There are some examples where fishers are trained to help with managing the MPA's.

In Bretagne (FR), mandatory training has been introduced since two years concerning 'pêche a pied' (all types of fisheries practised on foot on intertidal areas), including resource management. Another example is 'RESPONSABLE', a project of IFREMER and ARS-Bretagne about Shellfish Harvesting-related Risks and Communication. Training for the IF sector includes the concepts of sustainable fisheries and stock management. Fisheries committees in France often have the opportunity to present their management system in coastal conferences or courses to students.

6. Link between the inshore fisheries administrative bodies and European and international bodies

In all sub-national regions, fisheries in general is represented at a European level by regional committees and bodies such as the Regional Advisory Committees (RAC) (see 4.2.3 Regional Advisory Councils) or the National government body. Inshore fisheries is not represented as a separate sector in the RAC, the specific interest of IF is not highlighted as such.

7. Role of inshore fisheries in consultation processes by other sectorial policies

IF organisations are generally well consulted in a wide range of other sectorial governmental policy developments. The sectors that were most mentioned by the respondents are: coastal development, coastal protection, marine planning, renewable energy, environment.

In Belgium and France this is part of the wider consultation of fisheries, as there is no separate IF organisation.

8. Inter-regional organization and co-operation structures for inshore fisheries

Except in Belgium, inshore fisheries are involved in inter-regional organizations and co-operation structures of the government. Examples given are international fora (e.g. the Wadden Sea Forum), national fisheries organisations and specific management committees (e.g. management of “Baie de Granville”, technical advisory groups).

9. Interaction of fisheries with other sectors

Although the nature conservation bodies were not mentioned as key stakeholder by the respondents in Belgium and France, IF strongly interacts with the nature/conservation sector in all sub-national regions, because of the implications of Natura 2000 (Habitat and Birds directive) on fisheries activities (see also 1.3.1.6 Natura 2000). Also the importance of the cultural sector was mentioned in all sub-national regions, as IF is often part of the cultural heritage (no specific reference by FR respondents). The French and English respondents mentioned many additional links with other sectors, for example with the local economy & tourism, with education. These interactions also exist in the other sub-national regions, but have not been identified as being so important.

10. Effects of inshore fisheries on land-based activities

The effects of inshore fisheries on land-based activities are taken into account in the IF policies in the French and UK regions in the study area. In the study area in the UK it was specified that there is a coordination mechanism between marine planning and terrestrial planning at national level. In addition, when developing new by-laws, the IFCA’s have to conduct an impact assessment to evaluate possible effects onshore, for instance related to the social structure of the community.

11. Policy for inshore fisheries

In Belgium, IF is a part of the wider fisheries policy in which specific measures have been formulated, for those vessels that have voluntarily registered to the coastal fleet segment. For example, IF are subject to less stringent quota in order to compensate their smaller fishing effort. This applies only to those species not subject to a stock recovery plan, for which the Inshore Fishers have no quota limitations. The quota do apply to the large scale fisheries.

In France, no separate policy exists for IF. In the Netherlands, separate policies exist to maintain the IF fleet and fishing areas, and to support the transition from fisher to maritime entrepreneur status.

In France and Belgium, the perception is that the **local context** and the specificity of the fisheries is taken into account to a satisfying degree. This is not always the case in the Netherlands and England. The local context within which IF functions is highlighted as very important. There is not only one industry or one community per region.

The Dutch coastal fisheries are mainly subject to national policy the goals of which are: to regulate fisheries in relation to other marine functions, including the most important ecological function, to regulate fisheries vis-à-vis each other, and the leasing of shellfish farming plots (Symes and Phillipson, 2001).

In the UK, the IFCA’s consider their work as described by DEFRA as the IF policy. DEFRA gives guidance to the IFCA’s to fulfil their role to manage a sustainable inshore marine environment and inshore fisheries.

As the IFCAs are separate organisations that operate within a local context, they can manage the coastal zone in a differentiated way. Therefore, there is no overarching national IF policy. If there is a policy guidance (at local scale), this is mainly linked to conservation objectives and management measures. This is also seen as setting the policy framework for IF.

Because IF differ from region to region, the IF policy will have to be specific, i.e. issue and location based. For all respondents, implementing a general European IF policy seems very difficult for that same reason (see 1.3.2 Implementation of fisheries policy at national level).

12. Government goals for inshore fisheries policies

There are no overall/common specific goals set for IF by the government in the sub-national regions under study. This is quite evident as for most regions there is no clear or separate policy. Only in the case of very specific fisheries, clear goals can be set. For example, in the Dutch mussel fisheries the goal is to stop bottom trawling for mussel seeds by 2020, ("Transitie mosselsector en natuurherstel in de Waddenzee", Transition mussel sector and nature restoration in the Wadden Sea agreement from 2008). Since January 2005 no permits are given for mechanical Dutch cockle fisheries in the Waddensee because mechanical cockle fisheries have insufficient capabilities to develop sustainably (Ministerie van Landbouw, Natuur en Voedselkwaliteit, 2004).

Again here, it seems that goals need to be set according to the local issues and situation based.

13. Specific local fisheries management approaches

Specific management approaches were mentioned by the respondents in France and England. For the latter, the IFCA's play a crucial role. A need for more focused and strategic planning is mentioned. The IFCA's mention that a better management would be possible if they would have more 'control' over the area and that tools are needed to be able to manage these properly. At present, by-laws are generally used for management, but these by-laws are prohibitive by nature. Some respondents feel that a permit scheme would be interesting, providing people with opportunities rather than limitations or restrictions to fish. Other tools mentioned are closing areas allowing stocks to recover, re-laying of oysters in order to encourage stock replacement (e.g. the 'Chichester Harbour Oyster partnership'), joint monitoring programmes with the fishers, recommendations on conservation zones in consultation with the fishers and regulating orders.

In France, various management tools and measures apply to inshore fishing in French territorial waters. The Axis 4 program is mentioned as an important tool allowing specific local fisheries management approaches. It stimulates various local initiatives for dialogue with representatives of recreational fishers. It was noted that Europe could become more involved in local issues and in implementing more dialogue and more expertise (see 1.3.2.4. Implementation of Fisheries Policy at national level: France (contribution of D. Picault)).

The **ecosystem approach** (see 1.4.1.5 The Ecosystem-Based Approach to Fisheries Management (EBFM)) still remains a very unclear concept to many people. Nevertheless, several aspects or processes underpinning the ecosystem approach are used when looking at IF.

14. Mitigating measures

Measures to mitigate negative environmental effects of IF are not commonly used. Only in the Netherlands respondants specifically mention mitigation measures, such as temporal closure of areas. In the Netherlands for example, fishermen need to report to their producer organisation PO when bycatch of undesirable species is more than 5% in shrimp fisheries. If this occurs, the PO's will inform their fishermen of the closure of the fishing area. The area is then closed for two weeks. (Source: Management plan garnalenvisserij, maart 2009).

15. References to EU policies other than fisheries

The best known coastal policy at a European level is the Marine Strategy Framework Directive (MSFD, see 1.3.1.3 Marine Strategy Framework Directive (MSFD)). Most respondents have been invited to contribute to the development of the MSFD documents, such as the initial assessment of the marine environment, the socio-economic analysis and the description of the Good Environmental Status and related environmental objectives.

The majority of the respondents were aware of ICZM and to a lesser degree of MSP (in UK 6/10 respondents mentioned ICZM, 3/10 mentioned MSP. The response rate for ICZM and MSP was equal in the other regions). They have been involved in the development of the ICZM report, but it was considered that ICZM has not been particularly relevant to the IF sector. MSP was considered more relevant (see 1.3.1.4 Marine Spatial Planning (MSP)) .

The Integrated Maritime Policy (see also 1.3.1.2 Integrated Maritime Policy (IMP)) is less known by the respondents. MSP is one of the instruments of the IMP.

16. Data, Monitoring and Trend analysis

In Belgium, the Netherlands and the UK, data from the fishing industry is used to strengthen scientific assessment. In-depth research and scientific information about fisheries is needed to underpin the CFP. In the UK, a trend in "breaking down the barriers" between scientists and fishermen has been mentioned. The IFCA's play a role here, because of their close ties with the fishing industry (see 1.3.2.3. Implementation of Fisheries Policy at national level: England (contribution of J. Orchard-Webb). Management interventions through voluntary codes are used to gather information. In impact assessments, social, technological, economic and environmental data are included. Here again, there is a close link with conservation schemes, and relationship with other managing organisations such as Natural England, CEFAS etc. (see 1.5 Data and information management). Biological) Data availability and getting hold of research data is mentioned as a problem. The high costs of gathering data, including the staff cost, is an issue here.

In the UK, the Netherlands and France specific aspects of **IF are monitored** on a permanent basis. In all regions, monitoring is conducted on a project basis. Fish stocks, landings and environmental impacts are monitored regularly. Social aspects, such as social changes and gender equality are rather monitored on a project basis.

Trend analysis is clearly used in managing IF. Trend analysis to evaluate the status of fish stocks is mentioned as the major tool by all respondents. Other aspects differ from region to region. It was commented that trend analysis is conducted in an ad-hoc way, hence not systematically. The link to features within Marine Protected Areas are an important issue for future use of trend analysis in IF management.

17. Evaluation

The **effects and impacts** of inshore fisheries are **evaluated** in all regions, but this does not always lead to adaptive management[6] (e.g. not in Belgium). It does lead to adaptive management in England where the effects and impacts of IF are evaluated by the IFCA's, Natural England and CEFAS. In this case, it was specified that there is a focus on aspects of conservation.

An English respondent made a plea for an open and honest dialogue with the stakeholders on what is monitored and what the management regulations will be if effects are detected. The wider context of the monitoring activities needs to be communicated and the appropriateness of monitoring (in terms of location and timing) needs to be clear and transparent, so fishers can understand WHY certain measures have to be taken.

18. Communication

In the Netherlands, France and England, brochures as well as public meetings and websites are used for communicating the core issues on IF to the wider public. Axis 4 projects can play an important role here (see 1.4.2.4 Fisheries Local Action Groups (FLAGs)).

It is mentioned that engaging with the wider public is often a struggle, and that an increased public awareness on the importance and specificities of IF is needed.

19. Local ecological knowledge

In all regions, **local ecological knowledge** (LEK) on and by inshore fisheries is used (See 1.4.1.4 Local Ecological Knowledge (LEK)). It is not used as a standard or in a systematic manner, but rather informally for processes influencing their activities (e.g. wind energy, Natura 2000) or for licensing purposes or project-based activities. This is clearly a growing topic, but all respondents acknowledge that there are both limitations and perceptions that need to be considered.

It is felt by some respondents that there is an opportunity to make better use of fishers' information, data and knowledge and apply technology to capture and use this information.

