CleanAtlantic

Marine Litter in the Atlantic Area

Identification of initiatives, measures and actions to reduce marine litter in the Atlantic area and valorisation in an interactive platform

Report on the updating work conducted in the framework of the CleanAtlantic project extension (WP4.2)







Interreg Atlantic Area





| WP | WP4 – MARINE LITTER IN ATLANTIC AREA |
|--------------|---|
| ACTION | 4.2 – STAKEHOLDERS CHARACTERIZATION AND INITIATIVES TACKLING MARINE LITTER IN THE ATLANTIC AREA |
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EXECUTIVE SUMMARY

As part of the Interreg CleanAtlantic project, Cedre has undertaken to produce an inventory of initiatives, measures and actions (IMAs) designed to reduce the presence of marine litter in the Atlantic Area (AA).

To this end, Cedre launched in 2018 an online survey, with the help of CleanAtlantic partners. This survey, translated into 4 languages, was disseminated in the 5 AA countries: Ireland (IE), United Kingdom (UK), France (FR), Spain (SP) and Portugal (PT), for a period of 1.5 months. A total of 391 initiatives, measures and actions were identified and were registered in an online plateform specifically developed in the project. The work done and IMAs identified were reported in 2021 in a report entitled "Identification of the initiatives, measures and actions to reduce the presence of litter in the marine environment" (Cedre, 2021).

In 2022, as part of CleanAtlantic project extension, the survey was launched again in the 5 AA countries in order to make an update of the IMA inventory. A total of 90 new initiatives were identified as a result of the new survey dissemination. In parallel, the interactive platform developed to promote these initiatives was improved and uptaded with the new IMAs identified. This report presents the updating work conducted on the IMA identification and the plateform as part of the CleanAtlantic project extension.

At the end of the CleanAtlantic project and after two surveys dissemination, 481 initiatives have been identified and are registered the interactive platform specifically developped.



Abbreviation list

| AA | Atlantic Area |
|--------|---|
| ALDFG | Abandoned, Lost or otherwise Discarded Fishing Gear |
| Cedre | Centre of Documentation, Reasearch and Experimentation on accidental waters |
| CETMAR | Marine Technology Centre (Centro Tecnológico del Mar) |
| CUO | Clean-Up Operations |
| EPS | Expanded polystyrene |
| FR | France |
| IE | Ireland |
| IMA | Initiatives, measures and actions |
| MPA | Marine protected area |
| NGO | Non-govermental organisation |
| OPS | Operations |
| OSPAR | Oslo-Paris convention |
| РТ | Portugal |
| SME | Small Medium Enterprise |
| SP | Spain |
| UK | United Kingdom |



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Introduction

While the first initiatives, measures and actions (hereinafter referred to as IMAs) to reduce the presence of litter in the marine environment date back several decades, their number has grown enormously in recent years. All these IMAs contribute in their own way to the fight against marine litter. Some of them are very similar in the different countries; others are more original or more innovative, some of them deserve to be disseminated on a larger scale.

Stakeholders more or less involved in the fight against marine litter pollution cover a very wide range of activities, encompassing sectors of the maritime world (transport, fishing/aquaculture, tourism, environment, research) and beyond, sectors of activity on land (plastics, packaging industry, circularity of manufactured objects, recycling of marine litter, etc.).

The need to set up IMAs to fight against marine litter is felt by different spheres of actors: political, professional, scientific, and citizen.

But who does what? Who are these actors? What are the initiatives, measures or actions that are being implemented to reduce the presence or remove litter from the marine environment? And among them, which are the most original or innovative?

To answer these questions, Cedre, with the help of CleanAtlantic partners, undertook an inventory of IMAs implemented in the Atlantic Area (AA) to reduce the presence of litter in the marine environment. To this end, Cedre launched in 2018 an online survey, with the help of CleanAtlantic partners. This survey, translated into 4 languages, was disseminated in the 5 AA countries: Ireland (IE), United Kingdom (UK), France (FR), Spain (SP) and Portugal (PT), for a period of 1.5 months. A total of 391 initiatives, measures and actions were identified and were registered in an online plateform specifically developed in the project¹. The work done and IMAs identified were reported in 2021 in a report entitled "Identification of the initiatives, measures and actions to reduce the presence of litter in the marine environment" (Cedre, 2021)².

To facilitate their characterisation and better distinguish them, IMAs were categorised in a 4-level cascading classification (category/sub-category/type/sub-type).

It must be noted that the survey was limited to the 5 AA countries. However, not all the IMAs identified were implemented in the AA: some, outside the study area, were also included in the AA insofar as the survey mentioned them. in addition, only "structured" IMAs were taken into account: the simple individual beach litter collections sometimes mentioned in the survey were not considered as IMAs.

In 2022, as part of CleanAtlantic project extension, the survey was launched again in the 5 AA countries in order to make an update of the IMA inventory. A total of 90 new initiatives were identified as a result of the new survey dissemination. In parallel, the interactive platform developed to promote these initiatives was improved and uptaded with the new IMAs identified. This report presents the updating work conducted on the IMA identification and the plateform as part of the CleanAtlantic project extension.

¹ Plateform link: https://www.argepol.com/cleanatlantic-initiative-database/index.html

² Cedre (2021). Report 21.48.C. Identification of the initiatives, measures and actions to reduce the presence of litter in the marine environment and their valorisation via an interactive platform (Clean Atlantic project WP4.2)

This updating work was conducted with the consultant t D-SIDD (<u>https://d-sidd.github.io/</u>) that provided support for the questionnaire improvement, dissemination and data cleaning.

The survey questionnaire circulated in 2022 is presented in Appendix 1. New IMAs identified are detailed in Appendix 3 and their characteristics are analysed below.

Material and methods

1. THE SURVEY

1.1. The questionnaire

The initial option chosen to establish an inventory of key stakeholders and their IMAs was to survey each category of stakeholder using a specific, highly targeted questionnaire. Initially, a dozen very detailed questionnaires were drawn up for each of the types of actors likely to provide such information in the various sectors of activity related to the sea and aquatic litter (political, economic, associative, research, etc.).

