



## **FAME Support Unit**

### **AT01.2**

#### **ad-hoc consultancy**

**Marine litter from the fishing sector  
"How is the fisheries sector using  
EU Funds to fight Marine litter?"  
Final report  
(AT1.2 4/4)**

**September 2017**

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## Acronyms

AIR	Annual Implementation Report
ALDFG	Abandoned, Lost, or Discarded Fishing Gear
AT	Ancillary Task
CLLD	Community-led Local Development
COM	European Commission
DG MARE	Directorate General for Maritime Affairs and Fisheries
EFF	European Fisheries Fund
EMFF	European Maritime and Fisheries Fund
EU	European Union
FAME	Fisheries and Aquaculture Monitoring & Evaluation
FAME SU	FAME Support Unit
FAO	Food and Agriculture Organisation (of the United Nations)
FARNET	European Fisheries Areas Network
FLAG	Fisheries Local Action Group
FP7	Seventh Framework Programme for Research and Technological Development
GE	FAME SU geographic expert
GES	Good Environmental Status
GPS	Global Positioning System
Horizon2020	(Eighth) Framework Programme for Research and Innovation
IMO	International Maritime Organization
IMP	Integrated Maritime Policy
IPA	Instrument for the Pre-Accession Assistance
IUU	Illegal, Unreported and Unregulated fishing
JRC	Joint Research Centre
MA	Managing Authority
MARPOL	International Convention for the Prevention of Pollution from Ships
MCS	Marine Conservation Society
MS	Member State

MSFD	Marine Strategy Framework Directive
NGO	Non-Governmental Organisation
OP	Operational Programme
PA	Priority Axis under EFF
PO	Producers Organisation
UP	Union Priority
UN	United Nations
UNEP	United Nations Environmental Programme
VMS	Vessel monitoring system

## **Member State codes**

AT	Austria
BE	Belgium
BG	Bulgaria
CY	Cyprus
CZ	Czech Republic
DE	Germany
DK	Denmark
EE	Estonia
EL	Greece
ES	Spain
FI	Finland
FR	France
HR	Croatia
HU	Hungary
IE	Ireland
IT	Italy
LT	Lithuania
LV	Latvia
MT	Malta
NL	the Netherlands
PL	Poland
PT	Portugal
RO	Romania
SE	Sweden
SI	Slovenia
SK	Slovakia
UK	United Kingdom

## Executive summary

Marine litter is generating increasing concern at international, regional, macro-regional and national levels. The European Union is playing its part in addressing the problem in particular by providing public support to mitigation actions undertaken by the fishing industry through the former European Fisheries Fund 2007 – 2013 (EFF) and the current European Maritime and Fisheries Fund 2014 – 2020 (EMFF). The present report analyses the contributions of these funds to operations of marine litter mitigation undertaken by the fisheries sector itself or for its direct benefit, based on a sample of 14 EU Members States (MS) planning concrete actions under the EMFF: BE, BG, CY, DE, ES, FI, HR, IE, IT, PL, PT, RO, SE and UK.

During the EFF programming period, seven out of the 14 MS surveyed (ES, IE, IT, PL, PT, SE and UK) implemented a total of 59 operations related to marine litter with overall eligible costs of EUR 5.8 million and an EFF budget of EUR 3.4 million. Operations were mainly collective actions, but also actions under the sustainable development of fisheries areas. Almost half focused on the retrieval of abandoned, lost or discarded fishing gear (ALDFG) i.e. "fishing for litter", with actions for the provision of litter collection facilities and equipment, and the treatment and processing of litter, also important. Extrapolating these results to the 7 coastal states not surveyed suggests that overall EFF support to marine related operations could have been in the order of EUR 5.2 Million (3.4 for the 7 MS surveyed and 1.8 for the 7 coastal states not surveyed)

Under the EMFF, the number of MS planning actions for the collection of ALDFG and marine litter by fishers (EMFF Article 40.1(a)) increased to 14 (BE, BG, CY, DE, ES, FI, HR, IE, IT, PL, PT, RO, SE and UK have all committed resources in their respective Operational Programmes (OPs). The target number of operations in the OPs is 108 with planned public and EMFF contributions around EUR 31 and 22 million respectively. In terms of total public or EMFF contributions, "fishing for litter" actions represent only 2% of all measures foreseen under the various measures in support of the EU fishing fleet. Up until the end of 2016 only four MS had started to implement "fishing for litter" activities, with 12 operations selected (representing 11% of the planned number of operations and 2% of the targeted EMFF financial support for the programming period). Taking into account activities planned for the near future (even if not yet selected), the number of operations rises to 29 (27% of the target) in eight MS.

At this stage, no operations for the investment in facilities for marine litter collection in ports were identified under EMFF Art. 43.1. However, other initiatives by the fishing sector may have been implemented under other measures in particular under Community-Led Local Development. All the above EMFF estimates should thus be considered as conservative.

In addition to measures for the collection of marine litter by the fishing sector, other initiatives not involving that sector may be implemented under the Community-Led Local Development (CLLD, UP4) and the Integrated Maritime Policy (Art. 80.1.b and c), are potentially relevant to marine litter mitigation. For example, five IMP operations (all in NL<sup>1</sup>)

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<sup>1</sup> NL was not a MS included in the survey but implementation data are available.

with EUR 1.5 million of EMFF contributions focus on research, monitoring and awareness raising activities.

Actions for the mitigation of marine litter under EFF and EMFF play only a minor role both in terms of the total number of EFF/EMFF operations and the budgets committed, and EMFF implementation progress has been slow as for the rest of EMFF operations. Nevertheless, the EFF, and now the EMFF, offer possibilities through different measures to involve the fishing industry in addressing the marine litter problem, be it the retrieval of ALDFG, the provision of facilities and equipment for marine litter collection, research studies, or awareness raising activities.

In conclusion, although interest by MS in utilising EU funding support to involve the fishing industry in the reduction of marine litter has drastically increased from the EFF to the EMFF programming period, indicators are lacking to evaluate the effectiveness and efficiency of the marine litter-related actions undertaken by the fishing industry itself or of direct benefit to that industry. Monitoring and evaluating such indicators would contribute to identifying the best approaches for the involvement of the fishing industry in the reduction of marine litter in general, and of litter emanating from the fishing and aquaculture industry in particular.

## Introduction

### 1.1 Aims and objectives of the AT

The world's oceans and seas are the recipient of large volumes of both land and sea-based waste. For a long time, this situation has been ignored (indeed, the authorised dumping of waste at sea was widespread for many years), but with persistent materials such as synthetic plastics making up much of this waste, the situation is becoming of increasing concern.

As for the fishing and aquaculture contribution to marine litter, the use of synthetic materials is now almost universal, as they are strong, relatively cheap, very durable and widely available. The affordability of this gear, as well as increasing conflicts between towed and static fishing gears in many fishing areas, has resulted in large volumes of fishing gear being lost, abandoned or discarded<sup>2</sup>, thus contributing to the wider marine litter problem.

The EU has been at the forefront of investigating and addressing the contribution of ALDFG to marine litter and more particularly the negative impacts of ghost fishing in EU waters, from studies such as 'Ghost Fishing by Lost Fishing Gear' (Brown *et al.*, 2005), to regulation on gear marking such as Commission Regulation (EC) No 1805/2005 of 3 November 2005. This was further reinforced by Member State legislation enacting these regulations at national levels in EU waters. The EU fisheries funds and the associated MS public co-funding have also had a role to play in addressing this issue in particular through awareness raising, 'Fishing for Litter' programmes, and the collection and recycling of ALDFG.

This document reports the results of an ancillary task (AT) conducted by the FAME Support Unit (FAME SU) that examines the role of EU public funding through the European Fisheries Fund 2007 – 2013 (EFF) and the subsequent European Maritime and Fisheries Fund 2014 – 2020 (EMFF). The document:

- estimates the financial contribution (actual and planned) of the EFF and EMFF in targeting marine litter<sup>3</sup>;
- documents the operations/actions taken in Member States (MS) and sea basins in targeting marine litter through the EFF, considering in qualitative terms the removal of ghost nets under EFF Art. 37(c) while assessing the availability of quantitative data on the targeting marine litter by the fishing sector; and
- identifies among operations targeting marine litter those that could be used as inspiration for further action during EMFF implementation;
- draws out a number of lessons to be learned from these operations and their follow-up.

### 1.2 Methodology

The report focusses on measures foreseen in the EFF and particularly the EMFF to mitigate marine litter. The most obvious form of support is the active collection of lost fishing gear

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<sup>2</sup> Referred to collectively as Abandoned, Lost and Discarded Fishing Gear (ALDFG)

<sup>3</sup> The present report is not examining funding provisions under other EU funds that may have contributed to targeting marine litter from the fishing industry.

and marine litter by fishermen enabled by EFF Article 37(c)<sup>4</sup> and by EMFF Article 40.1(a)<sup>5</sup>. Accordingly, the first step preparing this document was to ascertain which MS have planned to make use of this Article in the present programming period according to their respective Operational Programme (OP). Based on this criterion, 14 out of 23 coastal MS were selected to be surveyed about their activities on marine litter mitigation both under EMFF, but also during the previous EFF period. The MS concerned are: Belgium (BE), Bulgaria (BG), Cyprus (CY), Germany (DE), Spain (ES), Finland (FI), Croatia (HR), Ireland (IE), Italy (IT), Poland (PL), Portugal (PT), Romania (RO), Sweden (SE) and United Kingdom (UK).

Subsequently both EFF and EMFF regulations were scrutinised in order to identify further measures that could be relevant to marine litter, including those providing support for the storage and treatment of marine litter or for related research and innovation activities; actions implemented for the sustainable development of fisheries areas (EFF Priority Axis [PA] 4 and EMFF Union Priority [UP] 4) are considered as well. The following Articles were selected as being of relevance (for further details, see chapter 3.1 and 4.1 below):

EFF:

- Art. 37 (c) – Collective actions;
- Art. 39 (2) (g) – Fishing ports, landing sites and shelters; and
- Art. 43 and 44 (PA 4): Sustainable development of fisheries areas.

EMFF:

- Art. 40.1(a) (UP1) – Protection and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities;
- Art. 43 (UP1) – Fishing ports, landing sites, auction halls and shelters;
- Art. 62 / Art. 63 (Community–led local development [CLLD] under UP4); and
- Art. 80 (Integrated Maritime Policy [IMP] under UP6).

The main sources of data and information used in the preparation of this report were:

- Country reports: The information on EFF, EMFF and other relevant activities collected through field research in the 14 MS, including an interview with the MA (based on a common questionnaire provided to geographic experts (GE));
- Data on planned commitments in the EMFF OPs, complemented by additional numbers from the Annual Implementation Reports (AIR) for 2014-2015;
- Data submitted by the MS for 2014-2015 and 2016 in accordance with EMFF Article 97.1 and the reporting obligations on selected operations specified there; data re collected and stored in the database of the FAME SU, i.e. the FAME database (FAME DB);
- Data obtained from the EFF ex-post evaluation at EU and MS level; and
- Published literature on marine litter, with a focus on litter generated or collected by the marine sector.

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<sup>4</sup> EFF Article 37(c) "(...) the EFF may support measures of common interest (...) to remove lost fishing gear from the seabed in order to combat ghost fishing." collection of waste by fishermen from the sea such as the removal of lost fishing gear and marine litter (...)"

<sup>5</sup> EMFF Article 40.1(a) "(...) the EMFF may support the following operations: (a) the collection of waste by fishermen from the sea such as the removal of lost fishing gear and marine litter (...)"

The information sources above were combined and cross-checked (where relevant, depending on the fund) in order to obtain an overall picture of the marine litter activities in the selected MS. (For further details please see also sections 3.1 and 4.1 below as well as Table 11 in the annex.)

It should be noted that MS other than those selected above might also have implemented operations related to marine litter under EFF and/or may still implement such operations under EMFF through measures other than EMFF Art 40.1(a); however, identifying those operations would require an in depth search in administrative records going the means allocated to the present ancillary Task. Since such operations could not included in the analysis presented here, the quantitative estimates in this report of the support provided to fishermen for the fight against marine litter in general and ghost fishing in particular, should be considered as conservative.

### 1.3 Background

The UNEP (United Nations Environmental Programme) defines marine litter “*as any persistent, manufactured or processed solid material discarded, disposed of or abandoned in the marine and coastal environment.*” (UNEP, 2009)

Fishing gear falls within the definition of “Garbage” in MARPOL Annex V Prevention of Pollution by Garbage from Ships (entered into force 31 December 1988) (ICF *et al*, 2017). This MARPOL convention is the *International Convention for the Prevention of Pollution from Ships* (MARPOL 1973, as modified by the Protocol of 1978) that has a number of annexes dealing with various categories of pollutants. Under the IMO umbrella, other Conventions relating to prevention of marine pollution have been agreed and signed.<sup>6</sup>

Also of relevance here is the Marine Strategy Framework Directive (MSFD) which sets the time frame for Member States to achieve a Good Environmental Status (GES) by 2020. Descriptor 10 focuses on marine litter, stating that GES is achieved only when “*properties and quantities of marine litter do not cause harm to the coastal and marine environment*”.<sup>7</sup>

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<sup>6</sup> i) International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties; ii) Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (LC), 1972 (and the 1996 London Protocol); iii) International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC), 1990; iv) Protocol on Preparedness, Response and Co-operation to pollution Incidents by Hazardous and Noxious Substances, 2000 (OPRC-HNS Protocol) v) International Convention on the Control of Harmful Anti-fouling Systems on Ships (AFS), 2001; vi) International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004, vii) The Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009

<sup>7</sup> [http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index\\_en.htm](http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/index_en.htm)

### 1.3.1 Sources and impact of marine litter

The Joint Research Centre (JRC)<sup>8</sup> thematic report on marine litter (Veiga *et al*, 2016) states that “*litter enters the ocean from diverse points and diffuse sources, which can be both land- and ocean-based. It can also be transported over long distances before being deposited onto shorelines or settling on the bottom of the oceans and seas. (...) Source identification can be very difficult, especially when the litter item has remained in the marine environment for a long period. Certain items, in particular fragments resulting from the disintegration of larger items, can be very hard or even impossible to identify in terms of their initial purpose and possible origin*”.

One of the most common distinctions in the origin of marine litter is the division between sea-based and land-based inputs. **Sea-based inputs** refers to litter that is directly (accidentally or deliberately) released into the sea by maritime activities e.g. shipping, fishing, offshore installations. **Land-based inputs** refers to activities which cause littering directly on the coast, such as beach tourism, but can also refer to litter generated inland, like in towns and on industrial sites, which is then windblown, washed, carried away or dumped into the sea.

as for the contribution of plastics and other synthetic materials to the more persistent forms of marine litter, the report “Marine Litter Vital Graphics” (UNEP and GRID-Arendal, 2016) states that “*Between 60 and 90 per cent – sometimes as much as 100 per cent – of the litter that accumulates on shorelines, the sea surface and the sea floor is made up of one or a combination of different plastic polymers. The most common items, constituting over 80 per cent of the litter stranded on beaches (Andrady, 2015) are cigarette butts, bags, remains of fishing gear, and food and beverage containers. Likewise, 90 per cent of the litter collected from sea floor trawls is made up of plastic (Derraik, 2002 and Galgani et al., 2015).*”

#### 1.3.1.1 Marine litter from fisheries and aquaculture

Sea-based sources of marine litter include shipping, offshore mining and extraction (vessels, and oil and gas platforms), the legal and illegal dumping of waste at sea, fishing and aquaculture.

Fisheries and aquaculture only account for a small proportion of sea-based marine litter, although it can be highly visible in some areas (fishing-derived waste made up nearly 10% of litter found on the UK’s beaches over 2016 (MCS, 2016)). The sector produces two different types of waste: one linked to non-specific vessel/navigation items, the other related to fishing gear (abandoned, lost or otherwise discarded) and equipment used in marine and coastal aquaculture. The first category includes generic waste such as cartons, cleaner bottles, spray cans, metal food cans, plastic gloves and plastic crates. The second category includes fishing/aquaculture-specific material such as fish boxes, fishing line, fishing weights, floats/buoys, bait straps, ropes/cords/nets, tangled nets/cords, crab/lobster pots (Veiga *et al*, 2016).

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<sup>8</sup> The Joint Research Centre (JRC) is the European Commission's science and knowledge service which employs scientists to carry out research in order to provide independent scientific advice and support to EU policy.

Fishing gear has been lost, abandoned or otherwise discarded in all seas and oceans throughout fishing history. The extent and impact have increased significantly over the last 50 years with the increasing levels of fishing effort and capacity in the world's oceans and the increasing durability of fishing gear (Macfadyen *et al*, 2009). Until the 1960s the equipment used for both aquaculture and capture fishing consisted mainly of metals, wood and natural fibres (which readily degrade in aquatic environments). Around this time, an industry-wide change over to plastic materials occurred, owing to the clear superiority of plastics in terms of both strength and durability (ICF *et al*, 2017).

As early as the 1980s, FAO recognised this issue as a major global problem and a serious threat to the marine and coastal ecosystems. The ability of abandoned, lost or otherwise discarded fishing gear (ALDFG) to continue to fish (often referred to as “ghost fishing”) has detrimental impacts on fish stocks and potential impacts on endangered species and benthic environments. ALDFG is also a concern because of its potential to become a navigational hazard (with associated safety issues) in coastal and offshore areas.

Macfadyen *et al* (2009) recognise that *“The magnitude, impacts and causes of ALDFG are not well known or documented in many fisheries.”* However, there are quite some examples where the level and impact of ALDFG is sufficiently high to cause concern and warrant action”. An ongoing study for the European Commission (ICF *et al*, 2017) also states that *“There are very few estimates of plastic waste generation in the fishing and aquaculture sector and no data on the annual consumption of plastics by the sector on which proxy measures can be developed. The amount of fishing gear that is abandoned, lost, or discarded at sea is also unknown.”* However, a number of studies carried out in different sea basins to characterise ALDFG have shown that there is great variability between different sea basins.

### **1.3.2 Types of mitigation measures**

It is widely accepted that addressing the sources of marine litter is preferable to mitigation. Since the majority of this litter originates from land-based sources and activities, the primary emphasis on controlling it should focus on preventing the inflow of litter to the sea. However, despite of international, macro-regional and national or even local efforts to reverse current trends, the problem continues to grow. As a result, there is an increasingly urgent need to tackle the issue through better enforcement of national regulatory systems, expanded outreach and educational campaigns at national, regional and global levels, and the use of strong economic instruments and incentives (UNEP, 2009). As a multi-dimensional problem, the solution lies in a variety of approaches:

- the development of strategies for the management of marine litter at a sea basin level;
- the enhancement of policies and legislation to be implemented and effectively enforced;
- the further development of institutional frameworks and the involvement of stakeholders;
- the development of an integrated solid waste management;
- a solid base of research on marine litter sources and its impact on the environment; and
- consolidated programmes of continuous monitoring.