20. Quality labels

Quality labels exist in all regions, being MSC labels or others (see 1.4.1.3 Quality labels). This is also reflected in the in-depth case studies (Phase 2 of this study, see report) in which quality labels were mentioned in almost every location. For example the Bretagne Qualité Mer and the Red Label, MSC labels for Hastings Dover Sole, Mackerel and Herring fisheries, also MSC label for the lobsters in the Bay of Granville (Report Activity 1.2),

[6] Adaptive management: A systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and practices (Source: greenfacts.org).

2.4 Reflections based on the results from the questionnaire

The following reflections are based on the responses received from the questionnaires and from a literature background study. They are reflections by the authors of this report and do not necessarily represent the view of the respondents.

✓ Highlight inshore fisheries in integrated coastal management and policies affecting the marine and maritime environment

The respondents are aware of the major EU coastal and marine policies such as the MSFD (see 1.3.1.3 Marine Strategy Framework Directive (MSFD)), the WFD, ICZM (see 1.3.1.5 Integrated Coastal Zone Management (ICZM)), and MSP (see 1.3.1.4 Marine Spatial Planning (MSP)). Especially for the MSFD, there was a considerable level of involvement, and most respondents have contributed to the negotiations for the initial assessments, the socio-economic analysis and the description of the Good Environmental Status.

The concept of ICZM in a European context dates from the early 1990s, when the single sector approach prevailed, integrated working was new, and the claims for use of the marine space were less prominent than today. MSP is a more recent development, so is the MSFD (came into force on 15 June 2008).

Why the MSFD and MSP are considered more relevant and why is the involvement of (inshore) fisheries in the MSFD and MSP higher than in ICZM?

The MSFD is a binding framework. A key element of the MSFD is the achievement of the Good Environmental Status (GES) by 2020. By 15 July 2012, the EU Member States had to deliver a description of the GES and related environmental objectives to the European Commission. Several objectives and their descriptors clearly link to fisheries, such as commercial fish and shellfish, maximum sustainable yield, biological diversity, non-indigenous species, elements of marine food webs and sea floor integrity.

From the questionnaires, it was clear that there was a considerable level of involvement of the IF representatives during the initial analysis and the description of GES. For instance IFCA's were consulted for data gathering and invited to express their thoughts and views on legislation and management.

The binding Water Framework Directive (WFD) is well known by most respondents. As the main goal is to achieve a good ecological status and good chemical status of all freshwater bodies by 2015, indices have been proposed for this, among which we can cite ecological and chemical water quality, phytoplankton & other aquatic flora, macro invertebrates and fish species. The range of application of the WFD is not restricted to the freshwater, but also covers the coastal and transitional waters. In coastal areas, the WFD is in force up to one nautical mile from the territorial baseline of a Member State for a Good Ecological Status and up to 12 nautical miles for a Good Chemical Status (Source: Coastal Wiki. Consulted July 2014)

MSP and ICZM however, are at present not binding instruments. The European Commission has launched a proposal for a joint framework directive on 12 March 2013 which did not prosper. In July 2014 (23/07/2014), the EU's General Affairs Council adopted the new Maritime Spatial Planning Directive, which still has to be transposed to national legislation (see 1.3.1.4 Marine Spatial Planning (MSP)). Hence, ICZM may have less impact on the fishing sector. As one of the respondents rightly noted, ICZM is a (voluntary) process, so the impact on fisheries is not clear. Furthermore, ICZM tends to focus more often on the land and land-sea interface. MSP on the contrary is considered more 'threatening', as it often involves zoning plans for the marine space and lines appear on maps. Several Member States already have a trajectory of implementing MSP through legislation, which is not the case with ICZM. The fishing sector needs to get involved in MSP if it wants to have its voice heard. This was illustrated by Pim Visser, chief executive of VisNed (see 1.3.2.2. Implementation of Fisheries Policy at national level: The Netherlands) in his talk "Fishing on a postage stamp during the MSP Symposium hosted by the EC on 26 March 2012, where he held a plea for a bottom-up approach, for an active stakeholder engagement, and for sufficient monitoring and scientific support.

Applying the key principles of MSP as well as those of ICZM will assist a wider integration of IF in ICZM.

✓ Impact of Marine Spatial Plans on inshore fisheries

Fisheries are one of the sectors considered in MSP. It is clear that inshore fisheries need to get involved and be taken into account in the process of MSP, as they are a major user of the marine space. At present, the exact measures taken for inshore fisheries have not been decided in most areas. Although it seems that fisheries may have few restrictions for now, except for the access in and around windfarms, this may not be the case in the future. Also, with the setting aside of areas that are destined to energy production and/or storage (tide and wave energy) further restrictions may apply. Where measures will be taken, they are most likely to affect inshore fisheries more than LSF, as the IF activities are typically restricted to the 12 nm zone where most of the economic activities are located or planned. In e.g. Belgium, fishing (including IF) is forbidden at the Paardenmarkt site, where war ammunition is stored. Furthermore, shipping (and therefore also fisheries) is forbidden in a safety zone of 500 m around wind farms.

Marine Spatial Planning can also stimulate certain types of fisheries in specific zones, e.g. by excluding unsustainable fishery methods. In the recently approved marine spatial plan in Belgium, restrictive measures have been established in 4 zones in the Habitats Directive Area 'Vlaamse Banken' (Flemish Banks) to stimulate alternative, sustainable fisheries.On the other hand, the area that is exclusively for coastal fishing vessels (<221kW and <70GT) has been extended from 3 nm to 4.5 nm from the coastline (See 1.3.2 Implementation of fisheries policy at national level for more information about the marine spatial plans in the GIFS area).

✓ European Parliament resolution of 15 June 2006 on inshore fishing and the problems encountered by inshore fishing communities (EU 2006), [p6_TA(2006)0276]:

In this resolution of 2006 the European Parliament highlights the problems encountered by inshore fishing communities. Several of the problems can be linked to the principles of integrated working and good governance:

- The resolution calls for a preservation of the cultural traditions through IF and points out the importance of IF to the **local economy** and the **social fabric** of coastal communities. Also, it points out that IF must play a constructive role in the **protection and conservation** of the coastal marine environment. This demonstrates that IF is not only about economy, but also deals with social aspects and has cross-sector links (culture, tourism, environment and nature).

  The responses for this report point out that in the UK and France, IF clearly work together with conservation initiatives. The support for the local economy is mentioned in all regions (See in-depth case studies in Activity 1.2 Report)

- The resolution calls for **specific educational and training programmes** to encourage new entries to the sector. Especially in the responses of France and the UK, efforts for specific training programmes have been mentioned. In the UK however, they seem to be focused on enforcement or safety, rather than on sustainability and opportunities for co-management. There are some examples where fishers are trained to help with managing the MPA's.

  In Bretagne (FR), mandatory training has been introduced since two years for "pêche à pied" (all types of fisheries practised on foot), including resource management. Training for IF includes the concepts of sustainable fisheries and stock management.

  Educational programmes exist in all regions studied, and many initiatives and projects are undertaken to raise the profile and awareness about IF.

- The resolution stresses the importance to provide accurate data on inshore fisheries activities and calls for harmonising data on IF management, safeguarding the characteristics of the individual national and regional fisheries.

  The responses for this report show that trend analysis is used, but only for an ad-hoc approach. Monitoring is often done on a project basis. This is especially the case for social aspects. Data from the fishing industry is sometimes used, but not systematically.

- The resolution underlines that coastal management plans have positive effects on the sector.

  The analysis shows that IF representatives do relate to several initiatives such as MSP and the implementation of the MSFD.

✓ European Parliament resolution of 2 September 2008 on Fisheries and Aquaculture in the context of Integrated Coastal Zone Management in Europe (EU 2008) [2008/2014(INI))(2009/C 295 E/01]:

This resolution stresses the need for representatives of the fishing and aquaculture sectors to be involved in activities linked to the planning and development of ICZM, bearing in mind that their involvement in sustainable development strategies will increase the added value of their products.

When looking at the ICZM reports by the EU Member States for the period 2005-2010 (European Commission, Consulted May 2014), Belgium, France, the Netherlands and UK, all consider fisheries within their reports and all have involved fisheries representatives in the development of the reports. Although the reports are not "strategies" and ICZM will not develop a strategy for fisheries, links should be built.

As described earlier, the involvement of fisheries is higher in MSP than e.g. in ICZM. As more and more sectors seem to claim space in the marine environment, there is a clear need for the fishers to get involved in planning the space for the future. It is felt however that IF is not visible within national and European consultation and planning processes for dealing with MSP and ICZM. Having a separate organization such as the IFCA's helps to raise the profile of IF in these processes.

The resolution also calls for closer cooperation between relevant bodies at regional level through exchanges of information relating to the state of coastal zones and the adoption of joint strategies to improve the environmental situation of local marine ecosystems. Co-management with the fishers can fulfil this call.

The resolution also considers that both the fisheries and aquaculture sectors must be included in a cross-cutting approach to all maritime activities taking place in coastal zones, in order to achieve sustainable development in accordance with the new maritime policy guidelines. From the questionnaires, it was clear that fisheries representatives are involved in cross-cutting policies both at European and national level.

✓ EU small-scale fisheries in the reform of the Common Fisheries Policy

The Green paper (22.4.2009 – COM(2009) 163) on the reform of the CFP also pays specific attention to small scale fisheries. It states that differentiated management regimes are needed for LSF and SSF, emphasizing that in the latter the focus should be put on social objectives[7].

[7] the new CFP entered into force in January 2014 (see also 1.3.1.1 Common Fisheries Policy (CFP))

From the responses gathered for this report, the social importance of IF is clearly recognized; however, it is not monitored or described in a systematic way. On the other hand, according to the respondents, many projects do focus on social aspects of IF.

✓ Can Fisheries Local Action Groups (FLAGs) play a role in IF?

The FLAGs (see also 1.4.2.4 Fisheries Local Action Groups (FLAGs)) were not developed for the purposes of IF alone, they are not targeting any specific part of the fleets. However in practice, FLAGs are more appealing to IF segments of the fleets than to larger scale fleets because of the people involved in the FLAGs. The people in the local partnerships are member of the local bodies that represent IF. The FLAGs are based at local level, so they are much closer to IF. The interviews conducted in the in-depth case studies, support this statement (see Report Activity 1.2). For example in North Norfolk there was no regional or national voice for the Norfolk fisher's present before establishing the North Norfolk FLAG. The FLAG consists of a mixture of stakeholders, including the inshore fishermen, and raises the profile of the challenges the fishers face in order to secure a sustainable future, at regional and national level.

FARNET (Fisheries Area Network) studied the role of FLAGs within local fisheries governance. In this study different roles for FLAGs were identified (The role of FLAGs within local fisheries governance, Quiberon, 13-14-15 November 2012, Gilles van de Walle):

- **Flag up local needs**: FLAGs can act as local branches for implementing the European Fisheries Funds objectives, and adapting projects to local needs.
- **Horizontal integration**: FLAGs can assist horizontal integration within the fisheries sector by creating linkages with other sectors (social, environmental, tourism, food industry) and stimulate new activities and innovation.
- **Consultation**: Fishers are being asked to participate in many different processes (e.g. WFD, MSP, ICZM,). Everybody wants to consult fishers who have a very limited amount of available time. FLAGs can help by providing a consultation body where different economic sectors are represented. They stimulate discussions on a continuous basis with the other sectors present in the area.