It appeared that the number and disparity of these targets (i) complicated the drafting of certain questionnaires (in addition to the adaptation to the possible specificities of one of the countries) and (ii) implied too much work of analysis, without guaranteeing to have a sufficient number of answers for each of the questionnaires. It was therefore decided to reduce this action to a more reasonable size: a discussion extended to the whole consortium led to the creation of a single questionnaire, simplified in its design.

Once validated, this simplified questionnaire was translated with the support of CleanAtlantic partners into 4 languages (English, French, Portuguese and Spanish) and was distributed online in the 5 AA countries in 2018.

Following this first dissemination and as part of the CleanAtlantic project extension, the 4 versions of the questionnaire were slightly improved in order to facilitate the data treatment and were again distributed online in the 5 AA countries in November/December 2022. The questionnaire improvement was conducted with the support of the consultant t D-SIDD (<u>https://d-sidd.github.io/</u>). The English version of the udapted questionnaire is presented in Appendix 1.

1.2. The survey tool

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The use of an online survey was immediately obvious, rather than an email survey. After an analysis of existing survey tools, the choice fell on LimeSurvey, Enterprise version.

The only real constraint encountered was the mapping device inserted in the questionnaire. As the system did not allow the respondent to mark more than one point on the same map, it was necessary to open/close as many maps as there were points to be marked: this process could have penalized the fluidity of the questionnaire completion - and possibly discouraged some respondents.

This survey tool was used for both survey dissemination in 2018 and 2022.

1.3. Dissemination of the survey

Cedre and CleanAtlantic partners drew up a generic list of stakeholders, preferably targeting: local and regional authorities; national agencies; organisations of professionals linked to the sea; port authorities; managers of marine protected areas (MPA); environmental NGOs; social insertion organisations, etc. For both survey dissemination, the survey was distributed in 4 languages, in the same way in each of the 5

countries [French survey, English (UK+IE) survey, Spanish survey and Portuguese survey]: a follow-up at 3 weeks and a closing at 1.5 months.

This dissemination was carried out by Cedre with both the support of the consultant t D-SIDD (<u>https://d-sidd.github.io/</u>) and of a partner acting as a national relay in each of the 4 other countries; this national relay had previously been responsible for the translation of the questionnaire and the creation of the national distribution list of stakeholders. In some countries, the survey was also relayed through social media.

2. THE ANSWERS

2.1. The raw answers and data cleaning

The data from the online questionnaires (or "raw answers") were automatically saved on the LimeSurvey platform dedicated to the CleanAtlantic project.

At the end of the survey, the data retrieved (.csv extraction file) was cleaned in order to remove the "not usable answer". The data cleaning was conducted with the support of the consultant t D-SIDD (<u>https://d-sidd.github.io/</u>).

To eliminate the "not usable answers" included in the "raw answers", a first cleaning focused on the "empty answers" corresponding to answers that had not been completed beyond level 4 of the online questionnaire and in which only the identity of the respondent, at best, was provided: a large number of answers were thus eliminated to retain only the "potentially usable answers" (Table 1).

| Pro | gression through the questionnaire | Quality of information | Qualification | |
|---------|--|---|----------------------------|--|
| Parts | Action from respondent | Quality of information | Qualification | |
| 0 -1 | Q closed as soon as opened Q started then closed again after going back | No information | Empty answers | |
| 3 | Progression until RGPD | No information | | |
| 4 | Progression until ID | No information {except possibly the characteristics of the respondent) | | |
| 5 to 9 | Possible report of at least one IMA | | Potentially usable answers | |

Table 1: Qualification of the answer according to the degree of progress through the questionnaire

The remaining "potentially usable answers" were subject to a second cleaning, this time by looking at their content, in order to remove:



• The "nul/ answers", i.e. those which, in fact, did not mention any initiative although the respondent had progressed in the questionnaire, sometimes even well beyond page 5;

• The "off-tapie answers", such as those which stated, without further clarification, that the respondent "sometimes collects beachlitter";

• The "duplicate answers", i.e., answers mentioning an initiative already reported by at least one other respondent, or answers with identical content filled out twice by the same respondent or organization.

This second cleaning allowed keeping only the "usable answers".

3. IMAs CLASSIFICATION

3.1. Presentation

Based on "usable answers", IMAs identified were characterised along with the structures that carry them out (i.e., the organizations that implement them) as shown in Table 2.

As shown IMAs were characterised by:

- (i) their identity;
- (ii) the theme(s) or field(s) of action they address;
- (iii) the target(s) they aim at (what type of litter? or what public?);

And the supporting structures by:

- (i) their identity;
- (ii) the type of structure.

| Descriptors | | Number of categories | Categories |
|----------------|-------------|----------------------|--|
| IMA | · | | |
| ID | Name | - | Name / "unnamed" (when no specific name) |
| | Website | - | if any |
| | Geographic | 8 | local; county; regional; national; cross border; |
| Implementation | scale | 0 | international; zone area; N/A |
| area | Coordinates | _ | When local implementation (if not local: the location of the |
| | | _ | organisation) |
| Running St | atus | 3 | In progress / Completed / Unknown |
| | | 5 (incl. | Clean-up / Recovery (6*); Observation / Monitoring (6*); |
| IMA Topics | | 24 sub- | Awareness raising (3*); Circular economy (5*); Policy (4*) |
| | | categories *) | |

Table 2: IMA characterisation (name and number)



| | | 5 (incl. 44 | Litter type (9*); specific litter item (15*); litter impact (2*); |
|-------------|---------------|----------------|---|
| IMA targets | | sub- | stakeholder (10*); Theme (4*); etc. |
| | | categories | |
| | | *) | |
| SUPPORT STR | UCTURE (ORGAN | IISATION IN CH | IARGE OF IMA) |
| | Name | - | |
| | Web site | - | |
| | Туре | | International organisation; Government (Service, Agency); |
| ID | | | Local or regional authority or organisation; Professional |
| | | 13* | association; Firm / SME; NGO (environment); NGO (sport); |
| | | | NGO (social insertion); Research organisation ; Consortium; |
| | | | Culture centre; Sport(wo)man; Artist; etc. |

*Number not fixed (evolving)

3.2. Characterization of the IMA

• Identity of the IMA

Atlantic Area

In addition to the link with the supporting structure, the parameters retained for the identity of the IMA are: (i) the name, (ii) the link to its website (when it exists), (iii) the location of its implementation, and (iv) its current status. Although simple in principle, these identity parameters are sometimes missing or difficult to specify; conventions have been established accordingly: they are mentioned below.