### 1.3.2.1 Actions relevant for the fisheries and aquaculture sector

Measures to tackle the problem of ALDFG have been categorised as being either *preventive*, *mitigating* or *curative* (Macfadyen *et al.*, 2009):

**Preventive measures** (avoiding the loss of gear) are those to:

- make gear identification intrinsic within gear structure;
- require port-based marking inspections to reduce IUU-related ALDFG;
- promote spatial management to reduce conflicts between users of towed vs. static gear;
- facilitate onshore reception and convenient and affordable gear disposal; and
- set general limits on gear carried.
- provide regulatory and/or financial incentives to bring back to shore and to dispose adequately of derelict gear.

**Mitigating measures** (reducing the impact if lost) are those that:

- promote better gear design to reduce ghost fishing by lost gear; and
- encourage the use of 'ALDFG- preventing gear' through grants/ eco-labelling initiatives.

**Curative measures** (removal and clean-up of lost gear) are those that:

- promote lost gear recovery;
- combine local knowledge and scientific approaches for gear location;
- develop minimum requirements for diver safety plus guidelines and procedures to further ensure safety and success in retrieval;
- incorporate reporting of lost gear into current reporting systems;
- conduct targeted gear recovery; and
- provide guidance for cost-effective, safe and responsible disposal.

### 1.3.3 Overview of organisations and initiatives

Over the last few years, the problem of marine litter has received an increasing amount of scientific, media and governmental attention. At an international level, the IMO continues to be the main regulatory body, but with considerable support from UN bodies such as FAO and UNEP, regional bodies such as the EU, as well as NGOs such as the Global Ghost Gear Initiative and the Marine Conservation Society. There has also been an increasing commitment at both regional (especially sea basin) and national levels, often driven by an awareness of the impact of marine litter on maritime activities and conservation objectives, as well as media and local popular pressure.

The EU is active in funding research and projects tackling the marine litter problem under different perspectives and under different programmes:

The research programmes, *FP7* and *Horizon 2020* have been particularly beneficial. They funded 15 projects related to marine litter with a total value of EUR 69 million (with an EU contribution of EUR 57 million). Key projects included:

- CLEANSEA which focused on gaining new information on the impacts (biological, social and economic) of marine litter, developing tools needed to collect and monitor litter, and evaluating the impact of mitigation strategies and measures in order to provide options to policy makers in the EU;

- MARLISCO which aimed to raise awareness about the accumulation of marine litter in the marine environment; and
- MARELITT assisted in the initiation of the new marine litter removal projects. A crucial contribution of the MARELITT advisors was in developing business cases and identifying potential funding sources for projects.

Other projects have been funded under *Interreg* programmes, like MED-SEALITTER (Interreg Mediterranean) or under the Adriatic Instrument for the Pre-Accession Assistance (IPA) – Cross-border Cooperation Programme, like DeFishGear. The *Life* Programme funded projects in the field of marine litter including: SMILE, AMMOS, GHOST, LIFE DEBAG, LIFE LEMA, MERMAIDS as well as the ongoing CLEAN SEA LIFE. The JRC has also developed a number of marine litter related projects in the EU (e.g. Werner *et al*, 2016; Veiga *et al*, 2016).

Whilst the main funding beneficiaries of these projects have been research institutes, fishermen associations, other private sector and NGOs have been also supported. For example, *Lega Ambiente*, a large Italian environmental association carried out a large survey on marine litter<sup>9</sup>. Greenpeace also published a report in 2006<sup>10</sup> and ran a specific campaign on the issue. Campaigns have been carried out with strategies to raise public awareness, pressure governments and international institutions, and involve stakeholders, in particular fishermen and fishermen associations, in ALDFG prevention, mitigation and cure.

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<sup>9</sup> <https://www.legambiente.it/marinelitter/>

<sup>10</sup> [http://www.greenpeace.org/international/Global/international/planet-2/report/2007/8/plastic\\_ocean\\_report.pdf](http://www.greenpeace.org/international/Global/international/planet-2/report/2007/8/plastic_ocean_report.pdf)

## 2 Marine litter situation in EU littoral states

The present chapter gives a brief outline of the marine litter problem as perceived in the 14 MS included in the study and, more precisely, what type of litter items are considered more or less problematic (i.e. "an issue" or "a big issue") in those MS, with a focus on litter from fishing activities. The assessment is based on the indications given by the MA during the field research combined with the judgement and experience of the GE, and is therefore necessarily subjective<sup>11</sup>.

### Main findings:

- Items from fishing activities that are considered an issue in the 14 interviewed MS:
  - Nets (12 MS);
  - Fishing line, monofilament line (9 MS);
  - Floats for fishing nets (7 MS).
- Other items (from fishing or other activities) that are considered an issue in these 14 MS:
  - Ropes in general (9 MS);
  - Personal Protection Equipment (PPE) (e.g. rubber gloves, boots) (7 MS); and
  - Other general boat waste (e.g. jerry cans, oil cans, buckets) (7 MS).

Source: Country reports

Based on the results of the questionnaires, **nets** are the marine litter item most MS feel are a problem. Of 14 MS surveyed, 12 identified nets as an "issue", out of which 4 (HR, PL, SE and UK) considered them a "big issue".

Other items considered problematic from fishing activities are **fishing lines and monofilament lines**, selected by 9 MS, with 2 (HR and PL) highlighting them as a "big issue". This was followed by **floats for fishing nets**, mentioned by 7 MS, with 2 MS (PL and UK) indicating them to be very problematic.

With regard to other items from maritime activities in general, **rope** was considered an issue by 9 MS, followed by **PPE** (rubber gloves, boots, etc.) and **general boat waste** (jerry cans, oil cans, buckets, etc.), with both groups of items selected by 7 MS. (See also Figure 1 below and Table 5 in the Annex.)

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<sup>11</sup> The results have not been contrasted with relevant scientific literature or analysed e.g. by sea-basin, etc. since this went beyond the scope of the study

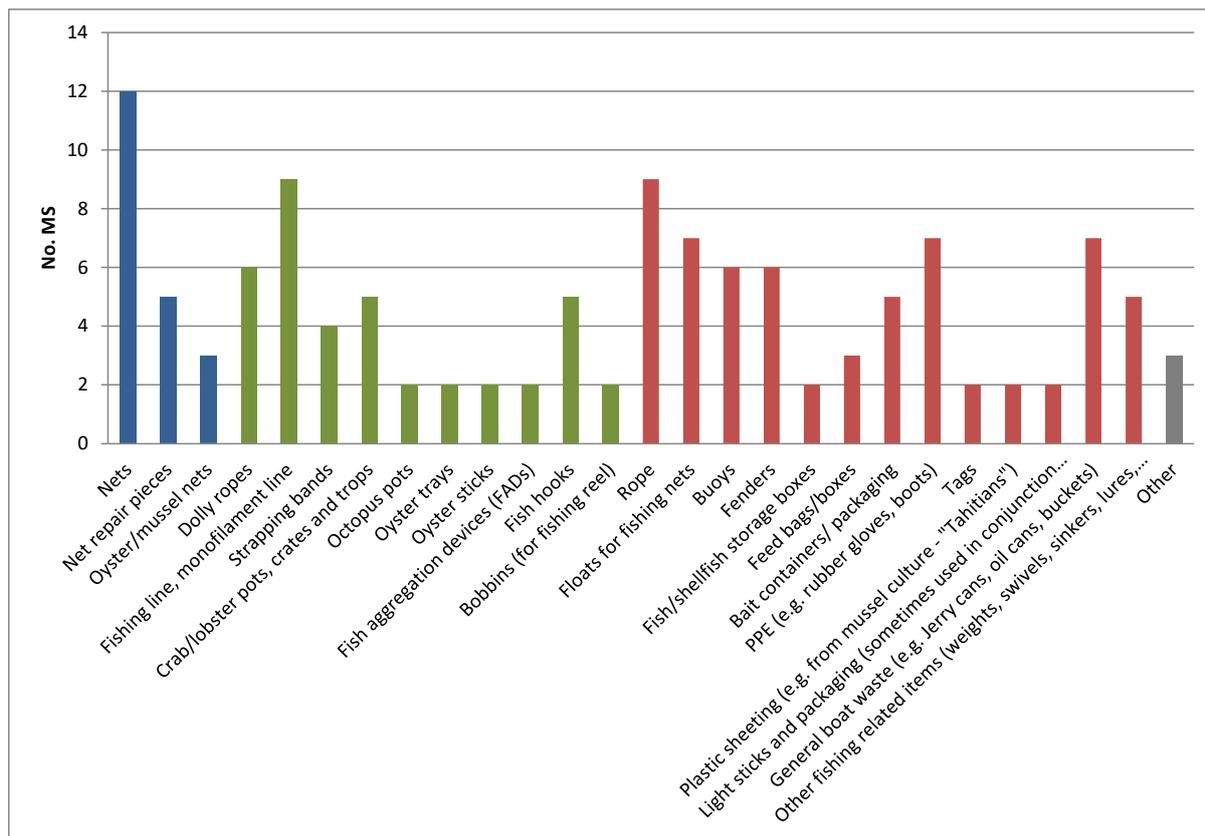


Figure 1: Marine litter items which are considered an issue in selected EU MS

- Nets*
- Other Fishing Gears*
- Other litter*
- Other*

### 3 Operations funded under the EFF

#### **Main findings:**

- 7 out of 14 MS surveyed have implemented **operations** related to marine litter under the EFF (59 operations amounting to EUR 5.8 million total eligible costs);
- Ranked by the **number of operations**, SE implemented 25 operations, followed by ES (23), IT (4), IE (2), PT (2), UK (2) and PL (1);
- Ranked by **eligible costs** the key MS (in EUR million) were PL (2.8) and SE (1.5) followed by ES (0.72), IT (0.46), PT (0.18), IE (0.07) and UK (0.06);
- Operations were implemented both under Collective actions (PA3, Art. 37(c)) and under the Sustainable development of fisheries areas (PA4, Art. 43 and 44);
- **Overall EFF support** to marine related operations could have been in the order of **EUR 5.2 Million** (3.4 for the 7 MS surveyed and 1.8 for the 7 coastal states not surveyed)
- **Foci of operations:**
  - Collection of lost fishing gear / 'fishing for litter' (27 operations);
  - Litter collectors/bags on board and in port (renting and transport, purchase) (15 operations);
  - Treatment/processing of litter (10 operations);
  - Awareness raising among fishermen (3 operations);
  - Research related to marine litter (3 operations); and
  - Recovering/recycling of plastics (1 operation).
- **Lessons learned:**
  - Importance of proper waste collection and management;
  - Need to consider economic issues related to: potential business opportunities in recycling fishing gear; potential port cost-saving measures; potential source of recyclable materials;
  - Need to involve more beneficiaries in environmental protection measures and the fight against marine litter;
  - Equipment for the collection/storage of litter to be installed on-board must be adequate to the specificities of each vessel; and
  - Minimisation of gear loss is possible with good practice and consideration of risks.

Source: Country reports

### 3.1 Legal basis for marine litter actions under the EFF

The measures of the EFF Regulation<sup>12</sup> deemed to the most obviously relevant or potentially relevant with regard to marine litter mitigation are the following:

- **Art. 37 (c) – Collective actions** (relevant):  
*The EFF may support measures of common interest which are implemented with the active support of operators themselves or by organisations acting on behalf of producers or other organisations recognised by the Member State and which aim, in particular, to: (...) (c) remove lost fishing gear from the sea bed in order to combat ghost fishing;*
- **Art. 39 (2) (g) – Fishing ports, landing sites and shelters** (potentially relevant):  
*1. The EFF may support investments in existing public or private fishing ports, which are of interest to fishers and aquaculture producers using them, with the aim of improving the services offered. (...) 2. The investments shall relate, in particular, to: (...) (g) the storage and treatment of waste; and*
- **Art. 43 and 44** (PA/Priority axis 4): **Sustainable development of fisheries areas** (potentially relevant).

The present chapter is based on the information gathered through the field research (questionnaires) as well as the EFF ex-post evaluation. However, the latter was not carried out at operation level, i.e. it is not possible to directly cross-check information it contains with the numbers obtained in the field. An assessment can only be made at the level of EFF PA 3, *Measures of common interest - Measure 3.1: Collective actions* (under which Art. 37(c) falls) for the MS included in the study, in order to estimate the total EFF budget spent for marine litter (see also Table 1 and related footnote).

### 3.2 Priority of marine litter under the EFF

Even though the EFF already provided specific support for marine litter mitigation actions (particularly through the removal of lost fishing gear from the sea bed under Article 37(c)), only 7 MS (ES, IE, IT, PL, PT, SE and UK) out of 14 MS surveyed stated that marine litter actions had been implemented under the EFF. Overall, 59 operations were completed with a total eligible cost of EUR 5.8 million. Forty-seven projects (80%) fall under PA3 (Art. 37(c)) and 11 (19%) under PA4 (Art. 43 and 44).

In terms of the Collective actions (PA3, EFF Article 37), where the 7 MS mentioned above implemented 2 487 operations with a total eligible cost of EUR 189.5 million, marine litter projects under PA3 represented less than 2% of the number of operations and less than 3% of

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<sup>12</sup> Council Regulation (EC) No 1198/2006 of 27 July 2006 on the European Fisheries Fund

the total eligible costs (see also Table 6 in the Annex). These numbers<sup>13</sup> suggest that the the fight against marine litter was not considered as a major priority under the EFF.

### 3.3 EFF Operations

Under the EFF, SE and ES implemented the highest numbers of marine litter-related operations: 25 and 23 operations respectively. However, in monetary terms, the highest amount for marine litter mitigation actions was spent in PL followed by SE, with EUR 2.8 and 1.5 million respectively.

Based on the indications of the MA and the geographic experts (GE), as well as additional calculations and corrections<sup>1415</sup>, the **EFF budget allocated to marine litter mitigation by the 7 MS mentioned below is estimated to have been of at least EUR 3.4 million, i.e. 59% of the total eligible costs** (see Table 1 and related footnotes and Figure 2 below).

This, again, is a conservative estimate because it does not take into account spending under other measures not specifically designed to contribute to the fight against marine litter but which may have contributed for example to increasing environmental awareness and willingness to engage in marine litter collection activities (e.g. training and continuous education).

Furthermore this does not take into account EFF spending on marine litter mitigation by the 7 coastal MS (DK, EE, EL, FR, HR, MT, NL) which later did not decide to implement the measure covered by EMF Art. 40(1)(a).

Had these MS supported marine litter mitigation at the same rate as those MS which did implement such measure both under the EFF and then the EMFF (i.e. 0.6% of PA3 and PA4), their total contribution would have reached EUR 1.8 Million. **Total EFF contribution to marine litter mitigation** can therefore be estimated to have been **in the order of EUR 5.2 million**.

**Table 1: Operations related to marine litter funded under EFF**

MS	No. operations	Total eligible costs (€)	Total EFF budget (€) for marine litter <b>(estimated)</b>
BE	0		
BG	0		
CY	0		

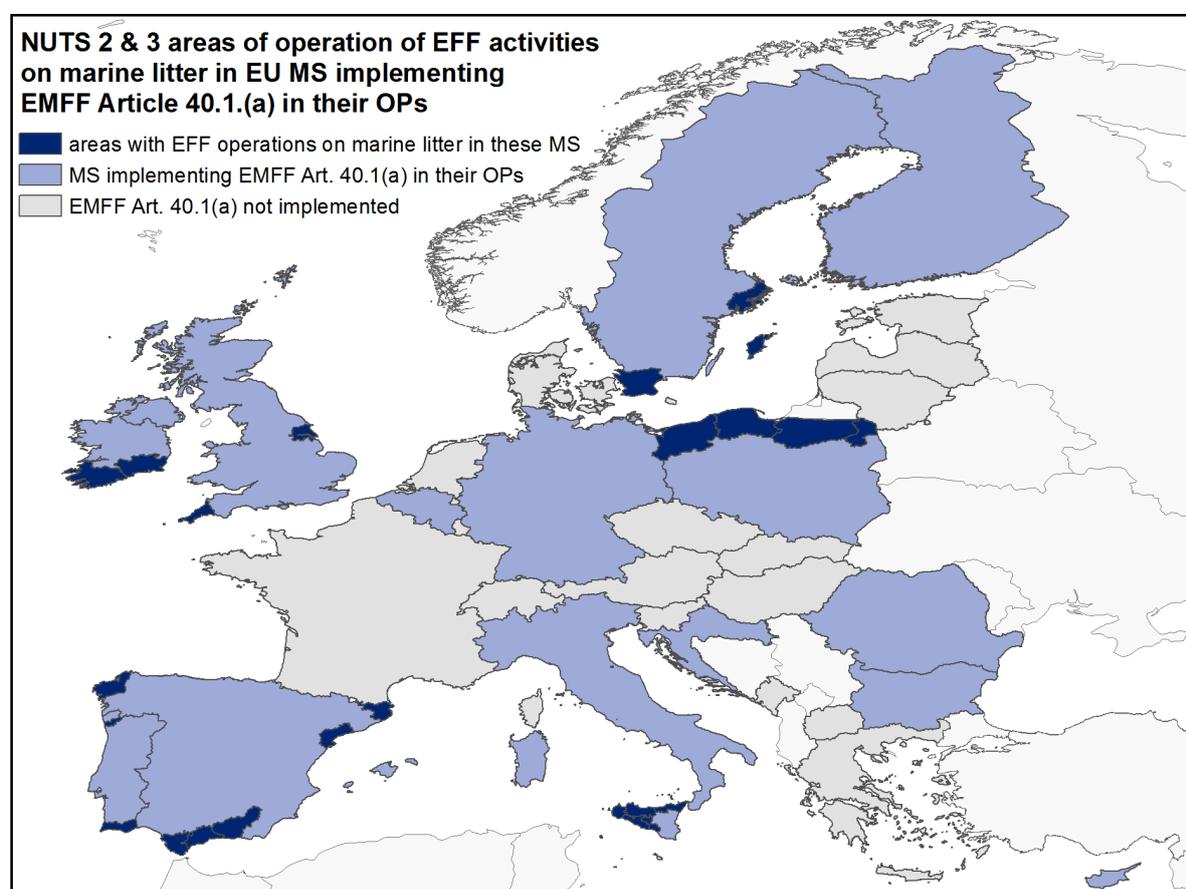
<sup>13</sup> For the sake of simplicity, in order to estimate the relevance of marine litter actions under EFF, calculations focused only on operations implemented under PA3, Collective actions (Art. 37(c), Infosys Measure 3.1).

<sup>14</sup> The EFF contribution of 2 MS (PL and PT) did not seem plausible or was not available. For this reason, the EFF budget for these 2 MS – which implemented only PA3 operations – was estimated based on the average proportion of EFF budget in relation to the total eligible costs for all operations under measure 3.1.