  FLAGs can help financing for the fishing sector to be involved in local debates. They can find projects to support fishers to be represented in these debates. For instance, in France (Arcachon), the former local fishing committee had entered a project for a position of coordinator between fishers and the body in charge of setting up a MPA.
- **Raising awareness**: FLAGs have been very active to raise awareness. Many projects focus on improving the image of the fishing sector through fairs, museums, roots, innovative projects e.g. using new technology that gives information about the role of fishing in local fishing industry.
- **Representation:** There are several examples where FLAGs take up an important role in representing the fishing community and help to organise the sector. In Hastings for instance, the FLAG project manager became an important ambassador for the fishing community. The Hastings FLAG seems to work fine because there is a large representation of fishers – much better when compared to others which often are dominated by public sector organizations (see also the Hastings case study in the Activity 1.2 Report).

The way in which FLAGs were set-up and work now fits well to ICZM principles toward good governance.

✓ Does a separate policy for inshore fisheries have an added value?

The reform of the CFP proposes a new approach to IF (see also 1.3.1.1 Common Fisheries Policy (CFP)). While the EU wide perspective would provide a broader and general framework, IF should be addressed through devolved management in order to adapt to the local situation.

It is not relevant for all countries to have a separate IF policy. For example, in countries where the IF sector is very small, it might make more sense to consider the policy as a part of the wider fisheries policy. However, in these cases, specific measures should be taken for IF because of their particular situation.

Quote Jacques Doudet (regional committee of fisheries in Bretagne): "I have never felt the need for specific IF structures, but there is a need for [an IF] specific policy".

IF differs significantly between the sub-regions analysed. Indeed, a wide diversity exists in scale, context, employment rate, policies, etc…. This strengthens the observation made by EU to promote IF policies within the local context.

✓ Does a separate organisation for inshore fisheries have an added value?

Organizations like the IFCA's in England and CPO in the Netherlands help IF to be more visible and to develop a more holistic approach for IF management, especially with respect to stakeholder consultation, representation and conservation. In both cases, the organizations have a legislative task, which is seen as an added value. They can also make the link to European & international bodies and to inter-regional cooperation structures and voice the viewpoints of IF.

In the view of the respondents in the UK and in the NL, it is obvious that having a separate organisation for IF is instrumental for increasing a good representation of IF in other co-operation structures.

2.5 Opportunities for inshore fisheries governance: an agenda for integration

The key principles of ICZM and MSP as published by the European Commission (see 1.3.1.4 Marine Spatial Planning (MSP) and 1.3.1.5 Integrated Coastal Zone Management (ICZM)) provide a good guidance for integrated coastal management and governance.

The following **key opportunities** for inshore fisheries were identified, following analysis of the responses gathered for this report:

- **Develop policy (measures) specific for inshore fisheries:**

Because of the specificity of IF, policies need to be tailored to the local situation and decisions should be taken as close as possible to the local community. Depending on the situation, a separate IF body might assist in representing IF, but at least fisheries policies need to include separate measures for IF. This is also recognized in the reform of the Common Fisheries Policy (Green paper) in which number of provisions and specific measures specifically target and benefit the SSF and its fleet[8].

- **Identify opportunities for co-management involving inshore fisheries:**

Co-management involves the sharing of management responsibility and/or authority between fishers and government (Arthur and Howard, 2005). Co-management will lead to a higher level of involvement and understanding with the parties involved. Agreements, formal or informal, can be used to formalise and clarify the roles.

- **Invest in stakeholder involvement and use of local ecological knowledge (LEK):**

In Belgium and France, inshore fisheries is not represented by a separate organization, hence IF is not recognised as a stakeholder separately. It is represented by the fishing sector as a whole. All respondents, even in UK and France where there is a separate organisation for IF, made a plea for increasing stakeholders' involvement and using the knowledge of fishers for policy development, advice and monitoring through e.g. joint monitoring programmes, more intense communication with fishers, representation of fishers in consultation bodies..

- **Develop specific management approaches for inshore fisheries:**

Focused and strategic planning for IF is needed, including the development of better management tools for IF. Possibilities for tools which stimulate sustainable fisheries, such as permits, co-management of conservation areas, joint research programmes, differential quota management, etc. should be considered.

- **Develop monitoring programmes for inshore fisheries:**

Monitoring and trend-analysis for IF is done on an ad-hoc basis. Develop systematic monitoring programmes for (inshore) Fisheries, and where possible integrate them in existing monitoring programmes, for example the programmes for the Marine Strategy Framework Directive or the Water Framework Directive. Economic, ecological as well as social aspects should be included to get a wide set of data for integrated analysis purposes.

The evaluation of the effects and impacts can be used to apply **adaptive management**.

- **Make the link to other policies:**

Linking the (inshore) fisheries to other policies such as Nature development/restoration & conservation, MSP, etc. should raise the profile of IF and develop a better dialogue with other sectors. This can be done for example by incorporating IF policy objectives in other policies, by translating policy objectives in local targets or goals, etc.

- **Develop a good working relationship between scientists and fishers:**

Fishers have a good knowledge of the local situation and can provide valuable additional information to scientific research. Examples of this cooperation already exist in self-sampling programmes,

- **Look at opportunities for FLAGs to assist inshore fisheries:**

FLAGs can play a role in IF in several ways, e. g. through focusing on local needs, ensure vertical and horizontal integration, help with consultation, communication and awareness raising.

Based on the research conducted in the context of activity 1.1 and activity 1.2 Coastal Zone Governance and Inshore fishing: Inshore Fishing Community Governance Case Studies, a position paper was drafted to inform decision-makers and stakeholders interested in governance aspects of inshore fisheries. The "Inshore fisheries, too important to ignore?" position paper summarizes the main outcomes of the research conducted in the context of activity 1 on Coastal Zone Governance and Inshore fishing,. it highlights key issues in terms of opportunities and obstacles, and proposes an agenda for action. The position paper is available on the GIFS website (www.gifsproject.eu)

[8] the new CFP entered into force in December 2013 (see also 1.3.1.1Common Fisheries Policy (CFP))

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Annex 1: Questionnaire template

Questionnaire:

Coastal zone governance and inshore fishing

QUESTIONNAIRE CONTENT

INTRODUCTION

PART 1: SETTING THE SCENE

1.1 Surveyed and consulted experts

1.2 The area under survey

PART 2: ANALYSIS

2.1. Organisation of Inshore Fisheries Sector

2.2. Inshore fisheries management and its role in striving for sustainable coasts

2.3. A sustainable future for inshore fisheries

2.4. Best practices

INTRODUCTION

Inshore fisheries (including small-scale coastal and traditional fisheries) make a considerable contribution to the socio-economic wellbeing of coastal communities. They contribute to local development, job preservation/creation, supplies of fresh fish and the preservation of traditional local cultures (EU Parliament Resolution 2004/2264(INI)). Coastal zones are subject to an array of different policy and management regimes. In order to effectively situate the role of inshore fishing into a broader sustainable development framework in the coastal zone, an understanding of coastal governance mechanisms and the legal, social, economic and political arrangements that are in place for managing fisheries and their interaction with other sectors is required. There is a widely acknowledged need to introduce the ecosystem approach in fisheries planning and management in order to comply with EU policies (e.g. Common Fisheries Policy, Integrated Maritime Policy, Habitats and Birds Directives, the Marine Strategy Framework Directive) and international conventions (Convention on Biodiversity, MARPOL, etc.). Yet successfully putting these policies - that are aiming for an integrated approach - into management practice is not straightforward.

This questionnaire will help to get an insight into and understanding of the different formal and informal management frameworks and approaches that exist for inshore fisheries in the southern North Sea and English Channel.

Emphasis will be placed on understanding the role of inshore fishing in a place-based management context, to achieve an ecosystem approach, Integrated Coastal Zone management (ICZM), local development plans, marine spatial planning, regeneration and protected area management.

You have been approached by the GIFS project as an expert in this field to help us and others to gain insights in these local and regional[9] frameworks for management and governance. The conclusions of the analysis will identify opportunities for wider integration of fisheries management in coastal management and potential areas of conflict. This study will identify appropriate governance structures for different areas depending on fishery type, scale and stakeholders. Your contributions are most valuable to us and will be duly acknowledged in the final document.

We would like to ask you to respond from your own personal professional viewpoint, NOT as a representative of your organisation.

Thank you for your time and efforts in completing this questionnaire.

In case of general questions or comments about the GIFS project, and for clarifications about the purpose of the questionnaire please contact our GIFS partner in the UK:

Julie Urquhart [J.Urquhart@greenwich.ac.uk]

For clarifications and questions concerning the specific content of the questionnaire, please contact:

Heidi Debergh [heidi.debergh@vliz.be]

PART 1: SETTING THE SCENE

1.1 Surveyed and consulted experts

This questionnaire was answered by:

Name:

Organisation:

I work for (*please indicate what applies*):

- ☐ Government body at local level
- ☐ Government body at regional level
- ☐ Government body at national level

[9] Regional level – local level: The regional level within this questionnaire refers to "subnational" (not supranational) e.g. the level of the provinces in the Netherlands, the regions in France, the counties in UK, the provinces and/or Flanders in Belgium. The local level within this questionnaire refers to the level of individual fishing communities/settlements.

☐Private body

☐Other, please specify:

Size of the organisation:

Function:

Address:

E-mail:

Telephone:

Do you agree that your name and contact details appear in the final report (no link will be made however to your specific responses):

☐Yes (this can be useful for readers if they want to contact you for further information)

☐No

Describe your involvement with inshore fisheries (*in what way do you interact with the inshore fisheries sector*):

To complete this questionnaire, the following persons were also consulted:

1. Name:

   Organisation:

   Function:

2. Name:

   Organisation:

   Function:

3. Name:

   Organisation:

   Function:

1.2 The area under survey

1. Within the context of the GIFS project (southern North Sea and English Channel) inshore fisheries is defined as "all fishing activities within 12 nautical miles from the coastline". However, other legal/administrative definitions of inshore fisheries may exist at individual country level [10]. From your perspective, which definition are you using for inshore fisheries? (*What definition(s) apply regionally/locally?*)

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2. Will this questionnaire focus on one specific type of inshore fishery?

[10] Examples of inshore fishing definitions:
UK - Vessels under 10 metres, operating in coastal waters typically out to 6 miles, but can be up to 12 miles, and to which the inshore management regime applies; FR - Petite pêche côtière is fishing practised by means of boats of which the overall length is lower than twelve meters, not using that towed machines and of which the exit at sea/ Time out of harbour does not exceed 24 hours; BE - All fishing vessels that have an engine power of 221 kW or less, including any additional power and a tonnage of no more than 70 GT, according to the "Official list of Belgian fishing vessels", as maintained by the Department of Maritime Transport of the Federal Public Service Mobility and Transport, and that undertake trips with a maximum period determined by the Minister (today being 48 hours) with start and end in a Belgian port; NL - Fishing within the 12 miles zone with ships no longer then 24 meter long and with a maximum capacity of 300 hp.