As for the name of the IMA, sometimes there is no name; in this case, it has been given a generic name. This is the case for:

- Numerous litter clean-up operations on the coast, in particular those organised by :
 - o NGOs or other organisations involving volunteers: here referred to as ["Citizen clean- up (unnamed)"];
 - o a local authority or a company employing salaried staff (agents and employees): here referred to as ["Clean-up (unnamed)"];
 - o a professional organisation (e.g. shellfish farming) on a day, on a local, regional or national scale: here referred to as ["Shellfish farming collection day"].
- Certain expeditions at sea [here referred to as "Expedition at Sea"].

With regard to the location of the IMA implementation, the following are specified

- The geographical scale: 7 possible scales have been retained: local, county, regional, national, transboundary, international and Atlantic Area (AA);
- The geographical entity: when available, the name of the site or sector (example: Listo beach, Biscay Bay, Ushant archipelago);
- The coordinates of the IMA implementation site, if known and unique. Sometimes the location is not obvious to specify; it was then agreed to proceed as follows:
 - o When the IMA is deployed on an (inter)national scale: the choice has then privileged the address of the head office of the supporting structure, even if it means locating the IMA inland (i.e.

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in Barcelona, Paris, or London, for example) as is sometimes the case for the "Policy" category in particular (e.g. reference document, ad hoc working group, etc.);

o The same applies when the IMA is deployed on several sites or does not have a fixed location: it is the head office of the supporting structure which is then indicated (case of the national campaigns of collection of litter on the beaches, for example);

o When the IMA reported in the survey is not implemented in the Atlantic Area: the bias adopted was to keep it - if justified - insofar as it was of interest to a respondent; some IMAs are thus located in the Mediterranean (effect of the French and Spanish surveys).

With regard to the current status of the IMA, three possibilities have been identified:

- o On-going;
- o Completed;
- o Unknown.
- IMA themes

The specific themes addressed by the IMAs (or areas of focus: What is the IMA's purpose?) fall into only five categories but encompass 24 subcategories; these subcategories may themselves be further classified into types and subtypes (Table 3).

| Primary Classification | | Secondary Classification* | |
|-----------------------------|------------------------------------|------------------------------|-------------------|
| Categories | Sub-categories* | Types (n*) | Sub-types (n*) |
| | Clean-up operations (on shoreline) | | |
| | Clean-up operations (in port) | | |
| CLEAN-UP / RECOVERY | Clean-up operations (at-sea) | 16* | 27* |
| CLEAN-OP / RECOVERY | Specific equipment | 10 | 27 |
| | Support tool | | |
| | Incentive scheme | | |
| | Litter surveys Ops (on shoreline) | | |
| | Litter surveys Ops (at Sea) | | |
| OBSERVATION / MONITORING | Litter surveys Ops (in river) | 19* | 38* |
| MONITORING | Litter Impact Assessment | | |
| | Support tool | | |
| | Specific equipment | | |
| | Event | | |
| AWARENESS RAISING | Education | 18* | 30* |
| | Support tool | | |
| | Recovery chain organisation | | |
| | Valorisation chain organisation | | |
| CIRCULAR ECONOMY | Litter recycling | 11* | 27* |
| | Use of recycled litter | | |
| | New material for sea-related uses | | |

Table 3: IMA themes (primary classification: categories and subcategories)



| LITTER POLICY | Engagement | | |
|---------------|------------------------|----|--|
| | Baseline documents | Q* | 15* |
| | (Inter) national forum | 9. | 12. |
| | Ban | | |
| | | | (************************************* |

*Number not fixed (evolving)

The sub-categories of each of the 5 main IMA categories are specified later in the analysis of the results, and the content of the sub-categories (types and sub-types) is detailed in the appendix (Appendix 2 - 2A to 2E).

• Main actor involved in the IMA

Since it is not always the support structure that initiates the IMA that is actually involved in the field, it seemed necessary to specify the actor who implements the IMA (Table 4).

When the support structure itself implements its IMA, the actor mentioned are respectively "Agents/employees" or "Contractor" if it is the organisation's salaried members who are primarily involved or if an external operator is called in, and "Volunteers" when the organisation mainly uses volunteers for the IMA concerned.

| Table 4: | Types | of | actors | involved | in IMA |
|----------|-------|----|--------|----------|--------|
|----------|-------|----|--------|----------|--------|

| | Government (services, agencies) |
|------------------------|--|
| | Contracting parties |
| | Local authorities |
| | Port authority |
| | Public foundation |
| | NGO (environment); NGO (social Insertion); NGO (sport) |
| | Contractor |
| | Agents / Employees |
| | Volunteers |
| Main astan | Professional association |
| Main actor involved | Shellfish farmers |
| involved | Fishermen |
| | |
| | Firm/ SME Tachendaria line titute |
| | Technological institute |
| | Scientists |
| | Research Consortium |
| | Consortium of stakeholders |
| | School (professional); Schools |
| | Local communities |
| | Sailors |
| | Sport(wo)man |
| | Artist |
| | • Etc. |

IMAs targets

The targets of the IMA (i.e. who is the main or only target of the IMA? or what type of litter the IMA is targeting?) are broken down into categories, the number of which is limited to five. These categories are further divided into sub-categories, the number of which is not completely limited in order to allow for a more detailed and discriminating description of the IMAs.