<sup>15</sup> The EFF contribution of 2 MS (UK and SE) showed minor incongruities that could be solved with simple corrections.

DE	0		
ES	23	722.016,39	150.383,67
FI	0		
HR	0		
IE	2	73.200,00	14.000,00
IT	4	462.000,00	311.000,00
PL	1	<b>2.819.421,64</b>	<b>2.024.366,66</b> <sup>16</sup>
PT	2	178.839,22	<b>117.314,66</b> <sup>17</sup>
RO	0		
SE	25	<b>1.493.534,00</b>	<b>746.767,00</b> <sup>18</sup>
UK	2	58.653,00	<b>34.653,00</b> <sup>19</sup>
<b>TOTAL 14 MS</b>	<b>59</b>	<b>5.807.664,25</b>	<b>3.398.484,99</b>

Source: Country reports, data from EFF ex post evaluation



**Figure 2: MS areas of operation with marine litter projects completed under EFF vs. MS implementing EMFF Art. 40.1(a) (source: country reports for EFF and OP/AIR for EMFF)**

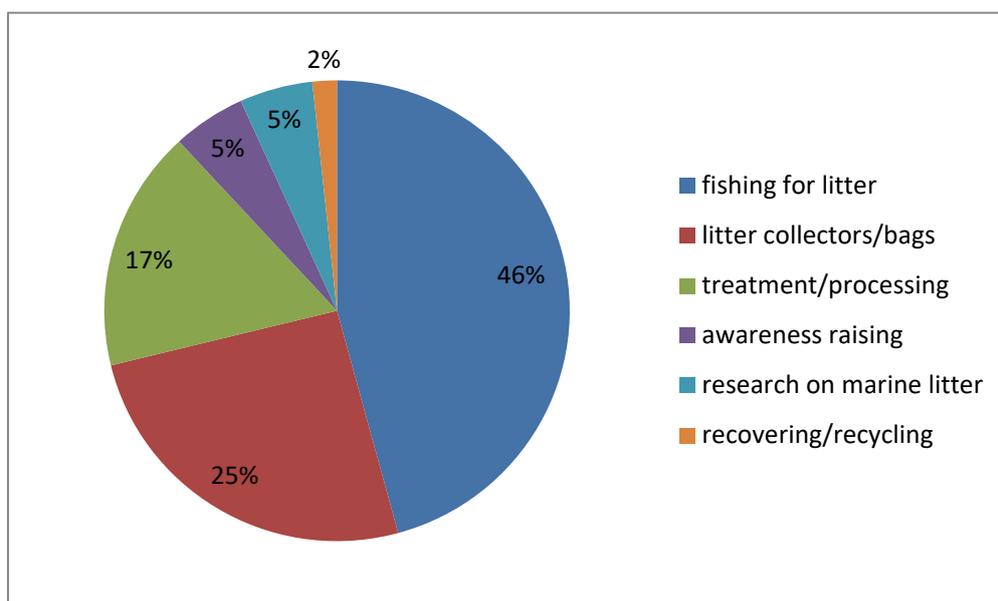
<sup>16</sup> Calculation based on average EFF budget share with regard to total eligible costs for measure 3.1. for PL

<sup>17</sup> Calculation based on average EFF budget share with regard to total eligible costs for measure 3.1. for PT

<sup>18</sup> 50% EFF co-financing rate assumed

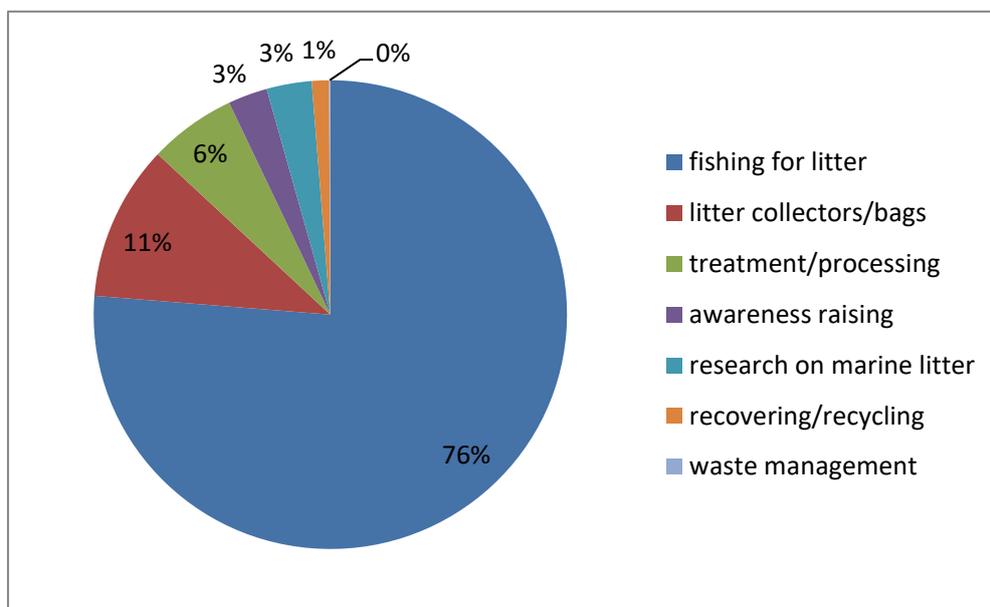
<sup>19</sup> Corrected (national contribution deducted)

Nearly half of the operations (27) focused on the recovery of lost fishing gear, followed by projects that financed the purchase or renting of litter collectors or bags (15) and the treatment or processing of waste (10) (see Figure 3 below).



**Figure 3: Type of marine litter operations under EFF (number of operations)**

In terms of total eligible costs, 'fishing for litter' operations amounted to more than 75% of the budget (EUR 4.4 million), while litter collectors and bags and the treatment and processing of waste represented only 11% and 6% of the total budget (EUR 0.6 million and 0.35 million) (see Figure 4 below).



**Figure 4: Type of marine litter operations under EFF (total eligible costs)**

The key beneficiaries of marine litter actions during EFF were private operators (mainly fishermen) in 26 operations (44%), followed by public entities (municipalities, etc.) in 18

projects (31%), and groupings of fishermen (producer organisations, cooperatives, etc.) in 8 operations (14%) (see Figure 5 below).

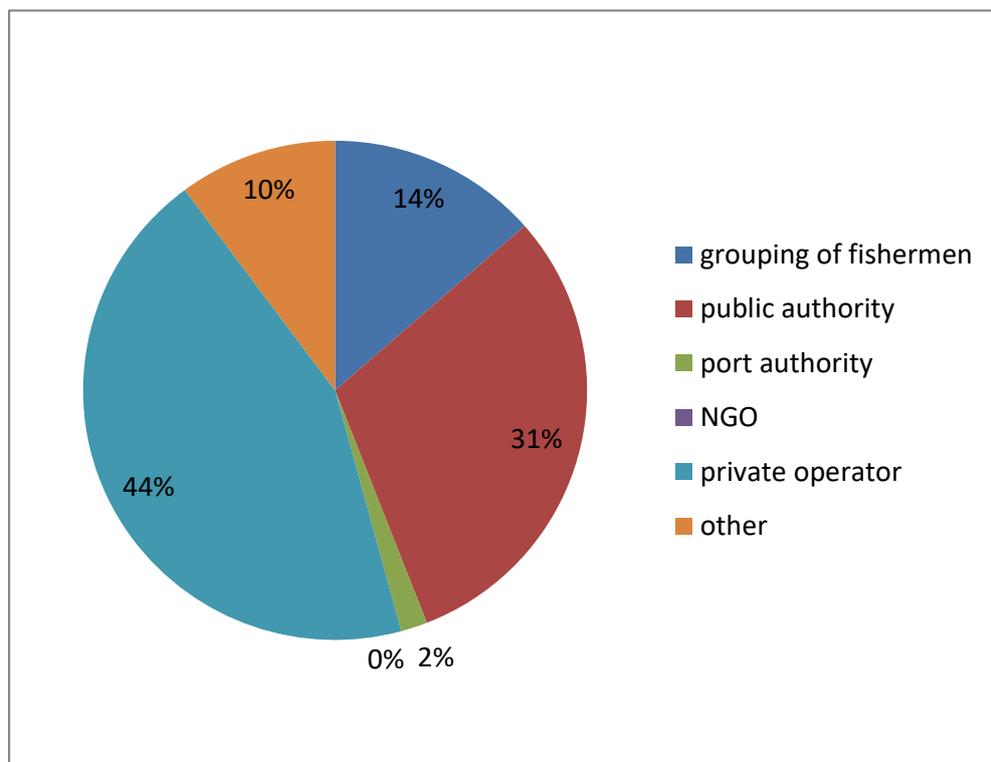


Figure 5: Type of beneficiary under EFF

### 3.4 Experiences and lessons learned

The interviews in the MS provided some information on the lessons learned from the marine litter actions supported by the EFF:

- A project for awareness-raising among fishermen and for the provision of differentiated waste containers highlighted the importance of an adequate waste collection and of proper waste management in general.
- An operation on recycling and re-using fishing gears to manufacture other products for the marine sector referred, among others lessons learned, to:
  - Potential business opportunities in recycling fishing gear;
  - Potential port cost-saving measures (in terms of waste management); and
  - Fishing gears as a potential source of recyclable materials.
- Different initiatives for local development implemented under PA4 (e.g. the development of a local system for the collection of marine litter from fishing activities) highlighted the importance of involving beneficiaries in environmental protection measures.
- A pilot project to assess the operability of a garbage collection and storage system on fishing vessels highlighted the necessity of equipment installed on-board to be adequate to the specificities of each vessel.
- Finally, a project for the provision and disposal of marine litter collection bags concluded on the positive effect of such bags when combined with adequate collection practices.

However, because the project undertakers were not required to collect information on the outcome of their activities, (e.g. quantities of gear or marine litter recovered, area cleaned, etc), it is not possible to draw any further lessons from these experience without further field work.

## 4 Operations funded under the EMFF

### 4.1 Legal basis under the EMFF for marine litter actions

The measures of the EMFF Regulation<sup>20</sup> deemed relevant or potentially relevant with regard to marine litter mitigation are:

- **Art. 40.1(a) (UP1) – Protection and restoration of marine biodiversity and ecosystems and compensation regimes in the framework of sustainable fishing activities** (relevant):
  1. *In order to protect and restore marine biodiversity and ecosystems in the framework of sustainable fishing activities, with the participation, where relevant, of fishermen, the EMFF may support the following operations: (a) **the collection of waste by fishermen from the sea such as the removal of lost fishing gear and marine litter**"; and*
- **Art. 43 (UP1) – Fishing ports, landing sites, auction halls and shelters** (potentially relevant):
  1. *For the purpose of increasing the quality, control and traceability of the products landed, increasing energy efficiency, **contributing to environmental protection** and improving safety and working conditions, the EMFF may support investments improving the infrastructure of fishing ports, auctions halls, landing sites and shelters, **including investments in facilities for waste and marine litter collection.***

The collection of marine litter or related activities by actors other than fishermen can also be funded under:

- **Art. 62 / Art. 63 (CLLD under UP4)** – Support from the EMFF for community–led local development / Implementation of community–led local development strategies (potentially relevant); and
- **Art. 80 (IMP under UP6)** (potentially relevant)
  1. *The EMFF may support operations in accordance with the objectives set out in Article 79, such as operations that: (...) (b) **protect the marine environment**, in particular its biodiversity and marine protected areas such as Natura 2000 sites, in accordance with the obligations established in Directives 92/43/EEC and 2009/147/EC.*

Finally, some marine litter-related activities may occasionally be (or have been) funded under other measures (e.g. cooperation between scientists and fishermen, professional training, etc.). This implies that quantitative estimates of total EMFF support to marine litter mitigation are necessarily conservative since they could not take this occasional support.

The present chapter is also based on the data collected through the field research (questionnaires), which in this case can be compared with the planned commitment according to the EMFF OPs (completed with numbers from the AIR 2014-2015) as well as

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<sup>20</sup> Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund

implementation data from Art. 97.1 reporting (further details explained in the following sections).

## 4.2 Priority of marine litter under the EMFF

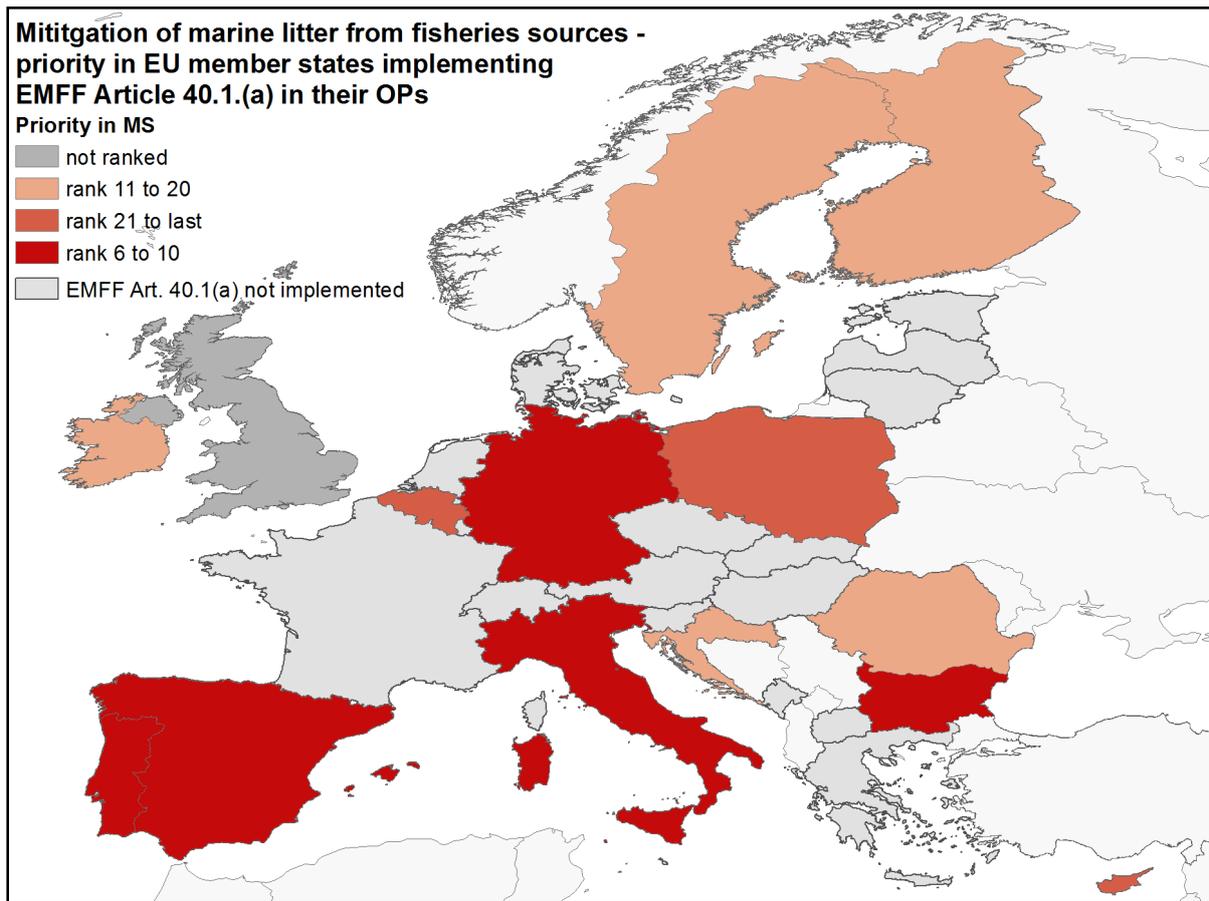
### Main findings:

- **Actions to mitigate the marine litter problem** are given on average a **medium to low priority** in the EMFF OPs of the MS (see Figure 6 below):
  - **5 MS** (BG, DE, ES, IT and PT) give marine litter a **medium priority** in their OPs;
  - **5 MS** (FI, HR, IE, RO and SE) give marine litter a **medium-low priority** in their OPs;
  - **3 MS** (BE, CY and PL) give marine litter a **very low priority** in their OPs;
  - **1 MS** (UK) did not provide any indication of the priority of marine litter, however there appears to be an interest in this type of action.
- From a point of view of **allocated resources**, the priority of marine litter is modest (see section 2.3.2).

Source: Country reports

According to the interviews with the MAs, actions for the mitigation of marine litter are given a medium to low priority in the MS. Five MS (BG, DE, ES, IT and PT) assigned marine litter a medium priority while another 5 (FI, HR, IE, RO and SE) indicated a medium-low priority. Three MS (BE, CY and PL) rated the importance of marine litter as very low. None of the MS interviewed ranked this topic as a high priority; one MS (UK) gave no indication on priority, however, according to the GE there is interest in implementing marine litter projects in the country (see also Figure 6 below).

The budget allocated to actions under Article 40.1(a) is low in comparison to the resources foreseen for UP1 and, in general, for all UPs (see also section 4.3 below). This confirms the statements gathered through the questionnaires, i.e. the low priority of marine litter actions in the context of the whole EMFF OP.



**Figure 6: Priority of marine litter mitigation in the present EMFF OP in the MS** (source: country reports)

### 4.3 Planned commitment according to OP (and updated data from AIR)

#### Main findings I:

##### Art. 40.1(a): Collection of waste by fishermen

- **14 MS** have allocated EMFF resources to this measure in their OPs: **BE, BG, CY, DE, ES, FI, HR, IE, IT, PL, PT, RO, SE and UK**;
  - **Number of operations** planned (target 2023): **108**
  - **Public contribution** planned: **EUR 31.21 million**
  - **EMFF contribution** planned: **EUR 21.85 million** (70% of public contribution)
- Leading MS in terms of number of operations: IT (20), SE (19), HR (15) and ES (10);
- Leading MS in terms of allocated public contribution: ES (EUR 8.7 million, i.e. app. 0.6 % of the OP budget or 1.7 % of the UP1 allocation), PL (EUR 7.5 million, i.e. app. 1.1 % of the OP budget or 3.9 % of the UP1 allocation), PT (EUR 5.3 million, i.e. app. 1.0 % of the OP budget or 3.5 % of the UP1 allocation), and IT (EUR 4.3 million, i.e. app. 0.4 % of the OP budget or 1.2 % of the UP1 allocation);
- The EMFF contribution represents on average 70% of the public contribution;
- With regard to **UP1 allocations**, Art. 40.1(a) represents
  - **1.82 %** of the **public contribution** of the 14 MS ; and
  - **2.02 %** of the **EMFF contribution** of the 14 MS;
- With regard to **total budget allocations**, Art. 40.1(a) represents
  - **0.14 %** of the **total public contribution** of the 14 MS; and
  - **0.54 %** of the **total EMFF contribution** of the 14 MS.