☐Yes ☐No

If yes, can you please define this fishery by means of one or more of the following criteria *(please tick boxes where applicable and provide answers):*

☐Specific port(s) or coastal settlement(s) (e.g. Hastings, Zeebrugge):

☐Specific fish species (e.g. *Pecten jacobaeus, Solea solea*):

☐Specific vessel type (e.g. vessels below 12m, vessels with engine power below 300kW):

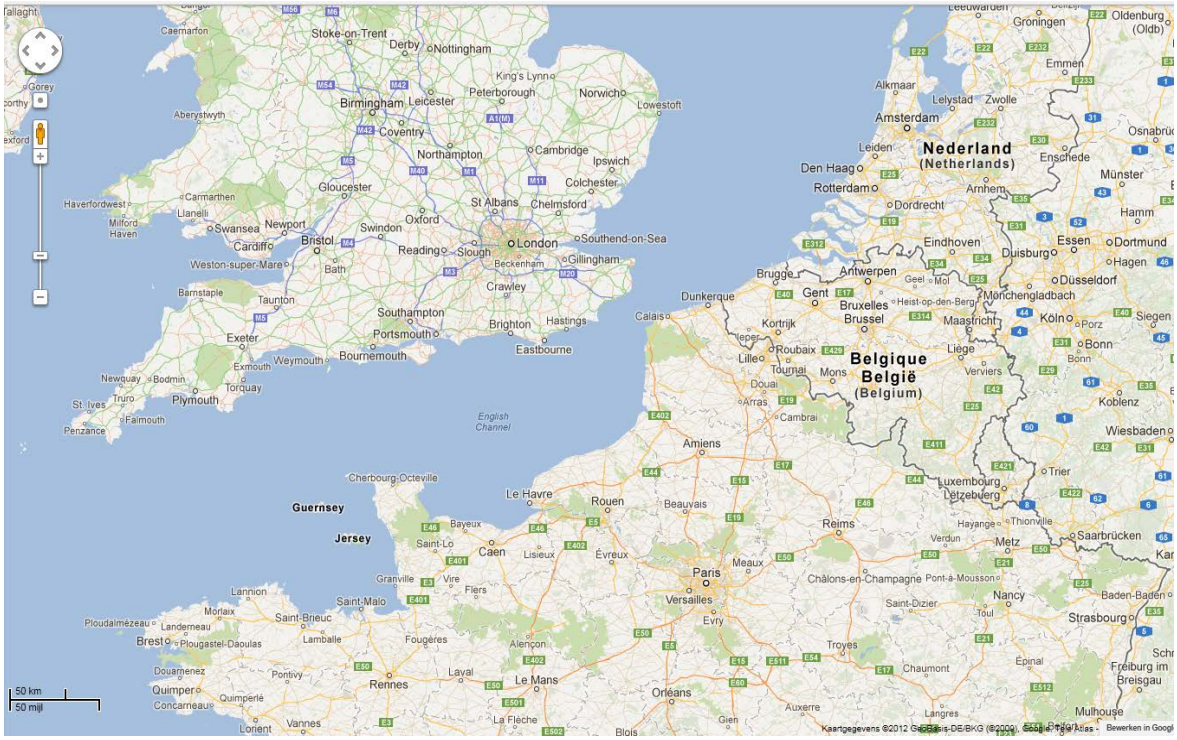
☐Specific fishing gear (e.g. otter trawl, pots):

☐Specific fishing area (e.g. Rye Bay):

☐Other? Please explain or define:

Start typing here

3. What area/geographical scale is considered for inshore fisheries? (*please draw on the map below or include own map if available*)



PART 2: ANALYSIS

2.1 Organisation of Inshore Fisheries Sector

1. Is inshore fisheries managed by a separate organisation (in terms of allocating quota, issuing by laws, regulation, monitoring of activity,…)? ☐Yes ☐No

If yes, identify the Inshore Fisheries organisation's name(s):

Start typing here

If no, is Inshore Fisheries represented by a broader fisheries organisation? ☐Yes ☐No

If yes, identify the broader fisheries organisation(s):

Start typing here

2. Identify the main stakeholders considered in relation to the local inshore fisheries policy:

A.	☐Officially involved ☐Unofficially involved
B.	☐Officially involved ☐Unofficially involved
C.	☐Officially involved ☐Unofficially involved
D.	☐Officially involved ☐Unofficially involved
E.	☐Officially involved ☐Unofficially involved

3. Are there signed agreements with specific stakeholders? ☐Yes ☐No

If yes, with which stakeholder and specify the aim of the agreement.

Start typing here

4. Are there examples of shared responsibility/co-management[11] between inshore fisheries and other stakeholders? ☐Yes ☐No

If yes, please give more details on the type of co-management and how the system works.

Start typing here

5. Are there specific training, education or awareness raising programmes related to inshore fisheries management? ☐Yes ☐No

If yes, give examples if possible.

Start typing here

Optional: Please feel free to add information here if you feel improvements can be made concerning stakeholder involvement for inshore fisheries management in your area.

Start typing here

[11] Co-management is seen to represent the sharing of management responsibility and/or authority between fishers and government (source: Arthur, R.I. and C. Howard 2005. Co-management: a synthesis of the lessons learned from the DFID Fisheries Management Science Programme. MRAG Ltd. London)

6. Which administrative bodies are involved in the inshore fisheries management and/or policy development?

At national level:

Administrative body	Involved in:
A.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
B.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
C.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
D.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
E.	☐Inshore Fisheries policy development ☐Inshore Fisheries management

At regional level:

Administrative body	Involved in:
A.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
B.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
C.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
D.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
E.	☐Inshore Fisheries policy development ☐Inshore Fisheries management

At local level:

Administrative body	Involved in:
A.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
B.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
C.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
D.	☐Inshore Fisheries policy development ☐Inshore Fisheries management
E.	☐Inshore Fisheries policy development ☐Inshore Fisheries management

7. Is there a link between the inshore fisheries administrative bodies and European and international bodies?

☐Yes ☐No ☐Not applicable

If yes, please name the EU and/or international bodies and indicate **how** the local/regional/national Inshore Fisheries liaise with these bodies:

EU – International body	**How** do the local/regional Inshore Fisheries liaise with these bodies
A.	
B.	
C.	
D.	
E.	

8. Are inshore fisheries organisations and management bodies consulted or represented in other sectoral policy developments from the government? ☐Yes ☐No ☐Don't know

If yes, please specify:

☐Coastal development

☐Coastal protection

☐Cultural heritage

☐Economy (other than fisheries)

☐Education

☐Environment

☐Integrated Coastal Zone Management

☐Integrated Maritime Policy

☐Social

☐Spatial planning at sea

☐Tourism

☐Other? Please specify:

Start typing here

9. Are inshore fisheries involved in inter-regional organisations and co-operation structures of the government? ☐Yes ☐No

If yes, please name them.

Start typing here

Optional: Please feel free to add information here if you feel improvements can be made concerning involvement of administrative bodies in inshore fisheries management in your area.

Start typing here

2.2. Inshore fisheries management and its role in striving for sustainable coasts

1. With which (non-fisheries) sectors does inshore fisheries interact at present?

	How does inshore fisheries interact with this sector?	How does this sector affect inshore fisheries?
☐Cultural sector		
☐Local Economy (other than fisheries)		
☐Education		
☐Environment sector (NGO's, governmental environmental bodies, …)		
☐Social sector (employment, housing, equal rights, …)		
☐Tourism sector		
☐Other, please specify:		

2. Are the effects of inshore fisheries on land-based activities taken into account in the Inshore Fisheries policies (eg. development and functioning of the harbours, employment, tourism effects, inshore fisheries versus wider fisheries sector)?

☐Yes ☐No ☐Don't know

2.3. A sustainable future for inshore fisheries

1. Is there a clear policy on inshore fisheries for the future?

☐Yes ☐No ☐Don't know

If yes:

☐At local scale

What are the key elements in this policy?

Start typing here

Has the time scale for the inshore fisheries policy been defined?

☐Yes ☐No ☐Don't know

If yes, what is the time scale?

Start typing here

Is the policy linked to other policies/strategies/plans? ☐Yes ☐No ☐Don't know

If yes, which ones?

☐Coastal development

☐Coastal protection

☐Environmental protection

☐Integrated Coastal Zone Management

☐Integrated Maritime Policy

☐Spatial planning at sea

☐Tourism

☐Other? Please specify:

Start typing here

☐At regional scale

What are the key elements in this policy?

Start typing here

Has the time scale for the inshore fisheries policy been defined?

☐Yes ☐No ☐Don't know

If yes, what is the time scale?

Start typing here

Is the policy linked to other policies/strategies/plans? ☐Yes ☐No ☐Don't know

If yes, which ones?

☐Coastal development

☐Coastal protection

☐Environmental protection

☐Integrated Coastal Zone Management

☐Integrated Maritime Policy

☐Spatial planning at sea

☐Tourism

☐Other? Please specify:

Start typing here

☐At national scale

What are the key elements in this policy?

Start typing here

Has the time scale for the inshore fisheries policy been defined?

☐Yes ☐No ☐Don't know

If yes, what is the time scale?

Start typing here

Is the policy linked to other policies/strategies/plans? ☐Yes ☐No ☐Don't know

If yes, which ones?

☐Coastal development

☐Coastal protection

☐Environmental protection

☐Integrated Coastal Zone Management

☐Integrated Maritime Policy

☐Spatial planning at sea

☐Tourism

☐Other? Please specify:

Start typing here

2. Are goals for inshore fisheries policy clearly defined?

☐Yes ☐No ☐Don't know

If yes, please describe the targets.

Start typing here

3. Please briefly identify the most relevant national policy frameworks and legislation which are considered in the development of the inshore fisheries policy.

Start typing here

4. Are clear references included to the objectives or principles of EU or international policies considered?

☐Yes ☐No ☐Don't know

If yes, which ones?

☐Integrated Coastal Zone Management (ICZM)

In compliance with the EU Recommendation on ICZM, the member states were encouraged to publish a report on the implementation of ICZM in 2006 and 2010.

Has your organisation been involved in the development of this ICZM report? ☐Yes ☐No

Are fisheries considered in the national ICZM report? ☐Yes ☐No ☐Don't know

☐Integrated Maritime Policy

☐Marine Spatial Planning

☐Water Framework Directive

☐Marine Strategy Framework Directive (MSFD)

In compliance with the MSFD, the member states had to deliver three documents to the European Commission by 15 July 2012: (1) an initial assessment of their marine environment (2) a socio-economic analysis and (3) the description of the Good Environmental Status and related environmental objectives. How have you been involved in the negotiations of these documents?