Because of the wide variety of IMAs, the range of their targets is very broad (Table 5); an IMA may target:



• Stakeholders: the general public or a specific stakeholders (fishermen, students, scientists, etc.);

• Litter: either (i) a type (ranging from marine litter in general, to a particular group: floating litter, etc.), or (ii) a specific item (fishing waste, cigarette butt, etc.);

- An impact or damage: birds, for example;
- A theme (e.g. circular economy, good practice, etc.).

Table 5: Targets of IMA

| | General Public |
|------------------|---|
| | Schools |
| | Firm / SME |
| | Protected natural site manager |
| | Sailors |
| Stakeholders | Sailors (kids) |
| | Shellfish farmers |
| | • Fishermen |
| | Shellfish and fishermen women |
| | Snack-bar at beach |
| | Various |
| | • Etc. |
| | Marine litter |
| | Sea litter |
| | Seabed litter |
| | Floating litter |
| Littor (turoo) | Beach litter |
| Litter (types) | |
| | Land litter Urban litter |
| | |
| | Plastic litter |
| | Microplastics |
| | • Etc. |
| | ADFLG (abandoned, lost or otherwise discarded fishing gear) |
| | Ghost nets |
| | Used fishing nets ; Used oyster bags; Used mooring lines |
| | Fishing related litter; Net mending pieces |
| Litter (items) | Ballons |
| | Plastic bags |
| | Butts |
| | Cotton bud |
| | • Tyre |
| | Neoprene wetsuit |
| | Filter media |
| | PET (polyethylene terephthalate) |
| | • Etc. |
| Litter (impacts) | Birds |
| | • Etc. |
| Theme | Biodiversity; circular economy; training; best practices |
| | • Etc. |
| | |



3.3. Characterization of the support structure

The support structure, i.e. the organisation in charge of the IMA, is defined by:

• its identity, the parameters of which are: {i) the name, {ii) the link to its website, and {iii) its place of residence;

• the type of structure, a parameter declined in ten categories: {i) International organisation,

{ii) Government {department, agency}, {iii) Local/regional authorities or organisation, {iv) Professional organisation, {v} Firm/SME, {vi} Social integration structure, {vii} Environmental NGO, {viii) Sports association {ix} Research organisation, {x} Research consortium, {xi} Scientific cultural centre, {xii} Sportsmen, {xiii) etc.

4. OUTCOME OF THE INVENTORY

The relatively simple and intuitive classification that was established to characterize the IMAs responded to the desire to differentiate the IMAs from one another, by identifying their specificities (relative to their themes, their supporting structures and their targets), with a view to achieving coherent groupings.

This classification also makes it possible to respond to the second wish, which was that the inventory should not be limited to the time of the survey, but should be able to integrate IMAs throughout the duration of the project - or even beyond, depending on future actions.

This classification is scalable, so as to allow the integration of new IMAs: if the number of categories is fixed, the number of lower ranks can be increased if needed and if the discrimination is relevant.

5. THE INTERACTIVE PLATFORM

The final objective of the inventory was to make it available online on the project website via an interactive online platform developed specifically for the project.



Results

1. SUMMARY OF THE SURVEY

Across the 5 countries (Table 6), the online survey generated a total of 152 "raw answers", i.e the number of times the questionnaire was opened even if there were no responses. 66 responses were identified as "potentially usable". Finally, 90 initiatives were recorded.

Table 6: Summary of the survey

| Raw answers | Potentially usable answers | Total IMAs identified |
|-------------|----------------------------|-----------------------|
| 152 | 66 | 90 |

2. SUMMARY OF THE IMA INVENTORY

2.1. Number and distribution of IMAs

90 IMAs were identified and retained as a result of this additional survey. They are distributed as follows across the 5 countries: 62 for France, 18 for Spain, 0 for Portugal, 3 for United Kingdom and 7 for Ireland (Figure 1).

These differences between the five countries are probably resulting from an unequal effort to disseminate the survey (in terms of numbers and types of recipients) within the five countries.

Despite the impossibility to conduct statistical comparison between countries, it is possible to carry out thematic overviews of the IMAs and to draw some general and comparative elements at the level of the 5 countries of the Atlantic Area (AA) as presented in figures below.

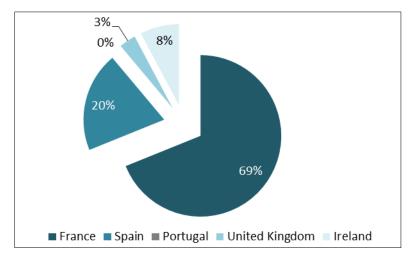


Figure 1: New IMAs identified in Atlantic Area: distribution by country (%)



2.2. Overall distribution of IMAs by category

More than 60% of the total IMAs fall into two of the five main categories (Table 7 ; Figures 2 and 3): Cleanup/recovery (30%) and Observation/monitoring (31%). Awareness raising and circular economy come in third place with 18%. Litter policy is the category with the fewest initiatives, with only 3% of total IMAs.

| | Ireland | UK | France | Spain | Portugal | Total | |
|-----------------------------|-----------|----------|------------|----------|----------|-------|--------|
| Clean-up / recovery | 3 | 2 | 15 | 7 | 0 | 27 | (30 %) |
| Observation / monitoring | 1 | 0 | 22 | 5 | 0 | 28 | (31 %) |
| Awareness raising | 2 | 1 | 12 | 1 | 0 | 16 | (18 %) |
| Circular economy | 1 | 0 | 11 | 4 | 0 | 16 | (18 %) |
| Policy | 0 | 0 | 2 | 1 | 0 | 3 | (3 %) |
| Total | 7 (7,8 %) | 3 (3,3%) | 62 (68,9%) | 18 (20%) | 0 (0%) | 90 | |