Source: OP/AIR

Fourteen MS are planning to support measures under Article 40.1(a) and have allocated EMFF resources: BE, BG, CY, DE, ES, FI, HR, IE, IT, PL, PT, RO, SE and UK, i.e. the MS included in the survey underpinning this report (see also Figure 7 below). According to the OPs (including updated data from the Annual Implementation Reports/AIR), the total number of operations planned (target value for 2023) is 108, with an allocated budget of EUR 31.21 million of public contribution and EUR 21.85 million of EMFF contribution. The co-financing rates in the MS range from 40% (FI) to 75% (a number of different MS); on average the EMFF represents 70% of the public contribution.

With regard to the number of operations, IT (20 operations) and SE (19 operations) plan the largest number, followed by HR (15 operations) and ES (10 operations) (see Figure 8). The allocated budget paints a different picture. ES has allocated the highest amount of resources to fishing for litter actions with EUR 8.7 million of total public and EUR 6.5 million EMFF contribution, followed by PL (EUR 7.5 million public and EUR 5.6 million EMFF contribution), PT (EUR 5.3 million public and EUR 4 million EMFF contribution) and IT

(EUR 4.3 million public and EUR 2.1 million EMFF contribution) (see Figure 9). This situation (i.e. widely diverging expenditure per individual operation) can be explained by the way MSs handle the implementation of these types of operations: in some MS single fishermen or operators are direct beneficiaries of EMFF support, while in others groupings of fishermen (cooperatives, producer organisations, etc.) are responsible for one comprehensive application (i.e. corresponding to one operation) for all its members. A similar picture can be derived from EFF data where SE for example implemented 25 fishing for litter operations for a total amount of around EUR 1.5 million (all carried out by private operators) while PL executed one single project for a total cost of around EUR 2.8 million where the beneficiary was a producer organisation.

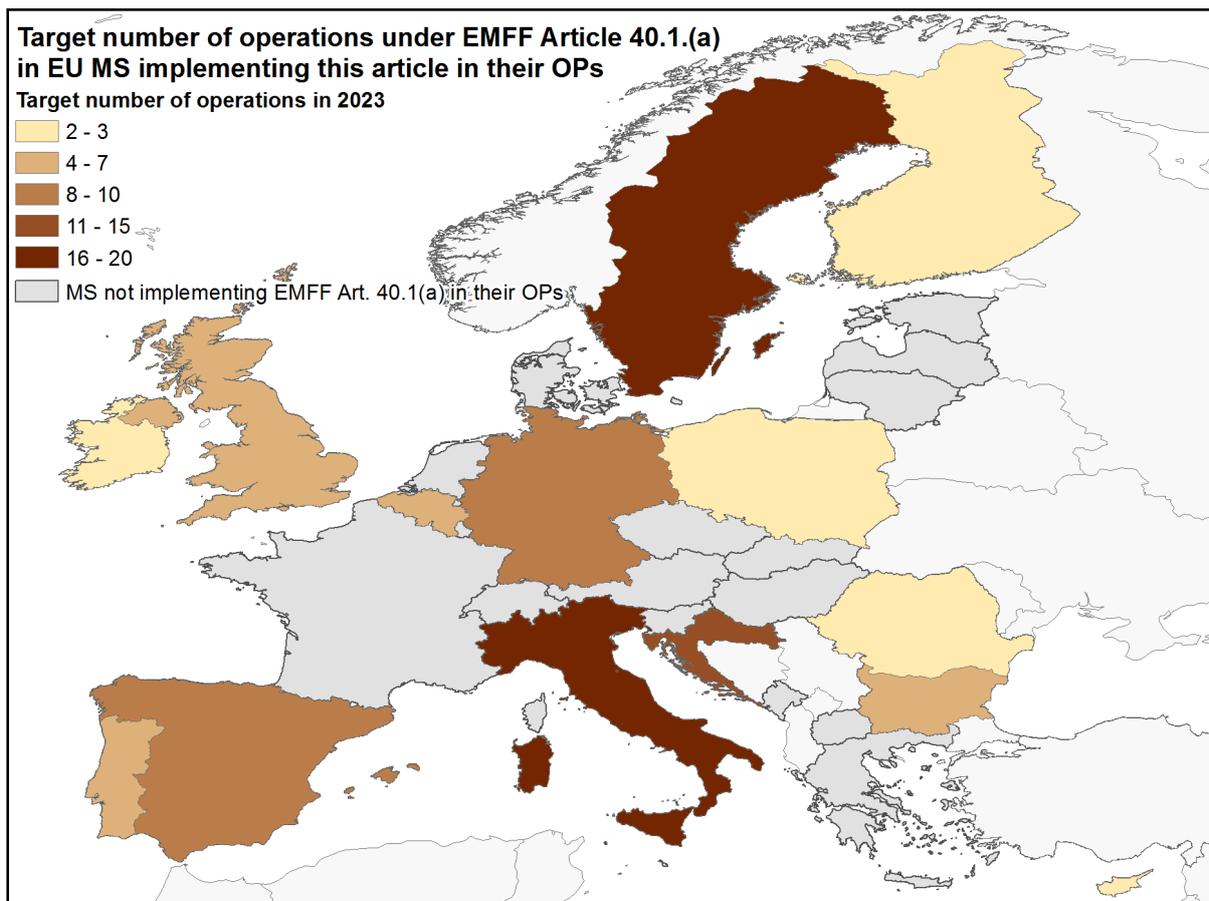


Figure 7: MS implementing EMFF Art. 40.1(a) (data source: OP/AIR)

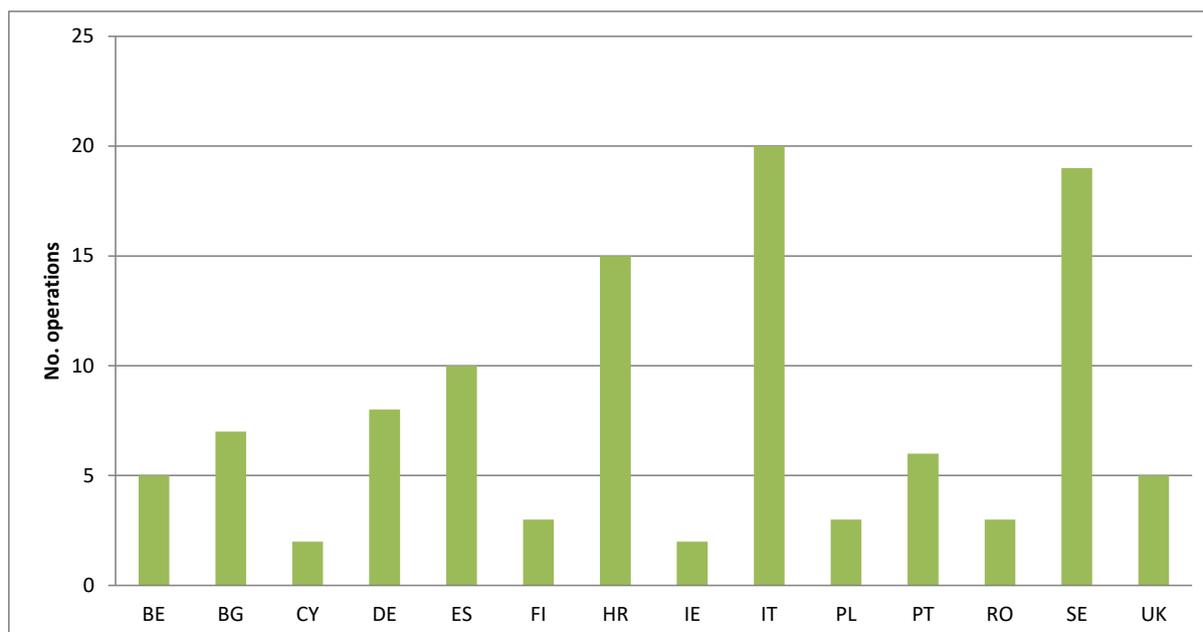


Figure 8: No. of planned operations (target 2023) under Art. 40.1(a) (data source: OP/AIR)

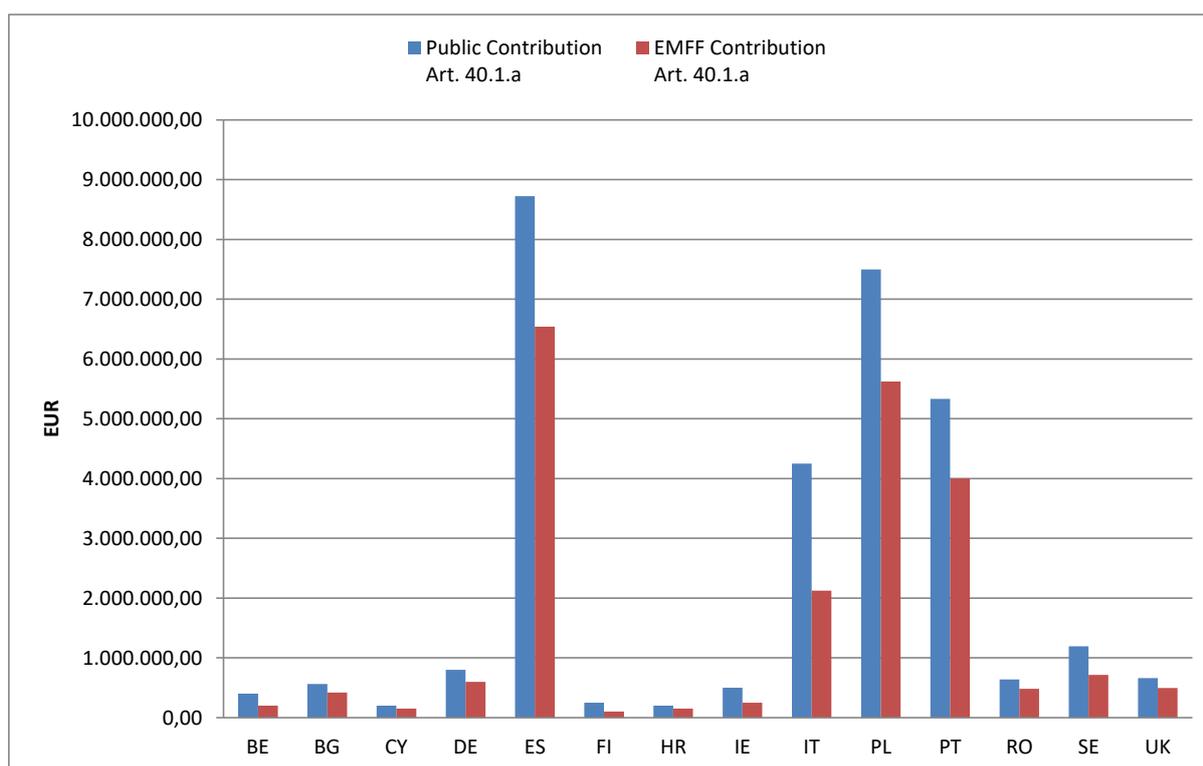


Figure 9: Planned public and EMFF contribution allocated to Art. 40.1(a) (data source: OP/AIR)

As mentioned in the previous section, the budget allocated to actions under Article 40.1(a) is low, amounting to less than 2% of the public contribution to UP1 for the 14 MSs (ca. 2% in terms of EMFF contribution to UP1), and 0.14% of the total public contribution to all UPs (ca. 0.54% in terms of EMFF contribution to the total public) (see also Table 9 and Table 10 in the annex).

Nevertheless, in comparison to EFF, the number of MS planning 'fishing for litter' projects has doubled from 7 to 14, while the total number of operations has also increased from 47 (PA3 projects only) to 108, i.e. an increase of 130%<sup>21</sup> on average. Looking at the MS that implemented marine litter projects under EFF, there is an increment in the number of operations in all MS, with the exception of ES (decrease from 15 to 10 operations) and SE (decrease from 25 to 19 operations) (see

Table 2)<sup>22</sup> suggesting that most MS that funded actions under EFF considered the benefits significant enough to increase actions under the EMFF.

**Table 2: 'Fishing for litter' operations – EFF vs. EMFF (Target 2023)**

MS	EFF: No. operations in marine litter under PA3	EMFF: No. Operations (Target 2023) under Art. 40.1(a)	Variation
BE	0	5	
BG	0	7	
CY	0	2	
DE	0	8	
ES	15	10	-33%
FI	0	3	
HR	0	15	
IE	1	2	+100%
IT	1	20	+1900%
PL	1	3	+200%
PT	2	6	+200%
RO	0	3	
SE	25	19	-24%
UK	2	5	+150%
<b>Total 14 MS</b>	<b>47</b>	<b>108</b>	<b>Ø +130%</b>

Source: Country reports, FAME 2017

<sup>21</sup> HR only joined the EU in 2013 and implemented a limited number of operations under EFF.

<sup>22</sup> No statement can be made regarding the evolution of the EFF/EMFF contribution to 'fishing for litter' actions from the previous programming period to the present one since no data are available on the EFF contribution at the level of PA3 (Art. 37(c)) operations (this information was not requested in the MS questionnaires).

## **Main findings II:**

### **Marine litter related Operations eligible for support under other measures**

- Operations related to marine litter might also be funded through other measures, mainly:
  - **Art. 43.1: Fishing ports, landing sites, etc. – Investment in facilities for waste and marine litter collection;**
  - **Art. 63: CLLD under UP4; and**
  - **Art. 80.1 (b) and (c): Integrated Maritime Policy (IMP) under UP6 – Protection of the marine environment;**
- However, no planned commitment under those articles is specified in the OPs;
- Moreover, MS not considered in this report (i.e. not making use of Art. 40.1(a) in their OPs) might implement marine litter actions under the above mentioned EMFF articles.

Source: OP/AIR

As outlined above, actions for the mitigation of the marine litter problem might be supported through other EMFF measures, more precisely under:

- Art. 43.1: Fishing ports, landing sites, etc. – Investment in facilities for waste and marine litter collection;
- Art. 63: CLLD under UP4; and
- Art. 80.1 (b) and (c): IMP under UP6 – Protection of the marine environment.

However, the OPs (and updated AIRs) provide no specific data on the planned number of operations or budget allocated to marine litter actions under these diverse measures; therefore, no statement is possible at this stage. In addition, and as already noted, those MSs that will not make use of Art. 40.1(a) but are possibly planning to run marine litter projects through the above measures instead, have not been considered in this exercise (they are not among the 14 MSs selected), i.e. their contribution to marine litter mitigation is not assessed in the present report.

## 4.4 Selected operations

### Main findings I:

#### Art. 40.1(a): Collection of waste by fishermen

- Based on officially reported data **4** (DE, IE, SE, UK) out of the 14 MS included in the survey have **started implementation** under this article with **12 (11%) operations selected** out of the 108 target value for total number of operations for 2023; (but an additional 4 operations (in SE and the UK) are planned as revealed during the field work i.e. 14,8% of the target up to June 2017);
- **Eligible public costs** of selected operations are EUR **0.8 million €** (3% of planned public costs for 2014-2020 under this Art.);
- **EMFF support** of selected operations is EUR **0.5 million** (2% of the target EMFF contribution for 2014-2020 under this Art.);
- SE is the leading MS in terms of the speed of implementation with 9 operations already selected (47% of target value) and 36% of funds committed (in terms of both public and EMFF contributions in relation to target value) based on official data and 1 more operation reported during the field work. DE, IE and UK have 1 operation each according to reported data but the field work revealed 3 new operations in 2017 i.e. a total of 4;
- **Foci** of operations are:
  - Collection of fishing gear/ghost nets;
  - Provision and disposal of marine litter bags for collection at sea;
  - Treatment and processing of waste;
  - Recovery and recycling of nets;
  - Collection of marine litter in general; and
  - Awareness raising.

Source: OP/AIR, Art.97.1 reports 2014-2015, 2016 (FAME DB), country reports

The present section is largely based on data exported from the FAME database, which includes all information submitted by the MS according to the reporting obligations set out in Article 97.1 of the EMFF Regulation and the details specified in Implementing Regulation (IR) 1242/2014<sup>23</sup>, i.e. the annual progress report. The export exercise was completed based

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<sup>23</sup> Commission Implementing Regulation (EU) No 1242/2014 of 20 November 2014 laying down rules pursuant to Regulation (EU) No 508/2014 of the European Parliament and of the Council on the European Maritime and Fisheries Fund with regard to the presentation of relevant cumulative data on operations

on the operation implementation data and value (IR 1242/2014, Annex III, fields 20 and 21, and Annex V) considered relevant for identifying operations related to marine litter. This is important in the case of measures other than those supported under Art. 40.1(a). Table 11 (in the Annex) provides an overview of relevant Articles on marine litter, related measures and relevant implementation data, according to which the export exercise was carried out.

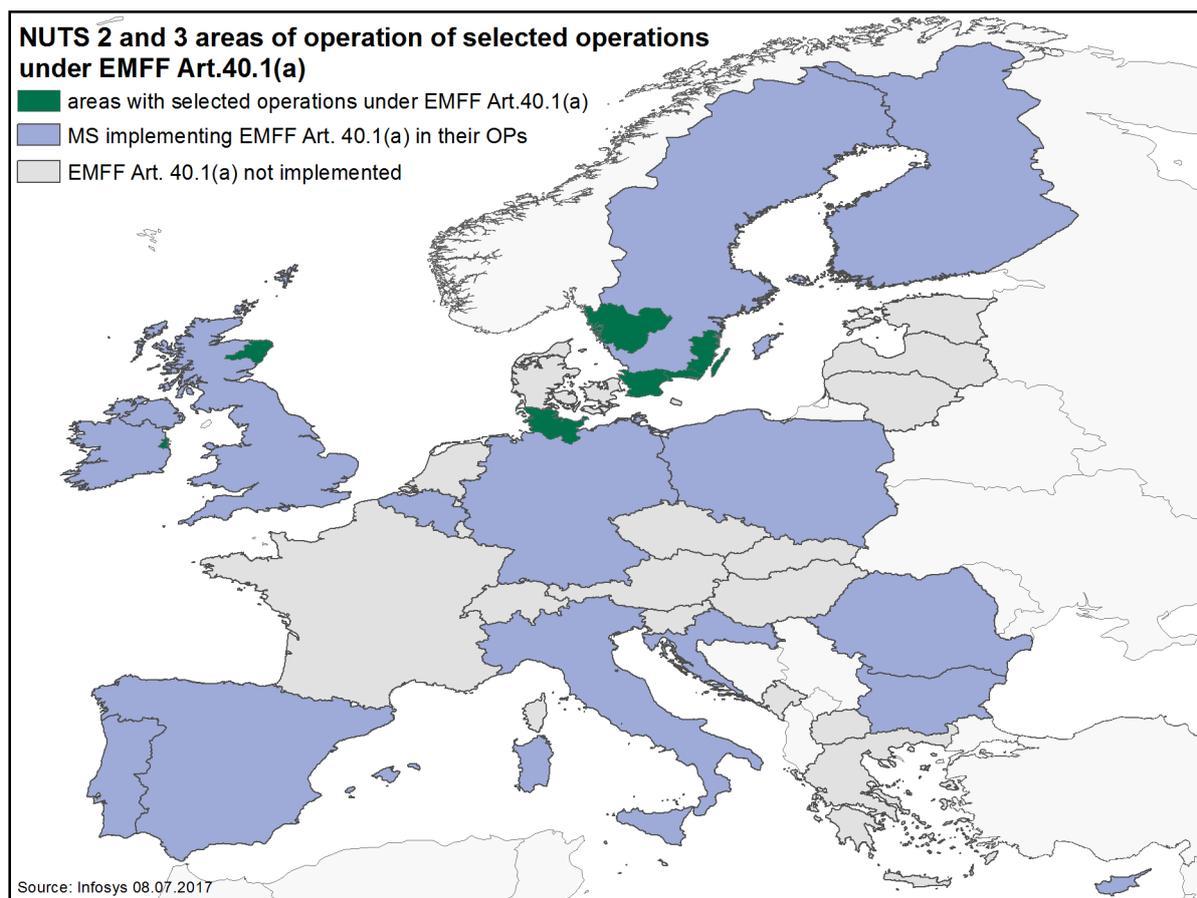
The export data was then reviewed (e.g. with regard to the operation name) and cross-checked with the information from the country reports. Where discrepancies with the country reports were observed, the data from the Article 97.1 reporting were favoured and used in the analysis presented below.