☐I have not heard of these MSFD documents

☐I have heard of these MSFD documents, but have not been invited to contribute

☐ I was invited to contribute and have contributed to these documents

☐I was invited to contribute but have not contributed to these documents

5. Is the inshore fisheries policy based on past and future trend analysis?

☐Yes ☐No ☐Don't know

If yes, what trends are considered?

☐Effects of climate change

☐Employment in fisheries

☐Fish consumption

☐Fish stocks

☐Fuel prices

☐Population developments

☐Other? Please specify:

Start typing here

6. Are there specific local fisheries management approaches (such as inshore fishery-led conservation programmes and co-management of resources)?

☐Yes ☐No ☐Don't know

If yes, please name them and describe the approach briefly.

Start typing here

Do you feel the approach is a success? Please explain.

Start typing here

Optional: Please feel free to add information here if you feel improvements can be made concerning inshore fisheries management in your area.

Start typing here

7. Are effects and impacts of Inshore Fisheries monitored on a scientific basis?

☐Yes ☐No ☐Don't know

If yes, what aspects are monitored? Please indicate if this concerns permanent or project based monitoring.

	Permanent or project based monitoring?
Capacity building & education levels	☐Permanent ☐Project based ☐Not monitored
Economic value	☐Permanent ☐Project based ☐Not monitored
Environmental impacts	☐Permanent ☐Project based ☐Not monitored
Fish stocks	☐Permanent ☐Project based ☐Not monitored
Gender equality	☐Permanent ☐Project based ☐Not monitored
Landings	☐Permanent ☐Project based ☐Not monitored
Job creation	☐Permanent ☐Project based ☐Not monitored
Safety and accidents at sea	☐Permanent ☐Project based ☐Not monitored
Social changes	☐Permanent ☐Project based ☐Not monitored
Subsidies	☐Permanent ☐Project based ☐Not monitored
Other, please specify:	☐Permanent ☐Project based

8. Are the effects and impacts of inshore fisheries regularly evaluated?

☐Yes ☐No ☐Don't know

If yes, does this evaluation lead to changes in policies as part of an adaptive management[12]?

☐Yes ☐No

If yes, are there limitations to adaptive management? ☐Yes ☐No

If yes, what are they?

Start typing here

9. Is data from businesses and industry used to strengthen scientific assessments?

☐Yes ☐No ☐Don't know

If yes, do you feel this businesses and industry data is beneficial? ☐Yes ☐No

Describe briefly how the data is gathered and used.

Start typing here

10. Are the core issues in inshore fisheries management communicated to the wider public?

☐Yes ☐No ☐Don't know

[12] Adaptive management: A systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and practices (source: greenfacts.org).

If yes, how?

☐Brochures

☐Public meetings

☐Website

☐Other, please specify:

11. Is local ecological and environmental knowledge of fishermen[13] used in inshore fisheries management?

☐Yes ☐No ☐Don't know

If yes, who is involved and how is the information used?

Start typing here

12. Does the Inshore Fisheries policy take into account the local context of fishing communities?

☐Yes ☐No ☐Don't know

Optional: Please feel free to add information here if you feel improvements can be made concerning adaptive management for inshore fisheries in your area.

Start typing here

[13] Local Ecological Knowledge (LEK) is tied to place (e.g. specific hunting or fishing grounds) and is knowledge acquired through experience and observation. It can be acquired over a single lifetime or over many generations. LEK does not require an ancient or even a multi-generational accumulation of knowledge, it does not require that the population be indigenous, and it does not require embedding in a broader shared culture. In other words, an individual can accumulate LEK over the course of one lifetime interacting with a local environment (source: National Marine Fisheries Service –US).

13. Is the Inshore Fisheries policy based on an ecosystem approach[14]?

☐Yes ☐No ☐Don't know

Which natural processes are considered in the Inshore Fisheries policy plan?

☐Feeding grounds

☐Hatching and nursery areas

☐Migration routes

☐Reproduction patterns

☐Seasonal changes in oceanographic conditions

☐Other, please specify:

Start typing here

14. Are there any quality labels in your region for inshore fisheries (e.g. ecological, cultural)?

☐Yes ☐No ☐Don't know

If yes, can you give examples (e.g. MSC label)?

Start typing here

15. Are mitigating measures foreseen in case of negative effects on other sectors?

☐Yes ☐No ☐Don't know

If yes, what are they?

Start typing here

[14] Ecosystem approach in policy/management: to encompass the management of human activities, based on the best understanding of the ecological interactions and processes, so as to ensure that ecosystems structure and functions are sustained for the benefit of present and future generations. The concept builds on a number of existing tools and approaches, such as integrated coastal and ocean management, with greater emphasis on ecosystem goals and objectives (source: www.un.org).

2.4. Best practices

The GIFS project is looking for best practices on inshore fisheries management or regeneration.

Do you have best practices you want to share with the partners? ☐Yes ☐No

If yes, please name them and describe them briefly.

Best practice in inshore fisheries	**Why** do you consider this example to be "best practice"
1.	
2.	
3.	
4.	
5.	

Thank you for your co-operation!

Annex 2: overview per country

Note: Where the information included in the overview below reflects answers provided by specific respondents, this is based on their individual knowledge and experience and should not be interpreted as representative of the organisations they work for.

PART 1: SETTING THE SCENE			
Definition of inshore fisheries			
B	**NL**	**FR**	**ENG**
All fishing vessels that have an engine power of 221 kW or less, including any additional power and a tonnage of no more than 70 GT, according to the "Official list of Belgian fishing vessels", as maintained by the Department of Maritime Transport of the Federal Public Service Mobility and Transport, and that undertake trips with a maximum period determined by the Minister (today being 48 hours) with start and end in a Belgian port;	Fishing within the 12 miles zone with ships no longer than 24 meter long and with a maximum capacity of 300 kW.	The definition of Inshore Fisheries for France is quite complex. A synthesis (in French) can be found here: http://fr.wikipedia.org/wiki/P%C3%AAche_%28halieutique%29	Operating in coastal water typically out to 6 nautical miles, but can be up to 12 miles. Inshore management regime applies. Vessels under 10 meter. One IFCA specifies that most of the fleet is multi-purpose, operating throughout the year in pursuit of whichever stock (and/or) quota is available during the relevant season. Tend to be “day trips”.
PART 2: ANALYSIS **2.1 Organisation of Inshore Fisheries Sector**			
1. Is inshore fisheries (IF) managed by a separate organisation			
B	**NL**	**FR**	**ENG**
NO. In Belgium, there is no separate organisation for IF. IF is represented by the Rederscentrale (Producer organisation).	YES. IF is managed by the Cooperative producers organisations (CPO). Some focus on one specific species, e.g. mussels, oysters, lobster, cockles, *Ensis*, shrimp. Others focus on specific fishing communities, e.g. Urk, Wieringen, Texel. Wider fishing organisations involved with IF are the Nederlandse Vissersbond (Dutch	NO. In France, there is no separate organisation managing IF. IF is represented by the Comité Regionaux des pêches and by the producer organisations.	YES. IF is managed by the IFCA’s and the MMO, as well as Defra which develops national policy for IF by Defra . The Inshore Fisheries Conservation Authorities (IFCA’s) develop localised management measures (e.g. byelaws) and enforce local and UK fisheries legislation in the area 0 to 6 nautical miles off shore and are also warranted to enforce on behalf of MMO out to 12 nm. MMO manages and enforces UK and European fisheries legislation in the area 0 to 200 nm form the shore, including localised management measures (e.g. byelaws) in the 6-12 nm area.

	Fishermen's Association) and Visned (body uniting the main producer organizations in the Netherlands cutter fisheries; formerly it was known as the Federation of Fishermen).		The Environment Agency manages freshwater and migratory fish in the inshore area.
2. Identify the <u>main</u> stakeholders considered <u>in relation to</u> the local inshore fisheries policy:			
B	**NL**	**FR**	**ENG**
Mainly fisheries or economic related stakeholders are mentioned. However, in the framework of Axis 4 projects, stakeholders in the tourism sector are also involved. The main stakeholders identified are: - Flemish government (Department for sea fisheries) - Federal government (FOD) - Fish auction Nieuwpoort - Advisory bodies (SALV) - Fishers - Scientists - Tourism	The main stakeholders are: - NGO's & nature organisations - Recreation - Local fisheries organisations - Provinces - Ministry for Economic Affairs - National government (Rijkswaterstaat) These are all officially involved.	The main stakeholders identified are: - Administrations: DIRM (La direction inter-regional de la mer) + DDTM (Direction départementale des territoires et de la mer) - Local authorities - Conseil régionaux and conseil généraux - Comités des pêches - Producer organisation - Scientists (Ifremer, Muséum National d'Histoire Naturelle, Institut de recherche pour le developpement) - Environnementalist stakeholders These organisations are mostly officially involved in IF. When summing up the stakeholders, focus is on the direct fisheries related organisations.	The main stakeholders identified are: - Fishermen (commercial) - Government organisations (IFCA, MMO, Natural England, local government etc) - NGO's (focus on conservation) and special interest groups - Recreation (angling, tourism, diving) - Community and members of the public - Producer organisations, processors, merchants - Industry (mostly mentioned: wind industry) - Fishermen's association (local as well as National) These organisations are mostly formally involved in IF. There is a quite good awareness of the importance of involving several stakeholders, not only focussing on direct fisheries related stakeholders.
3. Are there signed agreements with specific stakeholders?			
B	**NL**	**FR**	**ENG**
No. There are no signed agreements with stakeholders, neither co-management nor specific training or raising awareness programmes. However, Axis 4 projects are a stimulants for cooperation between sectors on a project basis (not limited to IF). For example an agreement has been signed by Natuurpunt (Nature NGO), the Flemish government ,IVLO (fisheries research) and the rederscentrale (shipowners) for fisheries in general.	YES. Examples: - sustainable mussel transition. - Convenant duurzame Voordelta (Voordelta-agreement: between Rotterdam harbour, natuurmonumenten, North Sea Foundation, Dutch Fish Product Board, Ministery of	Yes. In France, signed agreements with stakeholders are in place. The following agreements were mentioned: The **Fisheries Committee** can be mandated by the state to manage fishing in territorial waters (establishment licenses for example). Such committees can be organised at national, regional or departemental scale.	Yes. In UK, signed agreements with stakeholders are clearly in place. The following agreements were mentioned: **Memorandums of understanding** (MoU), quite common forms of agreements, outlining the ways organisations will work together to achieve objectives and management. For example MoU of IFCA's with nature conservation bodies and the MMO. It is a requirement of Defra for all IFCA's to have as part of their annual planning. Examples of local partnerships or platforms, such as:

	Economic Affairs and RWS): agreement on making Voordelta-fisheries more sustainable.	**Voluntary agreements** with fishermen, for example the **"Contracts blues"** (http://wwz.ifremer.fr/manchemerdunord/Unite-Halieutique/Halieutique-Boulogne-sur-Mer/Axes-de-recherche/Dynamique-des-pecheries/Projets-de-recherche-associes/Sollicitations-diverses/Contrats-bleus). These "Contracts Blue" are an instrument that take into account and respond to concerns about the preservation of resources and the marine environment aims. Measures establishing a partnership between fishermen and scientists are for example: - campaigns for data collection by the fishers on ships ("self-sampling") for both commercial catches and bycatch (whales, seabirds, elasmobranchs ...); - monitoring of protected areas in order to make a collection of usable data and used by others areas; - recording of oceanographic data, including monitoring of the presence of alien species; - scientific fishing. There is no national specific agreement with the fishers for Natura 2000. At local level there can be specific agreements with fishermen but this depends of the area. Fishermen are represented in the board of Natura 2000 area (when they have an interest in the area)	**the pan-European small-scale and artisanal fishers' platform** or the Chichester Harbour Oyster Partnership Initiative.