Table 7: New IMAs identified in the AA: Distribution by category and country

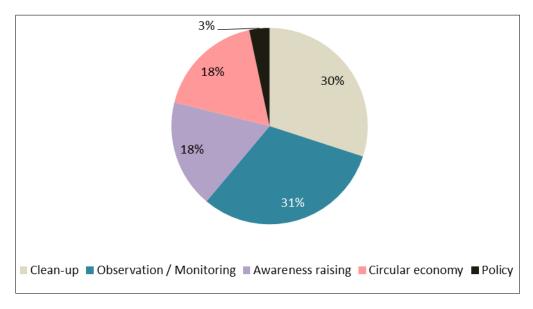


Figure 2: New IMAs identified in the AA: distribution by category (%)



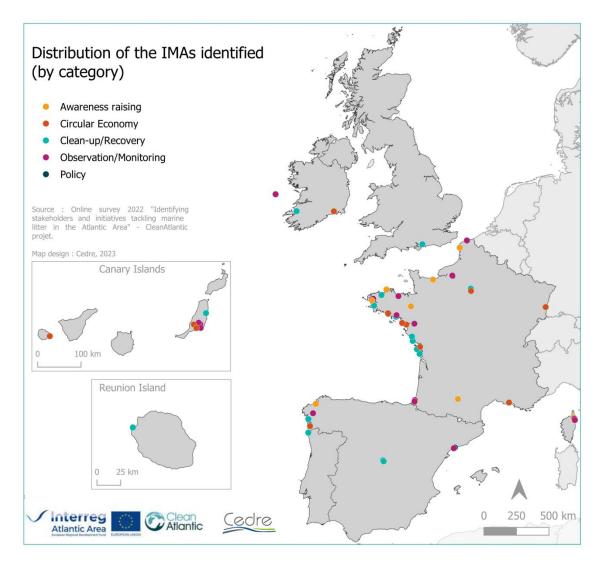


Figure 3: Distribution of the 90 new IMAs identified in the AA in 2022 (by category)



The "clean-up / recovery" category comes first in Ireland, UK and Spain. In France, however, the new initiatives reported are mostly in the "observation/monitoring" category (an effect of the French National Beach Litter Monitoring Network), then in "clean-up/recovery", followed by awareness-raising actions and the "circular economy" category.

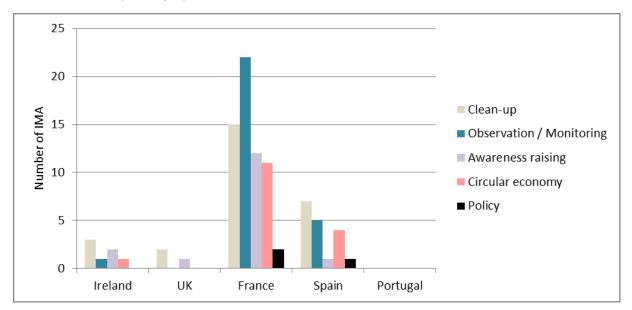


Figure 4: New IMAs identified in the AA: distribution by category and country

2.3. Overall distribution of IMAs by subcategory

With 20% of total IMAs, the most represented subcategory is *Clean-up operations on shoreline* (Figure 6), followed by the subcategory *Litter survey operations on shoreline* (14%; again an effect of the French National Beach Litter Monitoring Network). The remaining subcategories represent less than 10% of total IMAs.



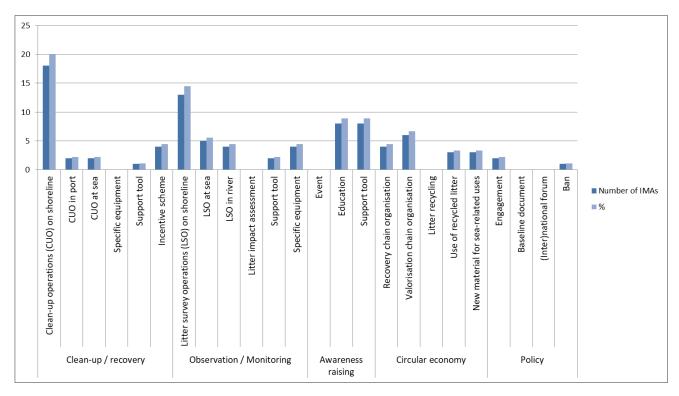


Figure 5: New IMAs identified in the AA: distribution by subcategory (number and %)

3. INTERACTIVE PLATFORM

An interactive online platform has been developed to showcase and facilitate dissemination of IMAs identified in the Atlantic Area.

The platform is accessible on the CleanAtlantic project website (<u>http://www.cleanatlantic.eu/</u>) or directly with the following link:

https://www.argepol.com/cleanatlantic-initiative-database/index.html

As part of the project extension, this platform has been improved in 2022 and 2023 in order to facilitate its use and make it friendlier (Figure 7). The updated version of the platform includes all initiatives identified since the beginning of the Clean Atlantic project, i.e., 481 initiatives.



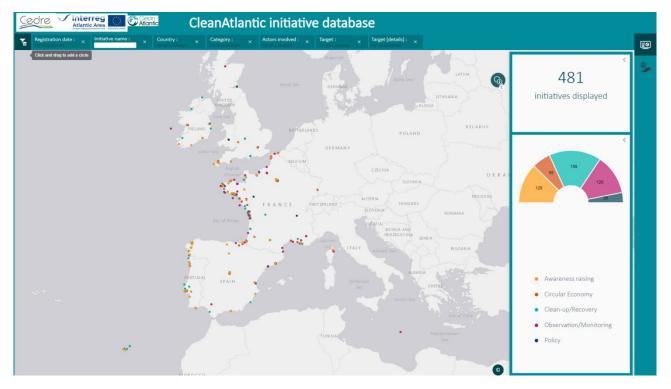


Figure 6: Home page of the interactive platform presenting the 481 initiatives identified since the beginning of the CleanAtlantic project



Conclusion

In 2022, as part of CleanAtlantic project extension, a survey was launched in the 5 AA countries in order to make an update of the IMA inventory elaborated in the first phase of the project. A total of 90 new initiatives were identified as a result of the survey dissemination. In parallel, the interactive platform developed to promote these initiatives was improved and uptaded with the new IMAs identified.