Four out of 14 MS (i.e. less than one third) have started the implementation of marine litter actions under Art. 40.1(a) with 12 operations selected until end of 2016, of which only one was completed by the end of 2016 (IE). This represents 11% of the total 108 operations targeted until 2023 (see also Table 3 below). The leading implementing MS is SE with 9 operations selected, followed by DE, IE and UK each with 1 operation (see Figure 10 below).

In monetary terms the 12 operations selected amount to EUR 0.8 million eligible public costs of which EUR 0.5 million EMFF support. These represent only 2.59% and 2.31% of the total public and EMFF contributions respectively planned under Article 40.1(a) until the end of the programming period. On average the commitments by MS are very low (see also Table 4 below and data export results in Table 12 in the annex).

Focusing on the implementation progress of the MS, in terms of the number of operations 2 MS (IE and SE) have already selected nearly half of the operations planned until 2023 (50% and 47%), in comparison to UK (20%) and DE (13%) (see Table 3).

In financial terms the commitment rate of the mentioned actions ranges between 36% and 29% for SE and IE respectively, and 18% and 14% for UK and DE (see Table 4).



**Figure 10: MS implementing EMFF Art. 40.1(a) and areas with selected operations (data source: OP/AIR, Art.97.1 reports 2014-2015, 2016 (FAME DB))**

**Table 3: Measures funded under Article 40.1(a): Number of selected operations**

MS	No. Operations Target value 2023	No. Operations selected until 2016	% No. Operations selected vs. target
BE	5		0%
BG	7		0%
CY	2		0%
DE	8	1	13%
ES	10		0%
FI	3		0%
HR	15		0%
IE	2	1	50%
IT	20		0%
PL	3		0%
PT	6		0%
RO	3		0%
SE	19	9	47%
UK	5	1	20%
<b>Total 14 MS</b>	<b>108</b>	<b>12</b>	<b>11%</b>

Source: Art.97.1 reports 2014-2015, 2016 (FAME DB)

**Table 4: Measures funded under Article 40.1(a): Public and EMFF contribution of selected operations**

MS	Public contribution 2014-2020	Eligible public cost selected operation 2016	%Total eligible. Public Cost	EMFF contribution 2014-2020	EMFF support selected operation 2016	% EMFF support
BE	400.000,00			200.000,00		
BG	560.404,77			420.303,58		
CY	200.000,00			150.000,00		
DE	800.000,00	114.700,00	14%	600.000,00	86.025,00	14%
ES	8.722.619,87			6.541.964,87		
FI	250.000,00			100.000,00		
HR	200.000,00			150.000,00		
IE	500.000,00	143.000,00	29%	250.000,00	71.500,00	29%
IT	4.250.000,00			2.125.000,00		
PL	7.500.000,00			5.625.000,00		
PT	5.333.333,33			4.000.000,00		
RO	640.000,00			480.000,00		
SE	1.191.895,00	432.709,34	36%	715.137,00	259.625,61	36%
UK	661.679,33	117.353,27	18%	496.259,50	88.014,95	18%
<b>Total 14 MS</b>	<b>31.209.932,30</b>	<b>807.762,61</b>	<b>3%</b>	<b>21.853.664,95</b>	<b>505.165,56</b>	<b>2%</b>

Source: Art.97.1 reports 2014-2015, 2016 (FAME DB)

The main focus of the operations is primarily the collection of ALDFG (all 9 operations in SE), followed by: the provision of litter collectors and bags, including the free disposal of marine waste in fishing ports (mentioned in 2 operations in DE and IE); the treatment and processing of waste (mentioned in 2 operations in DE and IE); net recycling (mentioned in 2 operations in IE and UK); the collection of marine litter in general (mentioned in 1 operation in DE); and awareness raising (mentioned in 1 operation in IE)<sup>24</sup>.

In addition to the operations mentioned above, the country reports provided information on further projects (not recorded in the FAME DB). This is the case for 3 operations in UK, possibly selected in 2017 only (amounting to around EUR 0.3 million total eligible costs and with a focus on the provision and disposal of marine litter collection bags) and one additional operation in SE for the collection of derelict fishing nets. Including these additional projects, the total number of selected operations by June 2017 rises to 16, i.e. 14.8% of the target value for 2023.

<sup>24</sup> It has to be noted that 2 operations, one in DE and the other in IE, include a range of activities that can be assigned to different categories or foci of activity. This is the reason why these operations are mentioned more than once under the groups of foci above.

## **Main findings II:**

### **Operations under other measures**

#### **Art. 43.1: Fishing ports, landing sites, etc. – Investment in facilities for waste and marine litter collection**

- No relevant operations identified;

#### **Art. 63: CLLD under UP4**

- 4 operations identified as possibly relevant to marine litter: 3 in LV and 1 in FI (source Art. 97.1 reports/FAME DB); however, LV is not included in the 14 MS selected for the present review; and for FI there is no reference in the country report from the field work;
- **Foci** of identified operations with possible relevance are:
  - Enhancement of the quality of the environment and improvement of beaches;
  - Reduction of the anthropogenic load;
  - Fisheries and seabed control.

#### **Art. 80.1.b and c: IMP under UP6 – Protection of the marine environment**

- 5 selected operations identified as relevant to marine litter (in NL), and 1 possibly relevant (in MT); however, NL and MT are not included in 14 MS selected for the review and there may be additional operations in FI;
- Eligible public costs of the 5 NL selected operations amount to around EUR 2 million, of which EMFF amounts to around EUR 1.5 million.
- **Foci** of operations are:
  - Studies to support a deal with the shipping sector on waste handling;
  - Studies on the effects of microplastics on the aquatic / marine environment;
  - Monitoring riverine litter;
  - School-education and public awareness on the sustainable use of the marine environment and prevention of (waste) pollution; and
  - Implementation of a river rubbish disposal.

Source: OP/AIR, Art.97.1 reports 2014-2015, 2016 (FAME DB), country reports

The export and filtering of data related to fishing ports and the relative investment in facilities for waste and marine litter collection (Article 43.1) did not provide any relevant data. The selection of operations based on the implementation data 'type of investment' and the description 'environmental protection' (the only one deemed relevant, see also Table 11 in the

Annex) provided only one operation which, according to the operation name, was not related to any marine litter action (see export data in Table 13 in the Annex).

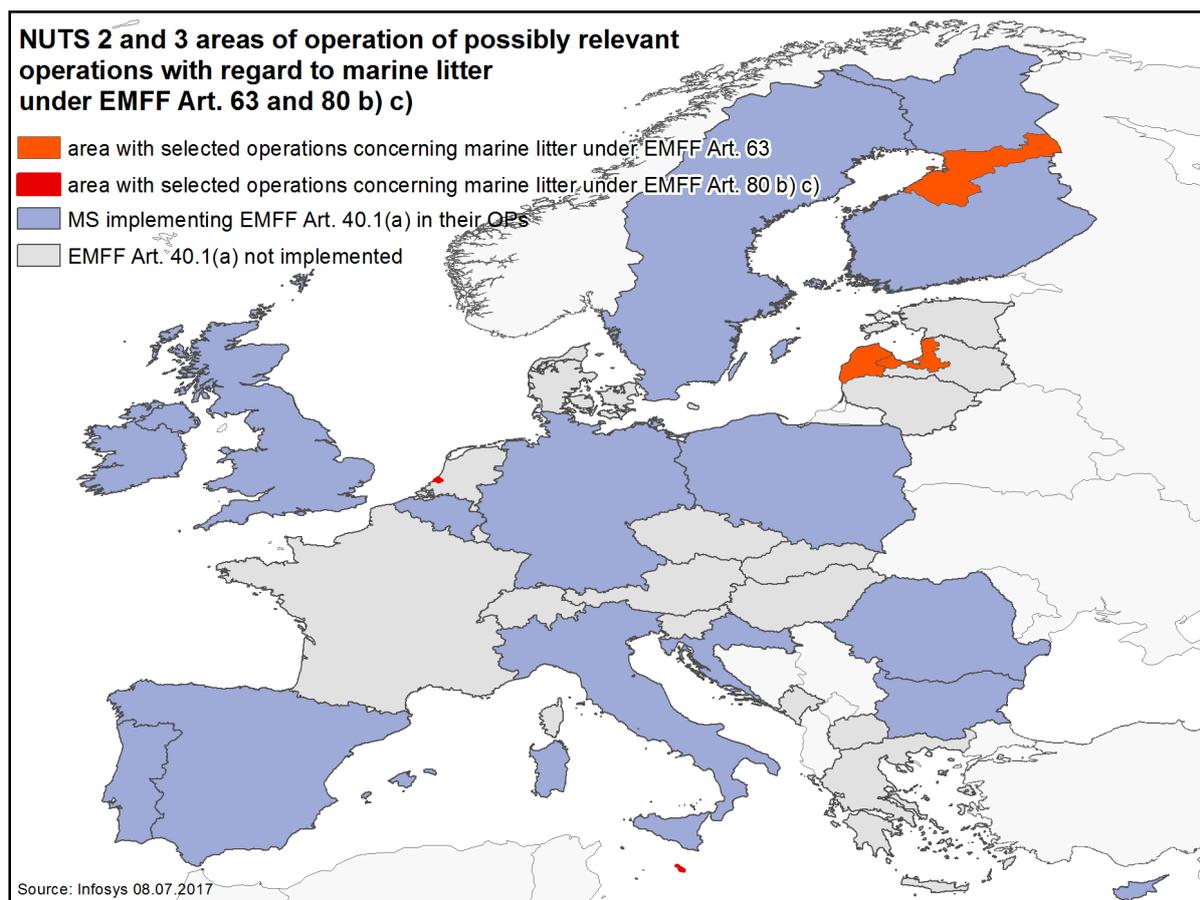
With regard to the **operations under CLLD (Article 63)** a first selection based on the 'type of investment' 'environmental protection', resulted in 17 operations (10 from LV and 7 from FI) (see Table 14 in the annex), including many actions with no apparent relation to marine litter. A second selection on the basis of the operation name identified 4 operations, 3 from LV and 1 from FI that could possibly be relevant to marine litter mitigation. These 4 operations amount to around EUR 0.37 million total eligible costs, with EUR 0.33 million eligible public costs (of which EUR 0.28 million is EMFF contribution) (see Table 15 in the Annex).

Two of the selected operations in LV focus on the "enhancement of the quality of the environment" and "the improvement of beaches", while the third one aims at reducing the "anthropogenic load" in a coastal district of LV. These latter projects could be related to marine litter e.g. to some cleaning-up activities, however, this assumption could not be verified since LV is not among the MS selected for field work in the study, i.e. no further details have been collected through field research (country report).

The fourth operation in FI refers to the "coordination of fisheries and seabed control"; this initiative could possibly be related to the removal of marine litter from the seabed, but could also be connected to the Marine Strategy Framework Directive (MSFD), particularly Descriptor 6, Sea-floor Integrity, and the related use of fisheries data<sup>25</sup> or even the involvement of fishermen. Unfortunately, the country report did not provide any indication on this operation in particular, meaning the relevance to marine litter could not be clarified.

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<sup>25</sup> The correlation of vessel monitoring (VMS) and logbook data from fishing vessels is being used, among others, to provide evidence on the seafloor integrity.



**Figure 11: MS implementing EMFF Art. 63 and 80(b) and (c) and areas with selected operations (data source: OP/AIR, Art.97.1 reports 2014-2015, 2016 (FAME DB))**

The export of data on operations supported under IMP (Article 80) shows a higher degree of relevance to marine litter: out of 7 selected operations, 5 projects (all NL) are clearly relevant and 1 (MT) is possibly relevant to marine litter. However, as none of the relevant operations involves support to the fishing industry to fight marine litter, they are only mentioned here as background information.

These operations combined amount to around EUR 3.6 million total eligible costs. Considering only the 5 relevant operations in NL the total budget is roughly EUR 2 million, with EUR 1.5 million EMFF contribution (see also Table 16 in the annex). The initiatives implemented are rather diverse, but can be clustered as follows:

- Research / studies (scientific and other):
  - Two studies to support a green deal with shipping sector on waste handling;
  - Studies on the effects of nano- and microplastics on the aquatic / marine environment;
  - Monitoring riverine litter;
- Awareness raising:
  - School-education and public awareness on marine environment sustainable use and prevention of (waste) pollution;
- Mitigation actions:
  - Implementation of a river rubbish disposal;

The scope of the operation name in MT, "Marine environmental monitoring: towards effective management of Malta's marine waters" is too broad to make an assumption with regard to any marine litter action. However, potential relevance cannot be excluded.

Since the operations selected above under IMP are implemented by MS not belonging to the list of MS selected for the present study, no further details can be reported at this stage.

In addition to the initiatives outlined above, the FI country report makes reference to a further operation already selected: "RoskatPois! Examining the state and sources of littering in the marine environment and determining means to reduce marine littering", with a total eligible budget of EUR 0.4 million. This operation is not recorded in the FAME DB (as probably only started in 2017) and can possibly be assigned to the measures funded under IMP as well<sup>26</sup>.

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<sup>26</sup> To be clarified with the GE and the MA.

## 4.5 Planned operations

### Main findings:

#### Art. 40.1(a): Collection of waste by fishermen

- 7 MS have a total of **13 operations in planning** under this article:  
**BE (1), DE (1), FI (1), PL (5), PT (1), SE (3)** and **UK (1)**;
- Including both **selected and planned operations**,
  - **8** out of 14 MS are already dealing with operations under Art. 40.1(a);
  - **There are 29 operations** in total, i.e. **27%** of the **target value for 2023**;
- Approximate total eligible costs are estimated at EUR 14 million.

#### Operations under other measures

- **5 MS** are also planning **9 operations** under other articles:  
**BG (1), DE (2), IE (4), IT (1)** and **PT (1)**;
- The project descriptions provided (from the country reports) suggest that:
  - 1 operation (PT) is under **Art. 43.1** (Fishing ports – Investment in facilities for waste an marine litter collection);
  - 2 operations (IE, IT) is under Art. 63 (CLLD); and
  - 5 operations (DE, IE) will fall under Art. 80.1(b) and (c) (IMP);
- Approximate total eligible costs are estimated at EUR 2.7 million.

Source: Country reports

Based on the information provided in the country reports, 7 MS are planning a total of 13 operations under Article 40.1(a) with estimated total eligible costs of around EUR 14 million. These MS are BE, DE, FI, PT and UK with 1 operation each, SE with 3, and PL with 5. Taking into consideration the 4 MS (DE, IE, SE, UK) already implementing measures under this article (i.e. with operations already selected), as well as the 4 new MS (BE, FI, PL and PT) with planned activities, in total 8 out of 14 MS are already dealing with 'fishing for litter' actions. Summing up both selected and planned operations, the number of 'fishing for litter' projects is 29 in total, i.e. 27% of the target of 108 operations for 2023.<sup>27</sup>

The foci of the planned activities is primarily the collection of marine waste by fishermen and, particularly the removal of ALDFG (11 operations) as well as the provision of bags to fishermen for the collection of waste (2 operations). DE is also planning a different set of activities, including research (analysis of the composition and origin of marine litter) and awareness raising (environmental education on marine litter).

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<sup>27</sup> No statement can be made concerning the financial commitment so far as the target values are defined in public and EMFF contribution, while the numbers available from the country reports on selected and planned operations refer only to total eligible costs.

Furthermore, 5 MS (BG, DE, IE, IT and PT) claim to be planning a total of 9 operations that, following the description given in the country reports, can be allocated to measures under other articles (other than Article 40.1(a)<sup>28</sup>). These are:

- Article 43.1, Fishing ports – Investment in facilities for waste and marine litter collection: 1 operation in PT (the first action under this article recorded so far), with an estimated total eligible cost of EUR 1.7 million;
- Article 63 – CLLD: 2 operations, one in IE and another in IT; the focus of these projects is mainly awareness raising (organisation of stakeholder and public educational events and participation in events in the context of waste management and marine litter actions);
- Article 80.1(b) and (c) – IMP: 5 operations, 2 in DE and 3 in IE, with a strong focus on research:
  - Developing alternatives for dolly ropes in beam trawl fisheries (modification of net design) (DE);
  - Investigating the distribution of micro plastic in sea animals of different trophic levels and modes (DE);
  - Investigating the potential for the recovery of oil based products from waste fishing nets (IE);
  - Increasing resource efficiency and effective waste management for the fishing industry (IE); and
  - Testing of waste management technologies on fishing vessels and fishing boats.

The approximate total eligible cost of the operations planned under the other articles above is EUR 2.7 million.

See also Figure 12 below.

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<sup>28</sup> The allocation of planned operations under specific measures needs to be clarified with the MA since the country report does not give indications about the related article number or even PA under which funding is planned.