4. Are there examples of shared responsibility/co-management between inshore fisheries and other stakeholders?			
B	**NL**	**FR**	**ENG**
No.	YES. Examples: 1) co-management exists between the fishers and the CPO, based on quota management and exchange of quota. The quota are divided by the CPO themselves. The quota of individual ships are transferable and leasable if you	Yes. The fisheries committtees (comités des pêches) can assist in establishing co-management. The French government gave to the Marine Fisheries and Aquaculture Committees the missions of representing and defending the interests of the profession in all areas affecting the sector (production, market, social, training, environment ...). It gives the opportunity to participate in the development of regulations on fisheries management. See examples for the management in Bretagne :	Yes, co-management is well imbedded in the UK. The following examples of co-management were mentioned: Co-management MMO and IFCA's, where IFCA's can develop and enforce policy. IFCA's can develop by-laws. Often co-management linked to management of European Marine Sites/Marine Conservation Zones (Habitat and Birds divertive), and linked to the

	are a member of a CPO. 2) Project-based: joint fact finding for adaptive management of the Vlakte van de Raan. Project with nature organisation (Zmf) and fisheries, in order to provide advice for the Natura 2000-managementplan.	http://www.bretagne-peches.org/index.php?option=com_content&view=article&id=249&Itemid=106 Furthermore, almost all fisheries are also managed by producer organizations (OP). The functioning of the OP is an example of co-management. Producer organizations play a role in resource management and marketing of seafood because they manage sub-quota on behalf of their members. These are awarded annually and set standards for market price and withdrawal.	protection of certain habitats or species. Local initiatives, such as the Inshore potting Agreement in south Devon, and the Ramsgate quota management, where the fishermen take on their own responsibility for management (pilot for IF reform).
5. Are there specific training, education or awareness raising programmes related to inshore fisheries management?			
B	**NL**	**FR**	**ENG**
No.	No.	No specific IF training or awareness programmes are mentioned for Pas de Calais & Picardie. In Bretagne, mandatory training has been introduced since two years for “pêche a pied” (all fisheries practiced on foot), including resource management. Training for IF includes the concepts of sustainable fisheries and stock management. Fisheries committees often have the opportunity to present their management system in the coastal conferences or courses to students. For Bretagne, it was mentioned that the fishers are aware of the importance of sustainable fishing and want to be involved in consultation processes. Their engagement in the management of natural resources is very satisfactory. http://www.cefcm.fr/formations_c.php	Training, education or awareness raising is one of the roles of the IFCA’s (“we have to, by legislation”). However, it is clearly not always visible for the national or wider organisations. As the IFCA’s are quite new, some are just in the phase of implementing a communication plan. The following examples were given: Training on enforcement; Safety training (eg divers safety); Awareness raising related to specific conflicts, eg seabass fishing off Cromer Pier (Eastern IFCA) IFCA’s visiting schools and universities; Training fishers in the gathering of underwater information to provide habitat descriptions, to inform the management of MPA’s (Sussex IFCA); Member get access to information on the nature of inshore fisheries and the management approaches. Most of the training mentioned, focusses on enforcement or safety, rather than on sustainability and chances for co-management. There are some examples where fishers are trained to help with managing the MPA’s.

6. Which administrative bodies are involved in the inshore fisheries management and/or policy development?			
B	**NL**	**FR**	**ENG**
At national level: FOD Mobility FAVV – food safety At regional level: Department for sea fisheries. At local level: Municipalities (Nieuwpoort, Oostende)	At national level: Ministry for Economic affairs Productschap vis (Dutch Fish Product board) Dutch Food and Water Authority (NVWA) Fisheries organisations At regional level: Province of Zeeland At local level: Municipalities	At national level: Direction des Peches Maritimes, Ministry in charge of fisheries Comité National des Pêches Maritimes et des Elevages Marins France AgriMer At regional level: Direction Interregional de la Mer Comité Regionaux des Pêches Maritimes et des Elevages Marins Organisation de Producteurs Directions interrégionales de la mer (DIRM) At local level: DDTM (Directions départementales des territoires et de la mer) service « Direction de la mer et du littoral » Comités Départementaux des Pêches	At national level: MMO (management and policy) DEFRA (policy) At regional level: IFCA's (policy and management) At local level: IFCA's (policy and management) IF fisheries management and policy development is done by MMO (mainly policy implementation and enforcement) and DEFRA (only policy development) at the national level, and by the IFCA's at regional and local level. MMO focus is on management and policy implementation. MMOs role in policy development is as a technical advisor to Defra, or as developer of local level management measures (e.g. marine plans or fisheries/conservation byelaws).
7. Is there a link between the inshore fisheries administrative bodies and European and international bodies?			
B	**NL**	**FR**	**ENG**
Yes. There is a link with the European commission. No further details given.	YES. There is a link with the European commission. No further details given.	YES. There is a link between the inshore fisheries administrative bodies and European bodies through the Regional Advisory Councils (RAC).	YES. There is a link between the inshore fisheries administrative bodies and European bodies through Defra, the MMO and the regional committee system for organisations (RACs = regional advisory councils). The IFCA's are not involved directly, except through European projects, focussing on IF. One remark was made that a large number of businesses choose not to engage.

8. Are inshore fisheries organisations and management bodies consulted or represented in other sectoral policy developments from the government?			
B	**NL**	**FR**	**ENG**
The fisheries sector in general (represented via the redercentrale) are consulted in relation to other sectoral policy developments, such as: coastal protection, economy in general, education, ICZM, integrated maritime policy, marine spatial planning. The redercentrale is involved in policy developments or frameworks related to these sectors or themes. But the IF sector itself is small and not well organised. There is no separate IF body to contact for consultation. Again, there are some informal project-based contacts, but this is not linked strictly with IF.	YES. The following sectors are mentioned: Coastal development Coastal protection Economy Environment Economy Education ICZM IMP Spatial planning at sea Tourism	Yes. Inshore fisheries organisations and management bodies are consulted or represented in other sectoral policy developments from the government. In this respect, the following sectors were mentioned: Coastal development Coastal protection Economy Education ICZM Integrated Maritime Policy and the action plan for the marine environment Social policy Tourism One respondent made the remark that the committees are consulted, because it is obligatory, but that their views are rarely taken into account.	Yes. Inshore fisheries organisations and management bodies are consulted or represented in other sectoral policy developments from the government. IFCA's are statutory consultees on most coastal matters. In this respect, the following sectors were mentioned: Coastal development Coastal protection Marine archaeology Marine Planning Wind farms Environment
9. Are inshore fisheries involved in inter-regional organisations and co-operation structures of the government?			
B	**NL**	**FR**	**ENG**
No. IF is not involved in specific inter-regional organisations or cooperation structures.	YES. Examples: - Trilateral Waddensea Forum (for Wadden Sea) - National fisheries organisations: Visned (body uniting the main producer organizations in the Netherlands cutter fisheries). Vissersbond (fishers's Federation)	Yes. Inshore fisheries are involved in inter-regional organisations and co-operation structures of the government, through the Direction interregional de la mer and the RAC, and other specific committees (eg comité de gestion de la Baie de Granville).	Yes. Inshore fisheries are involved in inter-regional organisations and co-operation structures of the government, such as: Regional Advisory Committees IFCA's Technical Advisory Group Co-operation structures related to European projects in which IFCA's are involved
2.2. Inshore fisheries management and its role in striving for sustainable coasts			
1. With which (non-fisheries) sectors does inshore fisheries interact at present?			

B	NL	FR	ENG
There is interaction with local municipalities & communities and with the environmental sector (perceived as “pressure” to do something). At local scale IF is a part of the cultural heritage.	IF interacts with different stakeholders. The environmental sector was mentioned as the most important one, because of the implication Natura 2000 areas have on fisheries. NGO’s and industry work together to explore possibilities for building with Nature. Education was mentioned because of the links with specific fisheries training programmes.	IF interacts for a wide range of stakeholders. These sectors were mentioned: - cultural sector: musea. In some places (eg Bretagne) fisheries is an important living heritage, determining the identity of a place; - Local economy other than fisheries: coastal development in general; - Education: schools. - Environment: participation in Natura 2000 related issues. Fisheries has become part of the marine environment protection; - Social sector: employment; - Tourism: e.g. taking tourist on board (remark: the legislation is limiting possibilities).	IF clearly interacts for a wide range of stakeholders. The interaction is very dependent on the issues and local situation. These sectors were mentioned: - Culture sector: eg Marine Archaeology, port heritage, wreck protection. This leads to further regulation for IF. - Local economy other than fisheries: aggregates, wind energy, oil & gas, retail. - Education: schools, universities. Concern: a lack of balanced information can adversely affect the reputation of the industry (misunderstanding). - Environment. Regulations are imposed to IF (top-down). Lots of interaction with NGO’s and action groups (e.g. discard action group). - Tourism and recreation, e.g. in traditional small fishing ports. Recreational anglers, bait diggers, restaurants & hotels. - Government actors, e.g. county councils, local councils.
2. Are the effects of inshore fisheries on land-based activities taken into account in the Inshore Fisheries policies (eg. development and functioning of the harbours, employment, touristic effects, inshore fisheries versus wider fisheries sector)?			
B	**NL**	**FR**	**ENG**
No.	No.	Yes. The effects of inshore fisheries on land-based activities are taken into account in the Inshore Fisheries policies.	It is mostly felt that the effects of inshore fisheries on land-based activities are taken into account in the Inshore Fisheries policies. At national level, there is a coordination mechanism between marine planning and terrestrial planning. Also, when developing new by-laws, the IFCA’s have to do an impact assessment, also looking at the effects onshore to the structure of the community.