IMAs were characterized and classified by (i) their identity (ii) the theme(s) or field(s) of action they address (iii) the target(s) they aim at (what type of litter? or what public?) and the supporting structures by (i) their identity (ii) the type of structure.

This study showed that the Clean-up/recovery category represents 30% of the new IMAs identified; the Awarness raising category represents 18%; the Observation/monitoring category represents 31%; the Circular economy category represents 18% and the Policy category represents 3%.

At the end of the CleanAtlantic project and after two surveys dissemination, 481 initiatives have been identified and are registered the interactive platform specifically developped. The objective of this action which was to provide an overview of key stakeholders and initiatives in the Atlantic Area, has therefore been achieved.



References

Cedre (2021). Report R.21.48.C. Identification of the initiatives, measures and actions to reduce the presence of litter in the marine environment and their and their valorisation via an interactive platform. CleanAtlantic Project – Work Package 4 – Final report. http://www.cleanatlantic.eu/wp-content/uploads/2021/10/CA_WP4-2_Initiatives_measures_and_actions_report.pdf



Appendices

- Appendix 1: Online survey questionnaire
- Appendix 2: Comprehensive IMAs classification used in the interactive platform
- Appendix 3 : New IMAs identified in the CleanAtlantic project extension

APPENDIX 1: ONLINE SURVEY QUESTIONNAIRE

QUESTIONNAIRE FOR IDENTIFYING INITIATIVES TACKLING MARINE LITTER AND STAKEHOLDERS IN THE ATLANTIC AREA – CLEANATLANTIC PROJECT

Welcome!

Thank you for taking the time to engage with this survey and assist with our research looking at best practices for dealing with marine litter on the shoreline.

What is the purpose of this survey?

This survey is part of the European Interreg Atlantic Area CleanAtlantic project which aims "to address the problem of marine litter by improving data management, monitoring, modelling, mapping, and the collection of litter in the Northeast Atlantic".

The purpose of this survey is to list past and present key litter initiatives, actions or measures in the five Atlantic countries involved, namely Ireland, United Kingdom, France, Spain and Portugal. This is in an opportunity for you to make your litter experience known and shared within the European Atlantic Area.

This survey was disseminated in 2020, and this year an update of the data obtained is being carried out. The 2020 results are available on <u>http://www.cleanatlantic.eu/fr/marine</u>-litter-in-the-atlantic-area/

Accessing results of the survey

A summary of the results (tables, graphs and maps) of the survey will be available in the next few months on the following page: <u>http://www.cleanatlantic.eu/results/</u>

Thank you (in advance) for your time.

QUESTIONS?

If you have any questions, do not hesitate to send an e-mail to:

- about the project (general contact): cleanatlantic@cetmar.org
- about the survey: <u>survey@cedre.fr</u> and/or to the national partner (one per survey):
 - o Ireland: Marine Institute
 - o UK: Cefas
 - Spain: Cetmar
 - Portugal: DGRM,
 - o France: Cedre

This survey is distributed with the technical and methodological support of D-SIDD.

GENERAL DATA PROTECTION REGULATION (GDPR)

To consult the Personal Data Privacy Policy in compliance with the requirements of the General Data Protection Regulation (GDPR), please click here.

The reason for the processing, the way we collect, handle and ensure protection of all personal data provided, how that information is used and what rights you may exercise in relation to your data (the right to access, rectify, block etc.) are explained below.

Please note that:

- Data are collected in the framework of the EU-funded project CleanAtlantic;
- Contributions received from this survey will be used for research purposes. The purpose of the survey is mentioned above;
- Stakeholders' contributions to the present survey are on a voluntary basis. The legal basis for processing is consent (Art. 6.1.a of the GDPR);
- Questions marked by an asterisk (*) are mandatory. Otherwise you will not be able to complete the questionnaire.
- Cedre (www.cedre.fr), as action leader of the CleanAtlantic project, is in charge of the survey;
- The survey will be carried out by Cedre with contribution from one national partner or NP (one NP per country–see after) aiming at (i) launching the questionnaire at national level towards national stakeholders, (ii) translating part of their answers and (iii) supporting partial analysis. NPs are as follows: Marine Institute (Ireland), Cefas (UK), Cedre (France), Cetmar (Spain) and DGRM (Portugal);
- Each NP will provide a link for the questionnaire to 'its' national stakeholders. Each NP will respectively have access to data coming from 'its' national stakeholders;
- Data will be stored in the UK (on a dedicated LimeSurvey server) and will be managed from France by Cedre;
- All personal data (names, contact details) will be stored throughout the lifetime of the project;
- All personal data will be deleted one year after the last action in relation to the consultation;
- As a stakeholder, you are entitled to access your personal data and rectify, block or delete them in case the data is inaccurate or incomplete. You can exercise your rights by contacting Cedre (survey@cedre.fr).



Indicate if you want your contribution to remain anonymous

- 1. Choose one of the following answers:
 - I give permission for my contribution to be published with my personal information: I consent to the publication of all information in my contribution in whole or in part including my name or my organisation's name. I declare that nothing within my response is unlawful or would infringe the rights of any third party in a manner that would prevent publication.
 - My contribution can be published provided that I remain anonymous: I consent to the publication
 of any information in my contribution in whole or in part (which may include quotes or opinions I
 express) provided that it is done anonymously. I declare that nothing within my response is
 unlawful or would infringe the rights of any third party in a manner that would prevent publication.
- 2. Did you participate in the survey released in 2020?
 - Yes
 - No
- 3. Which country do you represent?
 - France
 - Ireland
 - Spain
 - Portugal
 - United Kingdom

Indicate if you have been or you are involved in any initiatives/actions/measures tackling marine litter

Please indicate "yes" if you have participated or are participating in marine litter initiatives/actions/measures on behalf of your organisation. Indicate "no" if you are adding an initiative of which you are aware but which is not carried out by your organisation or if you are answering this questionnaire as an individual.