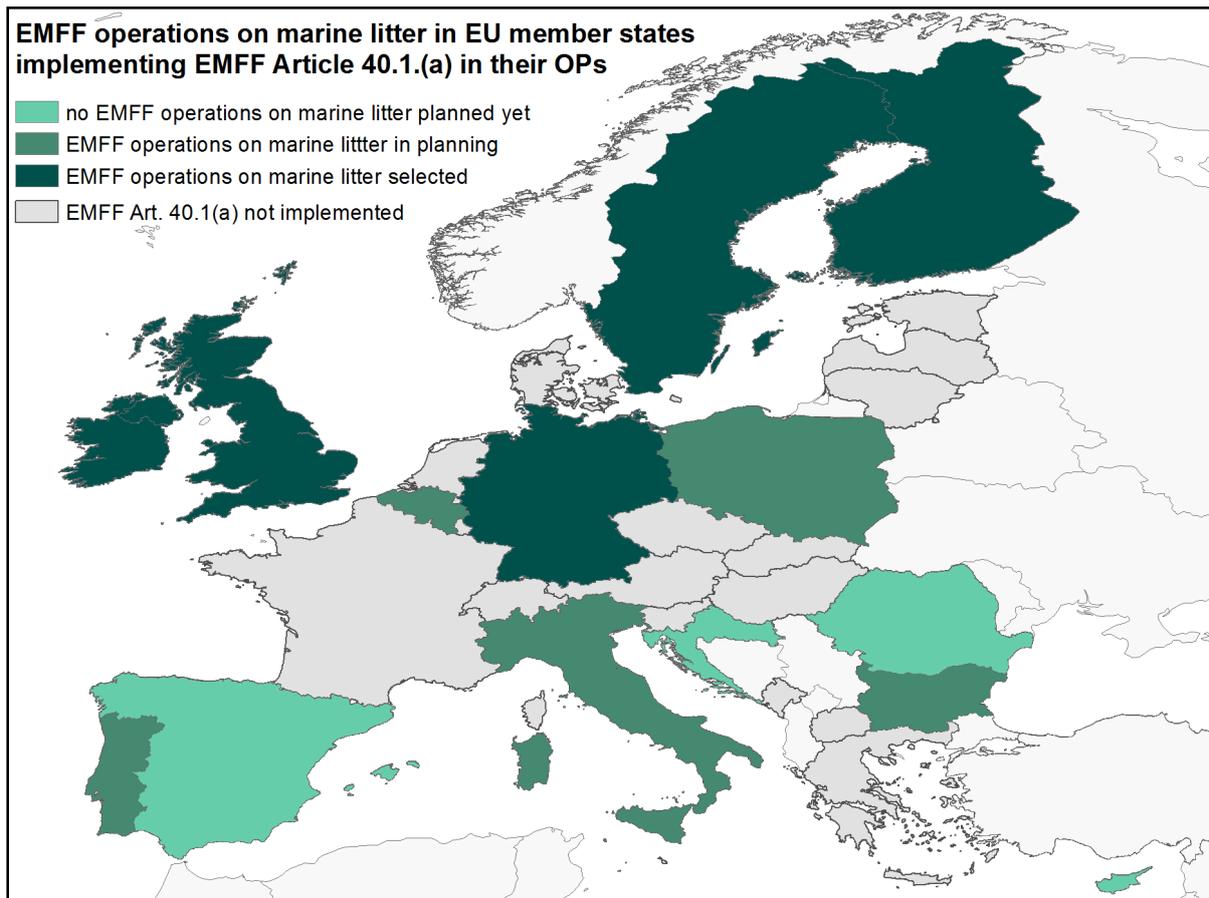


Figure 12: MS with selected and planned EMFF projects with focus on marine litter

## 5 Other activities to reduce marine litter

### Main findings:

- **Actions involving fishermen: 19 projects** implemented by 13 MS (all of the 14 selected MS except CY);
- Actions involving other stakeholders: 6 projects indicated (6 MS);
- Main focus of projects: **awareness raising**.
- Lessons learned relate to the importance of:
  - Understanding the amount of marine litter in the marine environment, the types of litter, types of plastic and what you can do with it;
  - The possibility of reducing the negative impact of lost nets;
  - Minimising gear loss through good practice and consideration of risks. Avoiding mobile / static gear conflict is key;
  - The provision of free, easily accessible skips for disposal of gear;
  - Sending redundant fishing gear (nets, ropes) for recycling.

Source: Country reports

### 5.1 Sources of funding

Besides EFF and EMFF, operations including actions on marine litter are or were also funded by other EU sources, namely:

- The EU LIFE Programme, the EU's financial instrument supporting environmental, nature conservation and climate action projects throughout the EU;
- the Cypriot Civil Society in Action Programme, using money of the European Aid Programme for reconciliation, confidence building measures, and support to civil society;
- the Interreg V-A Romania-Bulgaria programme;
- the Interreg Atlantic Area programme (ERDF), promoting cooperation of 37 Atlantic countries;
- the Adriatic IPA Cross Border Cooperation Programme; and
- the MARELITT Programme aimed at assisting EU Member States in achieving 'good environmental status' (GES) of all EU marine waters by 2020 by reducing the impact of marine litter on the coastal and marine environment, in particular MARELITT Baltic (Interreg Baltic Sea Region Programme; ERDF), reducing the impact of marine litter in the form of derelict fishing gear in the Baltic Sea.

Further funding for operations including actions on marine litter were realised with funding from national authorities and organisations, amongst others:

- the Stichting voor Duurzame Visserijontwikkeling (SDVO) - Foundation for sustainable fisheries development in BE;

- the Vlaamse Visserij Coöperatie (VVC) in BE;
- the National Agency of Fisheries and Aquaculture (NAFA) in BG;
- the Department of Agriculture, Environment and Rural Affairs (DAERA), previously Department of the Environment in UK; and
- the foundation BalticSea2020 founded by an individual through a donation of SEK 500 million (EUR 52.6 million), financing projects that are action-oriented, innovative and which contribute to a healthier Baltic Sea.

Funding in the private sector came from ship owners, processors and multiple retailers. It can be assumed that, compared to EU and national funding and taking into account the characteristics of marine litter as a societal problem, the private sector is playing a less significant role in funding marine litter mitigation operations.

## **5.2 Actions involving fishermen**

Actions involving fishermen not funded by EFF or EMFF were concentrating on ‘fishing for litter’ – for derelict gear as well as other marine waste – and disposal of the litter on land. Further activities were directly connected to ‘fishing for litter’ e.g.:

- registration and categorisation of marine litter, including web portals;
- management plans for marine litter;
- gear recycling;
- defining of best practices in mitigating marine litter; and
- awareness raising for and information on the topic of marine litter.

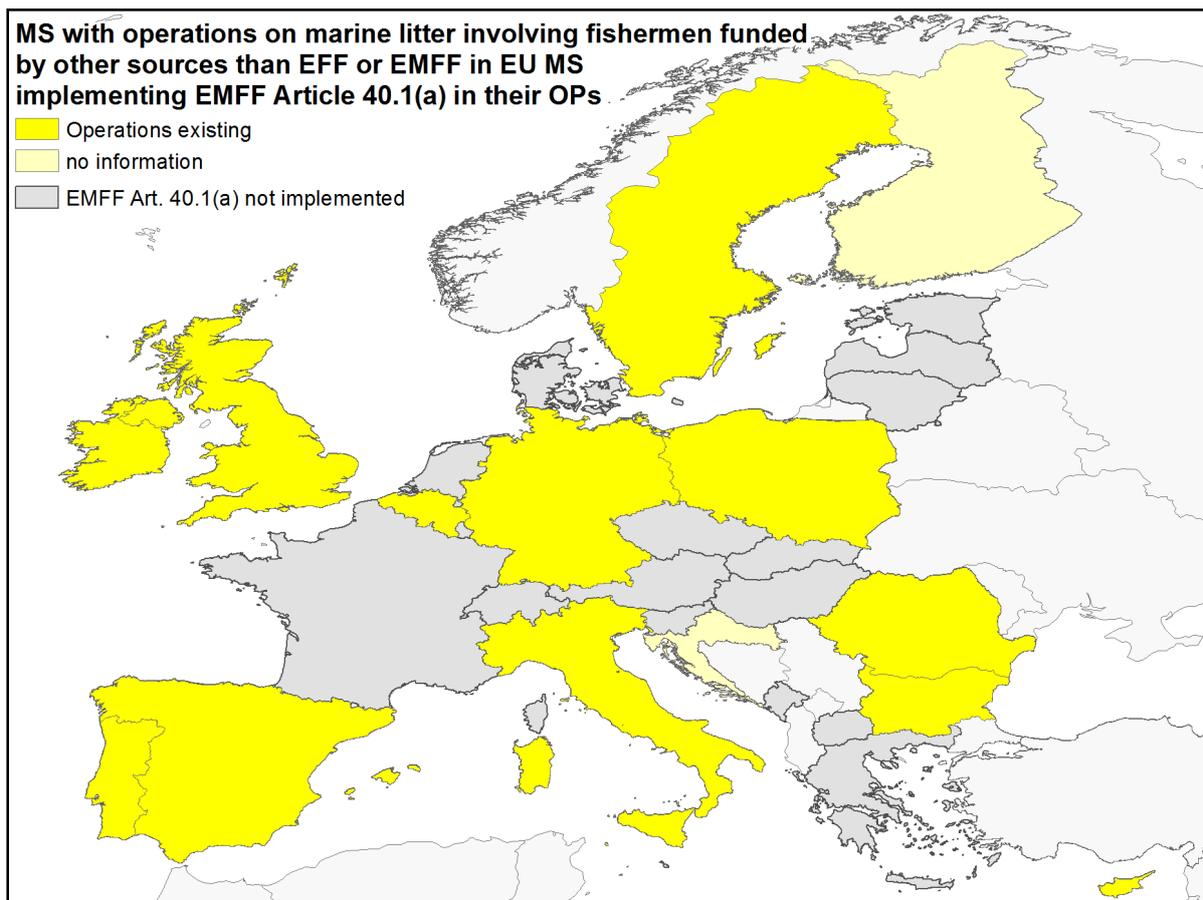


Figure 13: MS with other activities on marine litter involving fishermen

### 5.3 Actions involving other stakeholders

Actions on marine litter not funded by EFF or EMFF and not involving fishermen focussed on various beach cleaning and awareness raising initiatives. Actions were closely linked to:

- registration and categorisation of marine litter;
- studies on type, quantity, distribution, sources and effects of marine litter;
- testing and implementing new ways to manage and recycle waste from fisheries; and
- standardising data collection, monitoring and management of marine litter.

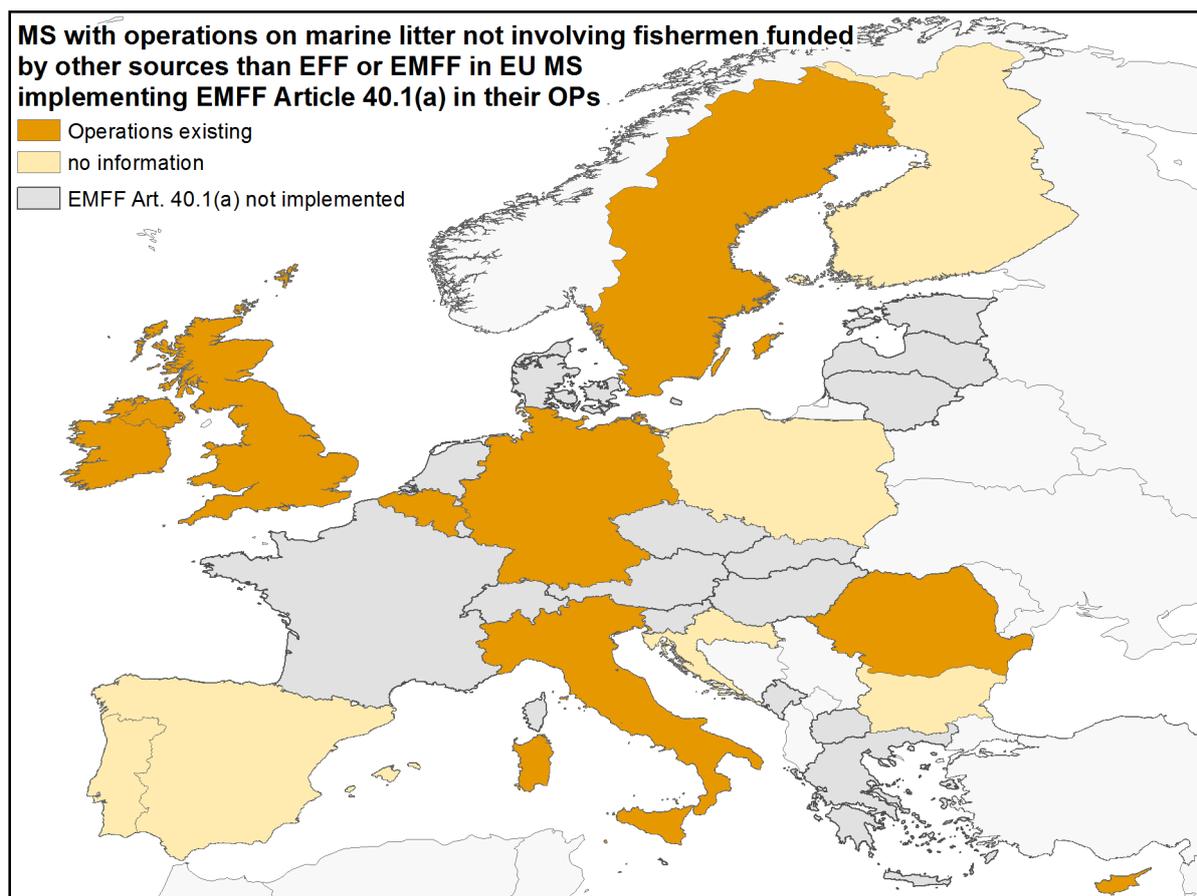


Figure 14: MS with other activities on marine litter involving other stakeholders

#### 5.4 Experiences / lessons learned

Only half of the MS questioned specified experiences and / or lessons learned from actions not funded by EFF or EMFF. Concerned stakeholders are primarily considered to be fishermen and the general public, but also port authorities, tourists, scientists, authorities including fisheries authorities and NGOs.

Most experiences / lessons learned related to the importance of raising awareness about marine litter, ways to avoid and / or reduce it, and general knowledge about it. This was especially true in operations which involved marine litter collection using on board and in port equipment. Experiences related to innovation occurred within scientific projects and within management and recycling initiatives.

Incentives for fishermen and ports arise especially from well-managed waste disposal systems and coastal management plans.

## 5.5 Press coverage of marine litter

### **Main findings:**

- Marine litter is increasingly present in the press; the GEs screened 42 articles with references to marine litter, most of them (76%) appearing in popular media.
- The majority (50%) deal mainly with household waste in coastal areas; 21% deal with nets, 7% with other fishing gear, 2% with other fishing related items and 19% with a combination of fishing activity marine litter types.
- The large majority of articles deal with awareness issues (74%); other foci are innovation, equipment on board, local community actions and other issues (each between 5% and 7%).
- Most of the articles reviewed (78%) were short (length of few pages) and non-technical, with only a few including case studies and in depth articles. They were usually written in simple colloquial language.
- **Lessons learned:**
  - Marine litter is becoming an increasingly important issue in the media. However, the focus is on household litter in coastal areas since readers can easily identify themselves with the problem.
  - Marine litter articles mentioning litter from fishing activities only do so in generic terms without focussing on specific types of litter (e.g. nets).
  - The focus lies on awareness of the problem and using simple language, and technical solutions and approaches are generally not addressed.

Source: Country reports

In the course of the field work to complete this report, the GEs also conducted a simple and non-systematic media search on articles, publications etc. related to marine litter. The results of the analysis of this press coverage is summarised above.

## 6 Discussion and next steps

The assessment provided in this report has shown that the EFF and planned EMFF contribution to mitigating the marine litter problem can be considered limited, with only a minor share of the total number of operations and the total financial commitments being directed to operations addressing the problem. However, a positive trend can be observed when comparing the two programming periods. Not only has the number of MS with operations of 'fishing for litter' doubled, but the number of planned operations has increased by around 130% under the EMFF. as for funding level it appears that it could increase by some 300% from the estimated EUR 5.2 Million for the EFF to the planned EUR 22 Million for the EMFF.

Progress in implementation of marine litter-related operations under the EMFF is, with a few exceptions, still quite low (11% in terms of the number of operations and 2% in terms of financial commitment), with 10 out of 14 MS not having started implementation and 6 having no planned measures at all. MS may, however, have started to finance marine litter actions under other Articles, in particular under IMP (but then probably not to support the involvement of fishermen in this respect) and possibly also under CLLD. While many of the accompanying actions related to marine litter (e.g. research, innovation projects, awareness raising, etc.) were supported by other financial means in the past, it seems that MS are increasingly aware of the possibility to support these activities through the EMFF.

Some areas of research relevant to this report could not be well developed within the scope of the present exercise, be it due to missing data/information from the MS or to the amount of literature and other information to be reviewed. In order to deepen the assessment on marine litter further, the following steps could be considered for the future:

- Conduct a few enquiries in the selected MS in order to confirm the allocation of operations to specific measures and clarify discrepancies in financial data based on the FAME SU export data (where needed);
- Collect additional information on public and/or EMFF contributions in planned operations in particular in CLLD projects (with FARNET's assistance) in particular on the type of compensation granted to fishermen for 'fishing for litter' (financial support calculated on the basis of litter collected, working hours invested, or as a lump sum);
- Develop indicators to evaluate the effectiveness and efficiency of the marine litter-related actions undertaken by the fishing industry to find out how successful different actions have been i.e. how much litter was gathered and properly disposed of, how much material has been recycled etc. This would then contribute to identifying the best approaches for the involvement of the fishing industry in the reduction of marine litter in general, and of that emanating from the fishing and aquaculture industry in particular.

## 7 Annexes

### 7.1 References for secondary / published information

#### 7.1.1 List of references

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- Sherrington, C., C. Darrah. S. Hann, G. Cole and M. Corbin (2016). Study to support the development of measures to combat a range of marine litter sources. Report for European Commission DG Environment by eunomia. 429 pp. Downloaded from <http://ec.europa.eu/environment/marine/good-environmental-status/descriptor-10/pdf/MSFD%20Measures%20to%20Combat%20Marine%20Litter.pdf> on 17 August 2017.

UNEP (2009). Marine Litter: A Global Challenge. Nairobi: UNEP. 232 pp. (page 13)

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Veiga, J.M., Fleet, D., Kinsey, S., Nilsson, P., Vlachogianni, T., Werner, S., Galgani, F., Thompson, R.C., Dagevos, J., Gago, J., Sobral, P. and Cronin, R.; 2016; Identifying Sources of Marine Litter. MSFD GES - TG Marine Litter Thematic Report; JRC Technical Report; EUR 28309; doi:10.2788/018068.