			However, it is mentioned that this area of developing community resilience needs to be developed more, in an integrated way. “A key strand of the strategy is to try and get land-based and sea infrastructure more resilient to change”.
2.3. A sustainable future for inshore fisheries			
1. Is there a clear policy on inshore fisheries for the future and what are the key elements?			
B	**NL**	**FR**	**ENG**
NO. There is no separate IF policy, but IF is part of the wider fisheries policy at regional scale (National Strategic Plan). As IF are rather a small sector in Belgium, it is felt that a separate policy is not needed. No linkages are made with other policy plans. In the wider fisheries policy there are references to IF. Key elements: less stringent quota in order to compensate for smaller fishing effort of IF. In return, fishers have to keep their vessel in that fleet segment for at least 5 years.	YES The overarching fisheries policy is focussing on: - maintaining the IF fleet and fishing areas - from fisher to maritime entrepreneur Specific for the shellfish fisheries, a transition policy 2020 was set up (“Ruimte voor zilte oogst”). This policy looks at possibilities for innovations in the shellfish sector. Most of these policies are driven by environmental conservation objectives.	NO. There is no separate policy for IF. IF is not visible as an economic sector and there are many unknown factors for instance related to the marine protected areas. However, specific attention is paid to IF in the overarching fisheries policy. At a regional scale, the focus is on “peche artisanale”, which is multifunctional and can easily adapt to changes. The Management system in Bretagne for example favours the preservation of resources without a decline in fishing enterprises. It is based on all available management tools (quota, limiting the length and power of vessels, fishing schedules, global or individual quotas as necessary, regulations of fishing tools, new devices may be the subject to moratorium).	Two respondents of the MMO and overarching organisations are not aware of an overarching policy for IF in England and Wales. One MMO respondent mentions that the Marine and Coastal Act and guidance from Defra has set a clear policy for the role of the IFCAs and their contribution to the aims of IF management. Quote from the fishermen’s organisations: “there is a growing consensus within the sector of wanting to move forward with management, but lack of response yet from the authorities”. Fishermen’s association: “there is a disconnect between major fisheries policy and small-scale inshore interests”. Most (4/5) IFCA respondents consider their areas of work defined by DEFRA (runs up to 2015) and the annual plan as the IF policy. The individual IFCA’s can each manage their zone in a different way and hence develop their own policy. Some mention the Strategic Plan for research and fisheries management plans. At the moment, the IFCA’s are reviewing their local by-laws and the local management structures in an objective-led way. This process needs to be imbedded into the wider fisheries management system at national and European level and related to the review of the Common Fisheries Policy (CFP). The CFP is the overarching policy framework for IF. The project Inshore –strategic assessment of inshore fisheries-is looking at giving guidance of the state of IF and what steps need to be taken to manage them. If there is a policy guidance at local scale, this is mainly

			linked to **conservation objectives** and strong management measures (eg in the Wash). Also, the IFCA's will have to develop management processes for European Marine Sites. This is also seen as setting the policy framework for IF.
2. Are goals for inshore fisheries policy clearly defined?			
B	**NL**	**FR**	**ENG**
There are no specific goals for IF	Yes, for the mussel sector, the specific goal is the reduction of bottom fishing on mussel seed in the period between now and 2020.	No. There are no specific goals for IF, other than the general statement that "Balanced economic development of ports and fishing companies need to take into account the issues of sustainable development and environmental protection".	No. There are no specific goals for IF, other than the general statement that "sustainable exploitation of resources needs to be ensured". DEFRA has given the IFCA's 47 objectives under its setting up of the IFCA's. So some IFCA's consider the goals as the ones stated in their annual reports and action plan. Fed Fishermen's organisations: "…even goals of fisheries as a whole are not clearly defined".
3. Please briefly identify the most relevant national policy frameworks and legislation which are considered in the development of the inshore fisheries policy.			
B	**NL**	**FR**	**ENG**
Operational programme for National Fisheries policy.	National plans for wind energy at sea. Natura 2000 policy.	This is the responsibility of the Direction des pêches maritimes et de l'aquaculture, Ministry in charge of fisheries. Rural code for marine fisheries (livre neuvième du code rural et de la pêche maritime).	Discards policy Marine Conservation Zone Policy Marine Protected Areas Policy Common Fisheries Policy Marine Act & its predecessors Sea Fisheries Act Habitats and Birds Directive Water Framework Directive Marine Strategy Framework Directive (MSDF)
4. Are clear references included to the objectives or principles of EU or international policies considered?			
B	**NL**	**FR**	**ENG**
There is a reference to the following EU policies: ICZM, IMP, MSP, MSFD.	Answer "Don't know"	Yes. The following EU policies were mentioned (in order of importance): IMP MSFD WFD ICZM MSP There is a clear reference to EU policies when looking at IF. The respondents are aware of the MSFD, the WFD and ICZM, and MSP. Especially for the MSDF,	Yes. The following EU policies were mentioned (in order of importance): MSFD WFD ICZM MSP There is a reference to EU policies when looking at IF. The respondents are mostly aware of the MSFD, the WFD and ICZM, and to a lesser extend to MSP (although this might be biased by terminology are the

		there was a considerable level of involvement, where all respondents have contributed to the negotiations for the initial assessments, the socio-economic analysis and the description of the Good Environmental Status. However, it was noted there are these references but that it remains unclear how fisheries are considered and what the impact of these policies will be on fisheries.	fact that MSP hasn't started in all regions yet). Especially for the MSDF, there was a considerable level of involvement, where the IFCA's were consulted eg for data gathering and expressing their thoughts on legislation and management. Also the MMO was actively involved. Surprisingly, the Integrated Maritime Policy wasn't mentioned by any of the respondents, but this might be due to integration of IMP in overall MMO policy development, without it being named as such.
5. Is the inshore fisheries policy based on past and future trend analysis?			
B	**NL**	**FR**	**ENG**
Yes, policy takes into accounts trends in fisheries employment and fleet evolution.	Yes. Trends analysis is based mainly on fish stocks.	YES, IF looks at past and future trend analysis, taking into account employment in fisheries, fish stocks, fish consumption and fuel prices. These two latter aspects have not been mentioned in UK, Belgium and the Netherlands.	Yes. Past and future trend analysis is mainly based on fish stocks. One respondent mentions employment in fisheries. For the rest, it was commented that trends analysis is done " in an ad-hoc way… isn't undertaken systematically enough…There's no defined measures" The link to features within Marine Protected Areas also are mentioned as important for future trend analysis.
6. Are there specific local fisheries management approaches (such as inshore fishery-led conservation programmes and co-management of resources)?			
B	**NL**	**FR**	**ENG**
No.	No	YES. The Axis 4 program is mentioned as an important tool allowing specific local fisheries management approaches. It stimulates various local initiatives for dialogue with representatives of recreational fishers, looks at implementation of fisheries management measures by fishing license or deposit: management measures, spatio-temporal measures, technical measures (gear characteristics), quotas, ... It was noted that Europe could become more involved in local issues outstanding in implementing more dialogue and more expertise. Another example can be found in the Atlas made by the comité des pêches de Bretagne regarding the	YES. The IFCA's are referred to as specific local fisheries management approach. They manage through by-laws a lot of the time, which is a cooperation approach. In the specific regions, there are examples of these kind of approaches, linked to specific fisheries (e.g. inshore potting agreements, Chichester Harbour Oyster Partnership Initiative) or area (eg the Wash, Ramsgate quota management project). A need for more focussed and strategic planning is mentioned. Also, the IFCA's mention that a better management would be possible if they have more control over the area and that tools are needed to be

		management in Bretagne : http://www.bretagne-peches.org/index.php?option=com_content&view=article&id=249&Itemid=106	able to manage properly (e.g. permit scheme).
7. Are effects and impacts of Inshore Fisheries monitored on a scientific basis?			
B	**NL**	**FR**	**ENG**
No. The effects of IF are not specifically monitored on a scientific basis. Some aspects are monitored at a project basis (eg economic value, safety at sea).	Yes. Capacity building, economic value, fish stocks, landings, job creation, safety at sea, food safety and subsidies are all monitored permanently. Social changes and gender equality are monitored on project basis.	Yes. Monitoring is done on a scientific basis. Economic value, education, environmental impact, fish stocks, landings, job creation, safety at sea and subsidies are taken into account.	Yes. Monitoring on a scientific basis is done. Mainly of fish stocks, landings and environmental impacts. This last issue is very much stimulated by European Marine Sites. To a lesser degree also economic value, job creation and other social aspects are monitored. Discard and fishing effort is monitored on project basis.
8. Are the effects and impacts of inshore fisheries regularly evaluated?			
B	**NL**	**FR**	**ENG**
Yes. The effects of IF are regularly evaluated, but this does not lead to adaptive management.	Yes. The impact is evaluated by the Agricultural Economic Institute (Landbouw Economisch Instituut). For landed fish these aspects are monitored: species, weight, prices, trends, etc.	The respondents had no clear view if the effects of inshore fisheries are regularly evaluated.	Yes. Effects and impacts of inshore fisheries are regularly evaluated. This is done by the IFCA's, Natural England and CEFAS. There is focus on features of conservation (MPA's) and of European Marine Sites. There is a plea for an open and honest dialogue with the stakeholders on what is monitored and what the management regulations will be if effects are detected. This evaluation lead to changes in policies as part of an adaptive management (an example being changes in quota allocation). One respondent mentioned that this is quite a new approach, and that there is now a movement towards a flexible and adaptive approach. Data availability and research is mentioned as a problem.
9. Is data from businesses and industry used to strengthen scientific assessments?			
B	**NL**	**FR**	**ENG**
Yes. Data from businesses and industry (catches, landings, sales, fishing efforts, fuel prices) are gathered in a database, which is used for specific	Yes. No further details given.	Yes. Data from businesses and industry (catches, landings, sales, fishing efforts, fuel prices) are gathered in a database, which is used for specific	Yes. Data from businesses and industry is used to strengthen scientific assessments. Data is gathered directly from landing figures, sale price and area of

requests.		requests. I system for data management for fisheries and aquaculture has been set-up. The information is fed into the national statistics for fisheries and aquaculture. More info: http://wwz.ifremer.fr/peche/Le-monde-de-la-peche/La-gestion/par-qui	capture. It is used by CEFAS for stock assessment and inputs into the ICES advice. Also, a trend in breaking down the barriers between scientists and fishers has been mentioned. "We work far more closely now with the scientific community…developing systems to gather data in a more effective form for the scientists and managers". One IFCA notes that the data need to be handled with care. They are dependent on their own surveys, and results all will depend on time of sampling etc. so they might differ from data from other sources. The IFCA's have close ties with the local fishing industries, which will deliver them data on where they are fishing, catch rates, etc. Also management interventions through voluntary codes are used to gather information. In impact assessments social, technological, economic and environmental data are included. Again here, there is a close link with conservation schemes, and relationship with other managing organisation such as Natural England, CEFAS etc.
10. Are the core issues in inshore fisheries management communicated to the wider public?			
B	**NL**	**FR**	**ENG**
No. There is no specific communication programme towards the wider public. However, same Axis 4 projects can play a role here.	Yes. Brochures, as well as public meetings and websites are used for communication to the wider public.	Yes. Brochures, as well as websites and public meetings are used.	Yes. All but one respondents claim that inshore fisheries management is communicated to the wider public, using brochures, public meetings, website, media (television programmes, radio broadcast), etc. It is mentioned by some that engaging with the wider public is a struggle. It should be part of the IFCA's job, but seems to be underrepresented at present. There is a wish to increase the public awareness.
11. Is local ecological knowledge used in inshore fisheries management?			
B	**NL**	**FR**	**ENG**
Yes. Local ecological knowledge is used informally, by consulting the fishermen for certain issues (eg wind farms). This is not done systematically, but project	YES. Fishermen are consulted for instance during the assignment of Natura 2000 areas.	Yes. Local ecological knowledge is used in inshore fisheries management to a certain degree, for instance giving advice for licencing or quota. In Bretagne, there is a network of scientists, fishers and environmental	Yes. Local ecological knowledge is used in inshore fisheries management (except for Kent & Essex IFCA), but is not used as a standard. It is clearly a growing area. The Quota Advisory groups play an important