Vlachogianni, Th., Anastasopoulou, A., Fortibuoni, T., Ronchi, F., Zeri, Ch.,(2017). Marine Litter Assessment in the Adriatic and Ionian Seas. IPA-Adriatic DeFishGear Project, IO-ECSDE, HCMR and ISPRA. pp. 168 (ISBN: 978-960-6793-25-7)

Werner, S., Budziak, A., van Franeker, J., Galgani, F., Hanke, G., Maes, T., Matiddi, M., Nilsson, P., Oosterbaan, L., Priestland, E., Thompson, R., Veiga, J. and Vlachogianni, T.; 2016; Harm caused by Marine Litter. MSFD GES TG Marine Litter - Thematic Report; JRC Technical report; EUR 28317 EN

### 7.1.2 List of published information in the MS collected by GEs

Agência Portuguesa do Ambiente 'Monitorização do Lixo Marinho',

<https://www.apambiente.pt/index.php?ref=17&subref=1249>, Portuguese

AGROPORTAL: 80% do Lixo Marinho é de origem terrestre e não provocado pela pesca,

<https://www.agroportal.pt/80-do-lixo-marinho-e-de-origem-terrestre-e-nao-provocado-pela-pesca/>, Portuguese

Anon (undated). 60.000 de tone de gunoaie, stranse din Marea Neagra, Deseurile au provocat moartea a numeroase specii de pesti (60,000 tons of garbage collected from the Black Sea. Waste has caused the death of many species of fish),

<http://stirileprotv.ro/stiri/actualitate/60-000-de-tone-de-gunoaie-stranse-din-marea-neagra-deseurile-au-provocat-moartea-a-numeroase-specii-de-pesti.html>, Romanian

Anton E., Radu Gh., Nenciu M. (2013), The situation of marine litter collected during demersal surves in 2011 in the Romanian Black Sea, Cercetari Marine / Recherches Marines, nr. 43: 350-357, ISSN: 0250-3069,

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#### 7.1.4 Best practice projects

Isla Verde Project (2014): Prevention of marine litter deposition and protection of marine fauna and flora, <http://islasverdes.com/>, Spanish

Pesca por um Mar sem Lixo: Project No. 31-03-03-01-FEP-184, co-financed by the EFF is an example of good replicable practice. It included a study for the quantification and classification of waste generated on board and captured in fishing gear. It also allowed for the assessment of the operability of a garbage collection system; the promotion of good environmental practice in order to maintain or change existing behaviour and practices, and the installation of an integrated waste management systems in fishing ports. The pilot project, the “Pesca por um Mar sem Lixo”, took place in the fishing port of Peniche. This project was implemented jointly by the port authority (DOCAPESCA), fishermen organisations (ADAPI, OPCENTRO and CAPA), Peniche Municipality, waste management companies (VALORSUL and AMBINATURA), and an NGO (Associação Portuguesa do Lixo Marinho). From the three fishermen organisations, 66 vessels joined the project, representing 419 fishermen. The vessels recovered 151,875 litres of plastic residue and 295,000 litres of undifferentiated litter. DOCAPESCA intends to expand the project to the fishing port of Aveiro in 2017. Until 2020, the objective is to implement this project in a total of 15 fishing ports in Mainland Portugal. <https://www.youtube.com/watch?v=hPkeS6tb9R4&feature=youtu.be>, Portuguese

## 7.2 Data

**Table 5: Types of marine litter in the MS**

Type of litter / MS	BE	BG	CY*	DE	ES	FI	HR	IE	IT	PL	PT	RO	SE	UK	TOTAL
<b>Nets</b>															
Nets															<b>12</b>
Net repair pieces															5
Oyster/mussel nets															3
<b>Other Fishing Gears</b>															
Dolly ropes															6
Fishing lines, monofilament lines															<b>9</b>
Strapping bands															4
Crab/Lobster pots, crates and tops															5
Octopus pots															2
Oyster trays															2
Oyster 'sticks'															2
Fish aggregation devices (FADs)															2
Fish hooks															5
Bobbins (for fishing reel)															2
<b>Other litter</b>															
Rope															<b>9</b>
Floats for fishing nets															<b>7</b>
Buoys															6
Fenders															6
Fish/shellfish storage boxes															2
Feed bags/boxes															3
Bait containers/packaging															5
PPE (e.g. rubber gloves, boots)															<b>7</b>
Tags															2

Type of litter / MS	BE	BG	CY*	DE	ES	FI	HR	IE	IT	PL	PT	RO	SE	UK	TOTAL
Plastic sheeting (e.g. from mussel culture - "Tahitians")															2
Light sticks & packaging (sometimes used in conjunction with FADs)															2
General boat waste (e.g. Jerry cans, oil cans, buckets)															7
Other fishing related items (weights, swivels, sinkers, lures, hooks)															5
<b>Other</b>															
Other															3

Legend:

*It is a big issue*



*It is an issue*



**Table 6: Marine litter operations (PA3, PA4) vs. collective actions under EFF**

MS	Total number of operations				Total eligible costs (€)			
	Marine litter PA3 + PA4	Marine litter PA3 only	Measure 3.1. Collective actions	% marine litter (PA3 only) of Measure 3.1	Marine litter PA3 + PA4	Marine litter PA3 only	Measure 3.1. Collective actions	% marine litter (PA3 only) of Measure 3.1
BE	0							
BG	0							
CY	0							
DE	0							
ES	23	15	1.691	0,89%	722.016,39	113.169,42	98.790.413,12	0,11%
FI	0							
HR	0							
IE	2	1	184	0,54%	73.200,00	5.000,00	5.821.654,54	0,09%
IT	4	1	103	0,97%	462.000,00	117.000,00	4.669.843,96	2,51%
PL	1	1	101	0,99%	2.819.421,64	2.819.421,64	12.439.539,69	22,66%
PT	2	2	132	1,52%	178.839,22	178.839,22	16.138.445,00	1,11%
RO	0							
SE	25	25	77	32,47%	1.493.534,00	1.493.534,00	26.685.827,97	5,60%
UK	2	2	199	1,01%	58.653,00	58.653,00	24.914.381,90	0,24%
<b>TOTAL 14 MS</b>	<b>59</b>	<b>47</b>	<b>2.487,00</b>	<b>1,89%</b>	<b>5.807.664,25</b>	<b>4.785.617,28</b>	<b>189.460.106,18</b>	<b>2,53%</b>

**Table 7: Operations implemented under EFF**

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
ES	311CFB D00005	ISLA VERDE	The project aims to raise awareness among vessel crews about the importance of correct collection and management of waste. It aims to equip eight ships with disposals to separate collected waste in order to reduce marine litter and improve its management. The waste will be codified by QR (Quick Response Code) to accelerate and simplify the issuing of MARPOL certificates.	Fundación Biodiversidad / COOP DE ARMADORES DE PESCA DE PUERTO DE	93,073.66	30/04/2014	Vigo
ES	311CGA L00009	Treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	Treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	XUNTA DE GALICIA	790.50	21/05/2007	Ferrol
ES	311CGA L00010	Plant treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	Plant treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	XUNTA DE GALICIA	1,015.50	29/05/2007	Ferrol
ES	311CGA L00011	Rental and transportation of collectors for the removal of waste from the Ferrol estuary (Ría de Ferrol)	Rental and transportation of collectors for the removal of waste from the Ferrol estuary (Ría de Ferrol)	XUNTA DE GALICIA	210.00	17/08/2007	Ferrol
ES	311CGA L00014	Rental and transportation of collectors for the removal of waste	Rental and transportation of collectors for the removal of waste – cleaning plan for the Ferrol estuary (Ría de Ferrol) (toca salgado, s.l.)	XUNTA DE GALICIA	130.00	30/10/2007	Ferrol
ES	311CGA L00015	Rental and transportation of collectors for the removal of waste	Rental and transportation of collectors for the removal of waste - Ferrol estuary (Ría de Ferrol) cleaning	XUNTA DE GALICIA	0.00	31/12/2007	Ferrol
ES	311CGA L00017	Rental and transportation of collectors for the removal of	Rental and transportation of collectors for the removal of waste – cleaning plan for the Ferrol estuary	XUNTA DE GALICIA	513.60	05/12/2007	Ferrol

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
		waste					
ES	311CGA L00019	Treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	Treatment of waste originating from the cleaning of the Ferrol estuary (Ría de Ferrol)	XUNTA DE GALICIA	624.00	14/12/2007	Ferrol
ES	311CGA L00020	Rental and transportation of collectors for the removal of waste	Rental and transportation of collectors for the removal of waste from the Ferrol estuary (Ría de Ferrol)	XUNTA DE GALICIA	1,240.00	14/12/2007	Ferrol
ES	311CGA L00042	Rental and transportation of collectors for the removal of waste from the Burgos estuary (Ría do Burgo)	Rental and transportation of collectors for the removal of waste from the Burgos estuary (Ría do Burgo)	XUNTA DE GALICIA	5,634.22	31/12/2008	Coruña, A
ES	311CGA L00201	Transport and waste treatment expenses shellfish bank regeneration	Transport and waste treatment expenses generated by the shellfish bank regeneration activities by the Pontedeume association.	XUNTA DE GALICIA	5,150.00	22/06/2009	Pontedeume
ES	311CGA L00212	Transport and waste treatment expenses, Pontedeume association	Transport and waste treatment expenses, Pontedeume association	XUNTA DE GALICIA	1,200.00	10/07/2009	Pontedeume
ES	311CGA L00215	Transport and waste treatment expenses, Pontedeume association	Transport and waste treatment expenses, Pontedeume association	XUNTA DE GALICIA	1,600.00	05/08/2009	Pontedeume
ES	311CGA L00216	Transport and waste treatment expenses, Pontedeume association	Transport and waste treatment expenses, Pontedeume association	XUNTA DE GALICIA	350.00	28/10/2009	Pontedeume
ES	311NCA T00114	Waste management on boats	Waste management on boats, 22 recycling bins for selective waste management.	COFRADÍA DE PESCADORES DE LA ESCALA	797.94	30/11/2011	Escala, L'

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
ES	411CAN D30029	Improvement of waste management of Tarifa	Installment of enclosures in the main touristic areas as well as in the surroundings of the Estrecho national park, that encompass and group the containers to avoid them being moved by the wind.	URBANIZADORA TARIFEÑA, S.A. (URTASA)	39,856.20	11/07/2012	Tarifa
ES	411CAN D40068	Adaptation of recycling plant "Environmental centre EL ESPARRAGAL"	The project consists of the carrying out of adaptation and modernisation works on the reception and classification of different types of waste.	ORTEGA VELA, S.A.	295,138.78	29/11/2013	Estepona
ES	411CAN D50010	Implementation of integral waste management system and socio-environmental development	Assembly and implementation of an integral waste management system on each boat, generated in the port of Motril, to recycle everything left over and the installation of a clean point in the port.	AS. PARA PROM. ECONÓMICA APROVALLE-TEMPLE-COSTA	208,584.15	26/04/2013	Motril
ES	411CAN D50013	Solar powered auto-compactor for the fishing port of Motril	The solar powered auto-compactor is a piece of equipment for waste collection to be used in large buildings, shopping centres, beaches, sports markets and events.  It is situated in the fishing port of Motril so as to collect the waste generated from the fish markets. It aims to be more efficient in waste collection as well as decrease the odours associated with it.	AUTORIDAD PORTUARIA DE MOTRIL	36,875.00	13/12/2013	Motril
ES	411NCA N00131	Tuineje authority (Marine contamination course) (25085)	Course on marine pollution and waste management.	AYUNTAMIENTO DE TUINEJE	3,192.83	04/08/2015	Tuineje
ES	411NCA T00014	Green point for the selective waste collection in the Sant Carles de la Rapita port	Green point for the selective waste collection in the Sant Carles de la Rapita port.	COFRADÍA DE PESCADORES DE SANT CARLES DE LA RÀPITA	10,000.01	05/07/2010	Sant Carles de la Ràpita
ES	411NCA T00015	Collection centre for residual oils in the Sant Carles de la Rapita port.	Collection centre for residual oils in the Sant Carles de la Rapita port.	COFRADÍA DE PESCADORES DE SANT CARLES DE LA RÀPITA	11,000.00	06/07/2010	Sant Carles de la Ràpita

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
ES	411NCA T00056	Adequacy and treatment of waste in 'pequeña venecia'	Adequacy and treatment of waste in 'pequeña venecia'	UNIÓ PRODUCTORS MOL·LUSCS DELTA DE L'EBRE	4,200.00	23/10/2013	Sant Carles de la Ràpita
IE	-	Recycling of used Polyethylene Fishing Gear back into the Marine Industry	Using recovered and recycled Polyethylene (PE) or High Density Polyethylene (HDPE) fishing gear to construct a debris deflector or other products to be used in the marine sector.	Public	€ 68,200	March 2010 – December 2011	IE024
IE	-	Fishing For Litter	Consultation with concerned and potential implementation parties on waste management initiatives including a Fishing For Litter programme. The development of two draft Fishing for Litter questionnaires, one for vessels and one for harbour masters.	Public	€ 5,000	March 2011 – November 2011	IE025
IT	07/ACO/11/PU	Progetto "Paint" di rimozione delle palificazioni abbandonate in mare	The project has been implemented in order to remove the abandoned mussel "sticks" from the seafloor and the sea surface in the province of Taranto.	Private operator	117,000	2011	ITF43
IT	09/SZ/11	GAC "Unicità del golfo di Gela"	Promotion and distribution of ecologic culture through the protection and valorization of the environmental and cultural heritage and through environmental education for the use of alternative energy sources, promotion of energy saving, recovery and re-utilization of litter	Other	60,000	2013/2014	ITG14 ITG15
IT	1/SZ/11	GAC "Isole di Sicilia"	Environmental protection and recovery, environmental valorization and education, development of a local system for the collection of marine litter from fisheries activities.	Other	125,000	2013/2014	ITG11 ITG12 ITG13
IT	03/SZ/11	GAC "Golfo di Patti"	Environmental protection and recovery, environmental valorization and education, development of a local system for the collection of marine litter from fisheries	Other	160,000	2013/2014	ITG13

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
			activities.				
PT	OR16-61720-OR1600002/14	Removal of fishing equipment lost by fishermen from the bottom of the Baltic Sea	Removal of lost fishing gear from the seabed	Producer Organization	2,819,421.64	2015-01-14	Baltic Sea
PT	31-03-03-01-FEP-166	Collective Actions	Research on the scale of degradation caused by ghost fishing; analysing the harmful effects of ghost nets on the marine environment; estimating the temporal and spatial dimension of ghost fishing; implementing a broad awareness plan;	Public Entity (Municipality)	159,310.08€	10/07/2013	PT112
PT	31-03-03-01-FEP-184	Collective Actions	Conducting a preliminary study on quantity and classification of waste generated on board and caught in fishing gear; implementation of a pilot experiment to assess the operability of a collection system for garbage captured in fishing nets in appropriate containers; initiatives to promote or improve existing practices on board vessels; integrated management of waste in fishing ports.	Public Entity (DOCA-PESCA)	19,529.14€	31/12/2013	PT150
SE	5112	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	51,349	2007-07-04	SE224
SE	5760	Draggning av spökgarn 2009	Collection of derelict fishing gear	Private operator	58,501	2009-03-26	SE224
SE	5941	Draggning efter spökgarn 2009 och 2010	Collection of derelict fishing gear	Private operator	60,768	2009-08-25	SE224
SE	6349	Draggning efter spökgarn 2011	Collection of derelict fishing gear	Private operator	68,236	2010-12-27	SE224

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
SE	6465	Draggning av spökgarn i södra Öresund	Collection of derelict fishing gear	Private operator	33,790	2011-05-03	SE224
SE	LB 2012 2728	Draggning efter spökgarn runt Gotland	Collection of derelict fishing gear	Private operator	41829	2012-03-27	SE214
SE	LB 2012 3277	Draggning av spökgarn i södra Öresund	Collection of derelict fishing gear	Private operator	49,726	2012-04-16	SE224
SE	LB 2012 4604	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	70,143	2012-06-05	SE224
SE	LB 2012 5160	Draggning efter spökgarn Söderarm-Simpnäs	Collection of derelict fishing gear	Private operator	33,629	2012-03-27	SE214
SE	LB 2012 6104	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	69,070	2012-08-27	SE224
SE	LB 2012 6107	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	69,070	2012-09-04	SE224
SE	LB 2012 6319	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	65,881	2012-09-24	SE224
SE	LB 2012 7467	Draggning av spökgarn i Ålandshav	Collection of derelict fishing gear	Private operator	46,050	2012-11-28	SE214
SE	LB 2012 7650	Draggning och upptagning av spökgarn/fiskenät	Collection of derelict fishing gear	Private operator	25,752	2012-12-12	SE224
SE	LB 2012 790	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	68,236	2011-05-01	SE224
SE	LB 2012 801	Draggning av spökgarn	Collection of derelict fishing gear	Private operator	48,868	2011-09-09	SE224
SE	LB 2012 809	Draggning efter "Spökgarn" på Skånes Sydkust	Collection of derelict fishing gear	Private operator	67,580	2011-11-21	SE224

MS	Info-sys ID	Title	Content of the project	Beneficiary	Total eligible costs [€]	Date of application	NUTS 3
SE	LB 2012 813	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	68,236	2012-01-13	SE224
SE	LB 2012 819	Draggning och upptagning av spökgarn/fiskenät	Collection of derelict fishing gear	Private operator	33,160	2011-11-02	SE224
SE	LB 2013 2544	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	70,977	2013-04-17	SE224
SE	LB 2013 27	Draggning av garn på Skånes sydkust	Collection of derelict fishing gear	Private operator	69,100	2012-12-28	SE224
SE	LB 2013 2745	Draggning efter spökgarn	Collection of derelict fishing gear	Private operator	69,070	2013-04-30	SE224
SE	LB 2013 386	Draggning efter spökgarn på Skånes syd- och ostkust	Collection of derelict fishing gear	Private operator	13,0364	2013-01-22	SE224
SE	LB 2013 572	Draggning av spökgarn i södra Öresund	Collection of derelict fishing gear	Private operator	51,633	2013-02-05	SE224
SE	LB 2013 82	Draggningar av uttjänta fiskeredskap och goda exempel	Collection of derelict fishing gear	Private operator	72,516	2012-12-29	SE110
UK	HOL006 2	Fishing for Litter - Holderness	Provision and disposal of marine litter collection bags	grouping of fishermen (PO, association),	6,000		UKE1
UK	COR005 6	Fishing for Litter April 2014 - September 2015 Cornwall	Provision and disposal of marine litter collection bags	grouping of fishermen (PO, association)	52,653		UKK3

Source: Country reports, FAME 2017

**Table 8: Planned commitment to EMFF Article 40.1(a)**

<b>MS</b>	<b>No. Operations (Target value 2023)</b>	<b>Public Contribution Art. 40.1(a)</b>	<b>EMFF Contribution Art. 40.1(a)</b>	<b>% EMFF of Public Contribution</b>
BE	5	400.000,00	200.000,00	50%
BG	7	560.404,77	420.303,58	75%
CY	2	200.000,00	150.000,00	75%
DE	8	800.000,00	600.000,00	75%
ES	10	8.722.619,87	6.541.964,87	75%
FI	3	250.000,00	100.000,00	40%
HR	15	200.000,00	150.000,00	75%
IE	2	500.000,00	250.000,00	50%
IT	20	4.250.000,00	2.125.000,00	50%
PL	3	7.500.000,00	5.625.000,00	75%
PT	6	5.333.333,33	4.000.000,00	75%
RO	3	640.000,00	480.000,00	75%
SE	19	1.191.895,00	715.137,00	60%
UK	5	661.679,33	496.259,50	75%
<b>Total 14 MS</b>	<b>108</b>	<b>31.209.932,30</b>	<b>21.853.664,95</b>	<b>70%</b>

Source: AIR 2016

**Table 9: Planned commitment to EMFF Article 40.1(a): Public Contribution (Art. 40.1(a) vs. UP1 and total)**

MS	Public Contribution Art. 40.1(a)	Public Contribution UP1	% Art. 40.1(a) of Public Contribution UP1	Total Public Contribution	% Art. 40.1(a) of Total Public Contribution
BE	400.000,00	26.514.661,00	1,51%	68.598.256,56	0,58%
BG	560.404,77	25.514.500,00	2,20%	113.543.228,00	0,49%
CY	200.000,00	18.290.666,00	1,09%	52.610.493,00	0,38%
DE	800.000,00	58.043.333,34	1,38%	285.692.216,69	0,28%
ES	8.722.619,87	524.773.767,54	1,66%	1.558.280.753,00	0,56%
FI	250.000,00	30.000.000,00	0,83%	140.893.168,00	0,18%
HR	200.000,00	134.040.491,00	0,15%	348.759.346,00	0,06%
IE	500.000,00	67.000.000,00	0,75%	239.265.133,00	0,21%
IT	4.250.000,00	346.111.570,00	1,23%	978.107.682,00	0,43%
PL	7.500.000,00	190.800.828,00	3,93%	710.509.513,00	1,06%
PT	5.333.333,33	150.625.002,29	3,54%	507.807.535,92	1,05%
RO	640.000,00	17.871.600,00	3,58%	223.709.082,00	0,29%
SE	1.191.895,00	36.737.236,00	3,24%	172.885.912,00	0,69%
UK	661.679,33	90.803.086,75	0,73%	310.783.491,15	0,21%
<b>Total 14 MS</b>	<b>31.209.932,30</b>	<b>1.717.126.741,92</b>	<b>1,82%</b>	<b>5.711.445.810,32</b>	<b>0,55%</b>
<b>Total EU</b>	<b>31.209.932,30</b>	<b>2.370.046.496,92</b>	<b>1,32%</b>	<b>7.878.564.257,19</b>	<b>0,40%</b>

Source: AIR 2016

**Table 10: Planned commitment to EMFF Article 40.1(a): EMFF Contribution (Art. 40.1(a) vs. UP1 and total)**

<b>MS</b>	<b>EMFF Contribution Art. 40.1(a)</b>	<b>EMFF Contribution UP1</b>	<b>% Art. 40.1(a) of EMFF Contribution UP1</b>	<b>Total EMFF Contribution</b>	<b>% Art. 40.1(a) of Total EMFF Contribution</b>
<b>BE</b>	200.000,00	14.375.000,00	1,39%	41.746.051,00	0,48%
<b>BG</b>	420.303,58	18.921.000,00	2,22%	88.066.622,00	0,48%
<b>CY</b>	150.000,00	12.928.000,00	1,16%	39.715.209,00	0,38%
<b>DE</b>	600.000,00	41.195.000,00	1,46%	219.596.276,00	0,27%
<b>ES</b>	6.541.964,87	352.491.260,84	1,86%	1.161.620.889,00	0,56%
<b>FI</b>	100.000,00	12.300.000,00	0,81%	74.393.168,00	0,13%
<b>HR</b>	150.000,00	86.827.381,00	0,17%	252.643.138,00	0,06%
<b>IE</b>	250.000,00	33.500.000,00	0,75%	147.601.979,00	0,17%
<b>IT</b>	2.125.000,00	173.055.785,00	1,23%	537.262.559,00	0,40%
<b>PL</b>	5.625.000,00	130.175.502,00	4,32%	531.219.456,00	1,06%
<b>PT</b>	4.000.000,00	103.625.000,00	3,86%	392.485.464,00	1,02%
<b>RO</b>	480.000,00	13.203.700,00	3,64%	168.421.371,00	0,28%
<b>SE</b>	715.137,00	22.042.074,00	3,24%	120.156.004,00	0,60%
<b>UK</b>	496.259,50	67.487.315,00	0,74%	243.139.437,00	0,20%
<b>Total 14 MS</b>	<b>21.853.664,95</b>	<b>1.082.127.017,84</b>	<b>2,02%</b>	<b>4.018.067.623,00</b>	<b>0,54%</b>
<b>Total EU</b>	<b>21.853.664,95</b>	<b>1.545.795.286,84</b>	<b>1,41%</b>	<b>5.749.331.600,00</b>	<b>0,38%</b>

Source: AIR 2016

**Table 11: Measures funded under EMFF relevant to marine litter: Art. 97.1 reports (FAME DB) filtered according to the following relevant operation implementation data**

Art.	Title	Measure	Code of the measure (Field 18) <sup>29</sup>	Measures in EMFF	Relevant operation implement. data	Code of the implement. Data (Field 20)	Value of the implement. Data (Field 21)
40.1(a)	Protection and restoration of marine biodiversity and ecosystems and compensation Regimes in the framework of sustainable fishing activities	Collection of waste by fishermen from the sea such as the removal of lost fishing gear and marine litter	I.17	<b>Article 40(1)(a)</b> Protection and restoration of marine biodiversity – collection of waste	Number of fishermen benefiting from the operation (unique)	1	(numerical)
43.1	Fishing ports, landing sites, auction halls and shelters	Investments in facilities for waste and marine litter collection	I.23	<b>Article 43(1) and (3) and Article 44(1)(f)<sup>30</sup> (inland)</b> Fishing ports, landing sites, auction halls and shelters – investments improving fishing port and auction halls infrastructure or landing sites and shelters, investments to	Type of investment: <b>environmental protection</b>	<b>3</b>	<b>62</b>

<sup>29</sup> Commission Implementing Regulation (EU) No 1242/2014 of 20 November 2014, Annex V: Operation Implementation Data

<sup>30</sup> Relevant for inland waters

Art.	Title	Measure	Code of the measure (Field 18) <sup>29</sup>	Measures in EMFF	Relevant operation implement. data	Code of the implement. Data (Field 20)	Value of the implement. Data (Field 21)
				improve the safety of fishermen			
63	CLLD under UP4	Various / not specified	III.3	<b>Article 63</b> Implementation of local development strategies – Projects supported by FLAGs (including running costs and animation)	Type of operation: <b>environment</b>	<b>1</b>	<b>108</b>
80.1 (b), (c)	IMP under UP6	Protection of the marine environment	VIII.2 and VIII.3	<b>Article 80(1)(b)</b> Promotion of the protection of marine environment, and the sustainable use of marine and coastal resources <b>Article 80(1)(c)</b> Improving the knowledge on the state of the marine environment	all selected	NA	NA

**Table 12: Operations selected under EMFF Article 40.1(a)**

No.	MS	03NameOperation	06Beneficiary	10TotalEligCost <sup>31</sup>	11TotalEligPublicCost	12EMFFsupport	13DateApproval	21ImplDataValue <sup>32</sup>
1	DE	Fishing for litter Schleswig-Holstein	Naturschutzbund Deutschland e.V.	140.980,00	114.700,00	86.025,00	27/7/2016	58
2	IE	Fishing for Litter Programme & Waste Management	Bord Iascaigh Mhara	143.000,00	143.000,00	71.500,00	22/12/2016	54
3	SE	Samla in förlorade fiskredskap i Sotenäs (Collect lost fishing gear in Sotenäs)	SOTENÄS KOMMUN	83.496,47	83.496,47	50.097,88	24/8/2016	30
4	SE	Samla in förlorade fiskeredskap eller marint skräp (Collect lost fishing gear or marine litter)	Ka 334 Zaima Fiske Och Sjöentreprenad	19.680,71	15.493,33	9.296,00	24/5/2016	2
5	SE	Draggning av spökgarn och marint skräp (Dragging of ghost nets and marine debris)	Per Isaksson	18.703,59	18.703,59	11.222,15	24/5/2016	2
6	SE	Bo Landèn	Bo Ingvar Landèn	67.458,78	53.967,02	32.380,21	24/5/2016	4
7	SE	Spökgarnsdragging	Tacitus AB	101.544,10	81.235,28	48.741,17	24/5/2016	3
8	SE	Lars Bergströms insamling av förlorade fiskeredskap och marint skräp (Lars Bergström's collection of lost fishing gear and marine litter)	Lars Gunnar Bergström	115.666,06	92.532,84	55.519,71	20/6/2016	35
9	SE	Komplettering till JNR 2016-4113	Lars Gunnar Bergström	23.133,21	23.133,21	13.879,93	25/8/2016	0
10	SE	Draggning av garn på skånes sydkust (Drawing of yarn on the south coast of Skåne)	Joakim Svensson	70.824,39	56.659,51	33.995,71	20/12/2016	3
11	SE	Draggning efter spökgarn (Dragging after ghost nets)	Mikael Johnsson	14.976,18	7.488,09	4.492,86	24/8/2016	6
12	UK	KIMO UK Net Recycling Scotland	KIMO UK	117.353,27	117.353,27	88.014,95	5/10/2016	200
	<b>Total</b>			<b>916.816,75</b>	<b>807.762,61</b>	<b>505.165,56</b>		<b>397</b>

*Relevant operations*

<sup>31</sup> All costs and support (fields 10, 11 and 12) in Euro

<sup>32</sup> Number of fishermen benefiting from the operation

**Table 13: Operations selected under EMFF Article 43.1, Type of investment: environmental protection**

No.	MS	03NameOperation	06Beneficiary	10TotalEligCost	11TotalEligPublicCost	12EMFFsupport
1	UK	Barrier Application for fishermen's parking	Frances French	4.578,48	2.060,31	1.545,24

*Not relevant operation*

**Table 14: Operations selected under EMFF Article 63, Type of operation: environment – 1<sup>st</sup> selection**

No.	MS	03NameOperation	06Beneficiary	10TotalEligCost	11TotalEligPublicCost	12EMFFsupport	13DateApproval
1	LV	Laivu piestātnes un bērnu rotaļu kompleksa būvniecība dabas parkā "Engures ezers" (Construction of boat berths and children's playground complex in the nature park "Lake Engure")	NOD "Engures ezera dabas parka fonds"	23.614,85	21.253,36	18.065,35	5/8/2016
2	LV	Engures novada pludmaļu un to piegulošo teritoriju labiekārtošana (Improvement of the beaches of Engure region and their adjacent areas)	PSV Engures novada dome	200.000,00	180.000,00	153.000,00	17/8/2016
3	LV	Antropogēnās slodzes un klimata pārmaiņu mazināšana izmantojot vides resursus – uzstādot ar alternatīvo enerģiju darbināmas laternas piecās izejās uz jūras pludmali (Reducing anthropogenic loads and climate change through environmental resources - installing alternative energy-powered lanterns at five outlets on the seafront)	PSV Jūrmalas pilsētas dome	100.000,00	90.000,00	76.500,00	11/10/2016
4	LV	Antropogēnās slodzes mazināšana dabas liegumā "Lielupes grīvas pļavās", izveidojot trīs labiekārtotas peldvietas pie Lielupes (Reduction of anthropogenic load in the nature reserve "Lielupe Grīvas meža", creating three well-equipped swimming pools near Lielupe)	PSV Jūrmalas pilsētas dome	162.781,52	146.503,37	124.527,86	8/8/2016
5	LV	Dabu un vidi saudzējoša tūrisma veicināšana Kolkas piekrastē (Promoting nature-friendly and environmentally-friendly tourism on the coast of Kolkh)	PSV Dundagas novada dome	179.999,96	161.999,96	137.699,96	19/12/2016
6	LV	Ventspils pilsētas administratīvajā teritorijā esošo iekšējo un jūras piekrastes ūdens akvatorijas uzraudzības, aizsardzības un maluzvejniecības apkarošanas veicināšana (Promotion of the control, protection and prevention of malaria inland in the administrative territory of the Ventspils City, inland and offshore)	PPI Ventspils pilsētas pašvaldības policija	125.555,59	113.000,03	96.050,02	19/12/2016
7	LV	Antropogēnās slodzes samazināšana Salacgrīvas novadā (Reduction of anthropogenic load in Salacgrīva district)	PSV Salacgrīvas novada dome	70.000,00	63.000,00	53.550,00	29/8/2016
8	LV	Mekes viesnīcas labiekārtošana (Mecca Hotel Enhancement)	SIA Mežgravas.lv	20.222,56	10.111,28	8.594,58	16/9/2016

No.	MS	03NameOperation	06Beneficiary	10TotalEligCost	11TotalEligPublicCost	12EMFFsupport	13DateApproval
9	LV	Skatu torņa un stāvlaukuma izbūve pie Kuivižu identitātes zīmes (Construction of a sight tower and a car park near the Kuivizis identity mark)	SIA Eniss	38.572,87	34.715,58	29.508,24	7/9/2016
10	LV	Vides kvalitātes uzlabošana, labiekārtojot Pāvilostas pilsētas pludmales (Enhancing the quality of the environment by improving the beaches of Pāvilosta)	PSV Pāvilostas novada pašvaldība	93.714,29	84.342,86	71.691,43	10/10/2016
11	FI	Pieliseen laskevien virtavesien toimenpideselvtys (Measurement of the flow of falls in the valley)	Future Missions Oy	7.876,97	4.923,11	2.313,86	3/6/2016
12	FI	Vem vill ha skarven? Skarvens och sälens socio-ekonomiska konsekvenser i Österbotten (Who wants the bunch? The socio-economic consequences of Skarven and the seal in Ostrobothnia)	ÅBO AKADEMI	48.344,00	48.344,00	22.721,68	15/4/2016
13	FI	Satakunnan jokitalkkari esiselvtys (Satakunta river bank preliminary survey)	ProAgria Länsi-Suomi ry	21.700,00	19.530,00	9.179,10	13/4/2016
14	FI	Kalankasvatuksen ympäristöhanke 2016-2018	Kymijoen Vesi ja Ympäristö ry	47.200,00	37.760,00	17.747,20	21/6/2016
15	FI	Merimetsojen uudet häirintämenetelmät 2016 (New Harassment Methods for Cormorants 2016)	Airiston-Velkuan Kalastusalue	29.477,29	25.055,70	11.776,18	30/6/2016
16	FI	Samaa saalista jakamassa- Kalastuksen ja hyljekantojen säätelyn yhteensovittaminen Perämerellä-hanke (Co-ordinating Fisheries and Seabed Control in the Bothnian Sea Project)	Perämeren Kalatalousyhteisöjen Liitto ry	6.344,48	5.710,03	2.683,71	17/5/2016
17	FI	KALASTUKSEN SEURANTA- JA OHJAUSKOULUTUS (Fishing Monitoring and Control Education)	Etelä-Karjalan Kalatalouskeskus ry	9.000,00	7.200,00	3.384,00	1/7/2016
	<b>Total</b>			<b>1.184.404,38</b>	<b>1.053.449,28</b>	<b>838.993,17</b>	-

Not relevant operation

Possibly relevant operation

**Table 15: Operations selected under Article 63, Type of operation: environment – 2<sup>nd</sup> selection according to operation name**

No.	MS	03NameOperation	06Beneficiary	10TotalEligCost Eur	11TotalEligP ublicCostEur	12EMFFsu pportEur	13DateApp roval
1	LV	Engures novada pludmaļu un to piegulošo teritoriju labiekārtošana (Improvement of the beaches of Engure region and their adjacent areas)	PSV Engures novada dome	200.000,00	180.000,00	153.000,00	17/8/2016
2	LV	Antropogēnās slodzes samazināšana Salacgrīvas novadā (Reduction of anthropogenic load in Salacgrīva district)	PSV Salacgrīvas novada dome	70.000,00	63.000,00	53.550,00	29/8/2016
3	LV	Vides kvalitātes uzlabošana, labiekārtojot Pāvilostas pilsētas pludmales (Enhancing the quality of the environment by improving the beaches of Pāvilosta)	PSV Pāvilostas novada pašvaldība	93.714,29	84.342,86	71.691,43	10/10/2016
4	FI	Samaa saalista jakamassa- Kalastuksen ja hyljekantojen säätelyn yhteensovittaminen Perämerellä-hanke (Co-ordinating Fisheries and Seabed Control in the Bothnian Sea Project)	Perämeren Kalatalousyhteisöj en Liitto ry	6.344,48	5.710,03	2.683,71	17/5/2016
	<b>Total</b>			<b>370.058,77</b>	<b>333.052,89</b>	<b>280.925,14</b>	<b>-</b>

Possibly relevant operation

Note: The 4 operations above could possibly be related to marine litter. However, LV is not included in the present review (i.e. data above cannot be cross-checked) and for FI there is no reference to this operation in the country report.

**Table 16: Operations selected under EMFF Article 80.1 (b) and (c), Type of operation: all**

MS	03NameOperation	06Beneficiary	10TotalEligCost	11TotalEligPublicCost	12EMFFsupport	13DateApproval
NL	Two studies supporting a green deal with shipping sector on waste handling	Ministerie van Infrastructuur en Milieu (Ministry of Infrastructure and the Environment)	60.000,00	60.000,00	45.000,00	19/10/2015
NL	School-education and public awareness on marine environment, sustainable use and prevention of (waste) pollution.	Ministerie van Infrastructuur en Milieu	550.000,00	550.000,00	412.500,00	11/12/2015
NL	Development of methodology to assess cumulative impact of impulsive noise sources.	Ministerie van Infrastructuur en Milieu	280.000,00	280.000,00	210.000,00	11/12/2015
NL	Implementatie van een zwerfvuilophaalregeling rivieren (Implementation of a river rubbish disposal)	Ministerie van Infrastructuur en Milieu	1.200.000,00	1.200.000,00	900.000,00	11/12/2015
NL	Studies on the effects of nano- en microplasticdeeltjes on the aquatic / marine environment	Ministerie van Infrastructuur en Milieu	100.000,00	100.000,00	75.000,00	12/1/2016
NL	Monitoring riverine litter	Ministerie van Infrastructuur en Milieu	160.000,00	160.000,00	120.000,00	15/7/2016
MT	Marine environmental monitoring: towards effective management of Malta's marine waters	Environment and Resources Authority	1.600.000,00	400.000,00	1.200.000,00	16/12/2016
Total			3.950.000,00	2.750.000,00	2.962.500,00	

- Not relevant operation
- Possibly relevant operation
- Relevant operations

Note: According to the description provided, the 7 operations listed above clearly seem to be related to marine litter mitigation. However, both MS, NL and MT, are not included in the present review, i.e. no field research was conducted that could confirm the relevance of these projects and provide additional qualitative information.