based.		organizations, through which the dialogue for IF is stimulated. Scientistst and fishers co-operate more and more, but on a voluntary basis and not systematically. Enough time is needed to create trust.	role here. Eg in the Marine Conservation Zone projects, information was given by the fishers which was then assessed and quality assured by the local IFCA and Natural England. So, local ecological knowledge is used, recognising there are both limitations and perceptions that need to be taken into account.
12. Does the Inshore Fisheries policy take into account the local context?			
B	**NL**	**FR**	**ENG**
Yes. Inshore Fisheries policy takes into account the local context.	No.	Yes. Inshore Fisheries policy takes into account the local context.	Three IFCA's feel that Inshore Fisheries policy take into account the local context. The other respondents were not convinced that it does. One respondent (fisheries association) gave a warning that the opportunities to fish are going into fewer and fewer hands, and those hands tend to be more big business and less locally-rooted. It is felt as important to retain as much of the wealth as possible within the local communities. However, if it comes down to balancing a viable industry, it needs to be taken into account that there's not one industry, there's not one community. A rather new aspect, is the pressure coming from the recreational community to recognise that value to the community interests. There is a huge recreational spend in the local communities. It is advised not to impose anything on the fishing community, but always to work with them. A lot of good ideas in the past came from the fishers themselves.
13. Is the Inshore Fisheries policy based on an ecosystem approach ?			
B	**NL**	**FR**	**ENG**
Partly. The IF policy takes into account hatching and nursery areas, but no other data on the ecosystem.	YES. These aspects are considered: hatching and nursery areas, reproduction patterns, seasonal changes in	The respondents feel that Inshore fisheries is based on an ecosystem approach is still a very unclear concept to many. All natural processes are taken into account: feeding grounds, hatching and nursery areas,	It is obvious that the ecosystem approach is still a very unclear concept to many. The ecosystem services model seem to be a more helpful steer. Natural processes which are mentioned are: hatching and

	oceanographic conditions. Also, interviews are used to gather information from the fishers, in order to verify or question information from literature or other studies.	migration routes, reproduction patterns, seasonal changes in oceanographic conditions. It is noted that these elements may be considered spontaneous or imposed by law (impact assessments).	nursery areas, migration routes, seasonal changes in oceanographic conditions, fluctuations in species abundance. Where “no”, the MSDF was referred to.
14. Are there any quality labels in your region for inshore fisheries (e.g. ecological, cultural)?			
B	**NL**	**FR**	**ENG**
Yes. One quality labels for fish caught by line is available. No MSC labels in Belgium.	YES. MSC label and RFS (Responsible fishing scheme).	Yes. A series of quality labels have been implemented. Some examples are: . Collectives branding : “Bar de ligne” (line fishing) pointe de Bretagne and Normandie . National branding : pavillon France. It aims to promote the consumption of products from the French fisheries and support to progress towards a more sustainable and responsible fishing (http://www.pavillonfrance.fr/a-propos) . Regional branding : « Bretagne Qualité Mer”, « filière opale », « Normandie fraicheur Mer », «Bienvenue en gourmandie » . Label to indicate the origin of scallop: “IGP Coquille Saint-Jacques des Côtes d’Armor » . Ecolabel « peche durable” (sustainable fishing) for the blue lobster (MSC) Bolinche (MSC) Lieu noir (MSC) . Qaulity label : “Label rouge Coquille Saint-Jacques Baie de Seine » (scallop), « Bretagne Qualité Mer » and « Label Rouge Sardine »	Yes. MSC labelling for IF is well known, but it clearly caused concerns among industry and the label is seen as unhelpful by some. For example, sometimes the fishery is just the same, but if you don’t pay for accreditation, it is not marketed as MSC. It is felt that the original promise of MSC accreditation has not been fulfilled. So MSC isn’t coming with a big enough incentive for the fishers to make a difference. Examples for MSC: Burry inlet cockle fishery, Hastings Herring and Mackerel Fisheries
15. Are mitigating measures foreseen in case of negative effects on other sectors?			
B	**NL**	**FR**	**ENG**
No mitigating measures in case of negative effects.	YES, for specific fisheries. Eg for the mussels and shrimp fisheries, by means of the temporal closure	No specific mitigation measures have been mentioned, apart from the dialogue, either spontaneous or through	All -but one- respondents don’t really see that they have a negative effect on other sectors, but mention the reverse: negative effects coming from other sectors onto fishing (eg wind farm development,

	of areas.	formal processes.	angling/commercial fishing tension). So mitigating measures are not considered as needed. One IFCA noted that the IFCA's will enable mitigating measures, because they take into account all the different viewpoints.

Annex 3: Glossary of terms

ACFA	Advisory Committee on Fisheries and Aquaculture
ACOM	Advisory Committee
AID	Algemene Inspectiedienst
ANEP	National Association of Producer Organisations (Association Nationale des Organisations de Producteurs)
BPNS	Belgian Part of the North Sea
CDPMEM	Comité Départemental des Pêches Maritimes et des Élevages Marins
CEFAS	Centre for Environment, Fisheries & Aquaculture Science
CFP	Common Fisheries Policy
CIP	Competitiveness and Innovation Framework Programme
CLLD	Community-Led Local Development
CNPMEM	National Committee for Maritime Fisheries and Marine Fish Farms (Comité National des Pêches Maritimes et des Élevages Marins)
CPO	Cooperative Producers Organisation
CRPMEM	Regional Committee for Maritime Fisheries and Marine Fish Farms (Comité Régional des Pêches Maritimes et des Élevages Marins)
DAM	Direction des Affaires Maritimes
DCF	Data Collection Framework
DCMAP	Data Collection Multi Annual Programme
DDTM	Departmental Directorate for the Territories and the Sea (Direction Départementale des Territoires et de la Mer)
DEFRA	Department for Environment, Food and Rural Affair (UK)
DG MARE	Directorate General of Fisheries and Maritime Affairs
DGITM	Directorate General for Infrastructure, Transport and the Sea (Direction générale des infrastructures, des transports et de la mer)
DIRM	Interregional Directorate for the Sea (Direction Interrégionale de la Mer)
DML	Delegation to the Sea and the Coastal Zone (Délégation à la Mer et au Littoral) :
DPMA	Directorate for Maritime Fisheries and Aquaculture (Direction des pêches maritimes et de l'aquaculture)
EAF	Ecosystem Approach to Fisheries
EAFRD	European Agricultural Fund for Rural Development
EBFM	Ecosystem-Based Fishery Management (see also EBM)
EBM	Ecosystem-Based Management (see also EBFM)
EC	European Commission
EFCA	European Fisheries Control Agency

EFF	European Fisheries Fund
EMFF	European Maritime and Fisheries Fund
EMODNET	the European Marine Observation and Data Network
ERDF	European Regional Development Fund
EU	European Union
EUROBIS	European Ocean Biogeographic Information System
FAO	Food and Agriculture Organisation
FARNET	European Fisheries Areas Network
FEDOPA	Federation of Artisanal Fisheries Producer Organisations (Fédération des Organisations de Producteurs de la Pêche Artisanale) (France)
FIS	Fisheries Information System
FIVA	Financial Instrument for the Flemish Fisheries and aquaculture
FLAG	Fisheries Local Action Group
GES	Good Environmental Status
GIFS	Geography of Inshore Fishing and Sustainability
ICES	International Council for the Exploration of the Sea
ICZM	Integrated Coastal Zone Management
IEK	Indigenous Ecological Knowledge
IF	Inshore fisheries
IFCA	Inshore Fisheries Conservation Authorities (UK)
IFREMER	French Research Institute for Exploitation of the Sea (Institut Français de Recherche pour l'Exploitation de la Mer)
ILVO	Institute for Agricultural and Fisheries Research (Belgium)
IMP	Integrated Maritime Policy
IPA	Inshore Potting Agreement
IUU	Ilegal, Unreported and Unregulated (fisheries)
LEK	Local Ecological Knowledge
LFS	Large Fleet Segment
LIFE	Low Impact Fishers of Europe
LOA	Length Over All
LSF	Large Scale Fleet
MARPOL	International Convention for the Prevention of Pollution from Ships

MASPNOSE	Maritime Spatial Planning in the North Sea
MCZ	Marine Conservation Zone
MMO	Marine Management Organisation
MNP	Marine Nature Park
MPA	Marine Protected Area
MS	Member States
MSC	Marine Stewardship Council
MSFD	Marine Strategy Framework Directive
MSP	Marine Spatial Planning
MSY	Maximum Sustainable Yield
MYFISH	Maximising Yield of Fisheries while Balancing Ecosystem, Economic and Social Concerns
NFFO	National Federation of Fishermen's Organisation
NGO	Non-governmental organizations
NUTFA	New Under Ten Fishermen's Association
NUTS	Nomenclature of Territorial Units for Statistics
NVB	Nederlandse Vissersbond
NSAC	North Sea Advisory Council
PBO	Publiekrechtelijke Bedrijfsorganisatie
PDO	Protected Designation of Origin
PGI	Protected Geographical Indication
PO	Producer organisation
RAC	Regional Advisory Committees
SAC	Special Areas of Conservation
SALV	Strategic Advisory Council for Agriculture and Fisheries
SCI	Sites of Community Importance
SDVO	Foundation for Sustainable Fishery Development
SEK	Scientific Ecological Knowledge
SG	Study Group
SME	Small and medium-sized enterprise
SMVM	Schémas de Mise en Valeur de la Mer

SPA	Special Protection Area
SSF	Small Scale Fleet/Fisheries
STECF	Scientific, Technical and Economic Committee for Fisheries
TA	Thematic Analysis Approach
TAC	Total Allowable Catch
TEK	Traditional Ecological Knowledge
TSG	Traditional Speciality Guaranteed
TCM	Technical Conservation Measures
UBO	Université de Bretagne Occidentale
UK	United Kingdom
UoB	University of Brighton
UoG	University of Greenwich
VIBEG	Visserij In Beschermde Gebieden
VLAM	Flanders' Agricultural Marketing Board
VLIZ	Flanders Marine Institute
VMS	Vessel Monitoring System
WFD	Water Framework Directive
WG	Working Group
WGMIXFISH	Working Group on Mixed Fisheries Advice for the North Sea