- 4. Choose one of the following answers:
 - Yes
 - No

1. Organisation identity

Describe the details of the organisation with which you have been or are involved in marine litter initiatives/actions/measures.

- 5. Name of your organisation/group
- 6. Which category best describes your organisation/group?
 - Artist
 - Consortium
 - Firm / SME
 - Govt (service. agency)
 - International organisation



- Local or regional authority / organisation
- NGO (environment)
- NGO (social insertion)
- NGO (sport)
- Professional association
- Research organisation
- Scientific culture centre
- Sports(wo)man
- 7. Website of the organisation
- 8. Indicate the GPS coordinates of your head office
- 9. Enter a contact email address
- 10. Provide the organisation's logo (if you give the link to the logo you authorise the use of the logo)

1. Organisation identity (if the answer was « no » in the previous section)

Provide information about the organisation you represent as well as information about the organisation whose initiative you are describing.

- 11. Name of your organisation/group
- 12. Name of the organisation whose initiative you are describing
- 13. Which category best describes your organisation/group?
 - Artist
 - Consortium
 - Firm / SME
 - Govt (service. agency)
 - International organisation
 - Local or regional authority / organisation
 - NGO (environment)
 - NGO (social insertion)
 - NGO (sport)
 - Professional association
 - Research organisation
 - Scientific culture centre
 - Sports(wo)man
- 14. Website of the organisation
- 15. Indicate the GPS coordinates of your head office
- 16. Enter a contact email address
- 17. Provide the organisation's logo (if you give the link to the logo you authorise the use of the logo)



2. Describe your INITIATIVE / ACTION / MEASURE

18. Name of initiative/action/measure

19. Which category best describes your initiative/action/measure?

- Clean-up/Recovery
- Awareness raising
- Policy
- Observation/Monitoring
- Circular economy

Clean-up/Recovery

20. Which sub-category best describes your initiative/action/measure?

- Clean-up operations (on shoreline)
- Clean-up operations (in port)
- Clean-up operations (at sea)
- Specific equipment
- Support tool
- Incentive scheme

Clean-up operations (on shoreline)

21. Which type best describes your initiative/action/measure?

- Citizen clean-up
- Professional clean-up

Citizen clean-up

22. Which sub-type best describes your initiative/action/measure?

- Manual (usual)
- Using kayaks
- Using paddleboards
- Other:

Professional clean-up

23. Which sub-type best describes your initiative/action/measure?

- Manual (usual)
- Mechanical and manual
- Other:

Clean-up operations (in port)

24. Which type best describes your initiative/action/measure?

- Citizen clean-up
- Professional clean-up



Citizen clean-up

25. Which sub-type best describes your initiative/action/measure?

- Manual (tools)
- Other:

Professional clean-up

26. Which sub-type best describes your initiative/action/measure?

- Manual (tools)
- Mechanical
- Other:

Clean-up operations (at sea)

27. Which type best describes your initiative/action/measure?

- Fishing for litter
- From dedicated vessel
- By diving

By diving

28. Which sub-type best describes your initiative/action/measure?

- Scuba diving
- Snorkelling
- Other:

Specific equipment

29. Which type best describes your initiative/action/measure?

- Beach clean-up
- Containment
- At-sea recovery
- On-board storage

Beach clean-up

30. Which sub-type best describes your initiative/action/measure?

- Manual tool
- Other:

Containment

- 31. Which sub-type best describes your initiative/action/measure?
 - Floating barrier
 - Other:

At-sea recovery

32. Which sub-type best describes your initiative/action/measure?



Page 6

- Recovery barge
- Other:

On-board storage

33. Which sub-type best describes your initiative/action/measure?

- Litter compactor
- Other:

Support tool

34. Which type best describes your initiative/action/measure?

- Guidelines
- App
- Web viewer

Guideline

35. Which sub-type best describes your initiative/action/measure?

- Shoreline clean-up
- Organisation of a Beach Clean-up
- Other:

Арр

- 36. Which sub-type best describes your initiative/action/measure?
 - Beach clean-up organisations list
 - Location of Beach clean-up sites
 - Other:

Web viewer

37. Which sub-type best describes your initiative/action/measure?

- Beach clean-up organisations list
- Location of Beach clean-up sites
- Other:

Incentive scheme

38. Which type best describes your initiative/action/measure?

- Signage tool
- Equipment

Signage tool

40. Which sub-type best describes your initiative/action/measure?

- Plaque / tag
- Other:



Equipment

- 41. Which sub-type best describes your initiative/action/measure?
 - Litter Tide tank
 - Big bag
 - Floating bin
 - Beach bin
 - Litter bucket
 - Other:

Awareness raising

42. Which sub-category best describes your initiative/action/measure?

- Event
- Education
- Support tool

Event

43. Which type best describes your initiative/action/measure?

- Exhibition
- Artist exhibition
- Sport performance
- Contest
- Sciences conference
- (Inter)national clean-up day
- (Inter)national programme

Contest

44. Which sub-type best describes your initiative/action/measure?

- Drawing
- R&D
- Best practices
- Other:

(Inter)national clean-up day

45. Which sub-type best describes your initiative/action/measure?

- International
- National
- Regional/local
- Other:

(Inter)national programme

46. Which sub-type best describes your initiative/action/measure?



- International campaign
- National campaingn
- Other:

Education

47. Which type best describes your initiative/action/measure?

- General outreach
- Targeted outreach
- Workshop

General outreach

48. Which sub-type best describes your initiative/action/measure?

- On beach
- In port
- On board a dedicated vessel
- Training course
- Lecture
- Other:

Targeted outreach

49. Which sub-type best describes your initiative/action/measure?

- Sea professionals
- Fishermen
- Shellfish farmers
- SME
- Sailors
- Surfers
- Schools
- Other:

Workshop

50. Which sub-type best describes your initiative/action/measure?

- Art
- Training course
- Other:

Support tool

51. Which type best describes your initiative/action/measure?

- Travelling exhibition
- Awareness kit
- Platform
- Game
- Quiz



- Storytelling
- Infography
- Video

Travelling exhibition

- 52. Which sub-type best describes your initiative/action/measure?
 - Marine litter
 - Litter recycling workshop
 - Other:

Awareness kit

- 53. Which sub-type best describes your initiative/action/measure?
 - Guidelines
 - Miscellaneous
 - Workshop
 - Other:

Platform

54. Which sub-type best describes your initiative/action/measure?

- Miscellaneous
- Training courses
- Ocean literacy
- Other:

Observation/Monitoring

55. Which sub-category best describes your initiative/action/measure?

- Litter survey Ops (on shoreline)
- Litter survey Ops (at sea)
- Litter Impact Assessment
- Support Tool
- Specific equipment

Litter survey Ops (on shoreline)

56. Which type best describes your initiative/action/measure?

- (Inter)national monitoring network
- Participative observations
- Research study

(Inter)national monitoring network

- 57. Which sub-type best describes your initiative/action/measure?
 - Standardized protocol



- OSPAR/MSFD (Marine Strategy Framework Directive) protocol
- Own protocol
- Other:

Participative observations

- 58. Which sub-type best describes your initiative/action/measure?
 - Standardized protocol
 - Own protocol
 - Other:

Research study

- 59. Which sub-type best describes your initiative/action/measure?
 - Methodology
 - Other:

Litter survey Ops (at sea)

60. Which type best describes your initiative/action/measure?

- (Inter)national monitoring network
- Participative observations
- Research study

(Inter)national monitoring network

- 61. Which sub-type best describes your initiative/action/measure?
 - Standardized protocol
 - Own protocol
 - Other:

Participative observations

62. Which sub-type best describes your initiative/action/measure?

- Standardized protocol
- Own protocol
- Other:

Research study

63. Which sub-type best describes your initiative/action/measure?

- Methodology
- Other:

Litter Impact Assessment

64. Which type best describes your initiative/action/measure?

- (Inter)national monitoring network
- Participative observations



- Research study
 - (Inter)national monitoring network

65. Which sub-type best describes your initiative/action/measure?

- Birds
- Turtles
- Fauna
- Other:

Participative observations

66. Which sub-type best describes your initiative/action/measure?

- Birds
- Mammals
- Other:

Research study

67. Which sub-type best describes your initiative/action/measure?

- Food chain
- Fauna
- Other:

Support Tool

68. Which type best describes your initiative/action/measure?

- Guidelines
- Database
- Web viewer
- App
- Model
- Wiki

Guidelines

69. Which sub-type best describes your initiative/action/measure?

- Monitoring
- Observation
- Other:

Database

70. Which sub-type best describes your initiative/action/measure?

- Data monitoring
- Other:



Web viewer

71. Which sub-type best describes your initiative/action/measure?

- Monitoring results
- Litter accumulations mapping
- Other:

Арр

72. Which sub-type best describes your initiative/action/measure?

- Monitoring
- Litter locations
- Observations
- Other:

Model

73. Which sub-type best describes your initiative/action/measure?

- Drift
- Other:

Wiki

74. Which sub-type best describes your initiative/action/measure?

- Litter identification
- Other:

Specific equipment

75. Which type best describes your initiative/action/measure?

- Observation

Observation

76. Which sub-type best describes your initiative/action/measure?

- ROV
- UAV
- Other:

Circular economy

77. Which sub-category best describes your initiative/action/measure?

- Recovery chain organisation
- Valorisation chain organisation
- Litter recycling
- Use of recycled litter
- New material for sea-related uses



Recovery chain organisation

78. Which type best describes your initiative/action/measure?

- For litter
- For used materials
- For a specific litter item

For litter

79. Which sub-type best describes your initiative/action/measure?

- Beach litter
- From fishing for litter ops
- Other:

For used materials

80. Which sub-type best describes your initiative/action/measure?

- Used fishing nets
- Used EPS fishing boxes
- Used fishing lights
- Used batteries
- Used mooring lines
- Other:

For a specific litter item

81. Which sub-type best describes your initiative/action/measure?

- Cigarette butts
- Single-use masks
- Other:

Valorisation chain organisation

82. Which type best describes your initiative/action/measure?

- Tool
- Developing local economy

Tool

83. Which sub-type best describes your initiative/action/measure?

- EPR implementation (Extended producer responsibility)
- Other:

Developing local economy

- 84. Which sub-type best describes your initiative/action/measure?
 - Recycling entrepreneurship
 - Other:



Litter recycling

85. Which type best describes your initiative/action/measure?

- Production of plastic
- Production of energy

Production of plastic

86. Which sub-type best describes your initiative/action/measure?

- R-Plastic pellets
- 3D printing filament
- "Precious Plastic" machine
- Other:

Production of energy

87. Which sub-type best describes your initiative/action/measure?

- Fuel
- Other:

Use of recycled litter

88. Which type best describes your initiative/action/measure?

- Manufacture of plastic objects
- Incorporation in another material

Manufacture of plastic objects

89. Which sub-type best describes your initiative/action/measure?

- Kayak / surfboard
- Clothes
- Sportswear
- Design objects
- Pots
- Glasses
- Mesh bags
- Orthotics
- Other:

Incorporation in another material

90. Which sub-type best describes your initiative/action/measure?

- In concrete
- Other:

New material for sea-related uses

91. Which type best describes your initiative/action/measure?

- Bio-sourced bioplastic



- New gear

New gear

- 92. Which sub-type best describes your initiative/action/measure?
 - Fishing nets / Oyster trays
 - Other:

Policy

- 93. Which sub-category best describes your initiative/action/measure?
 - Engagement
 - Baseline document
 - (Inter)national forum
 - Ban

Engagement

94. Which type best describes your initiative/action/measure?

- Mobilisation campaign
- Charter

Mobilisation campaign

- 95. Which sub-type best describes your initiative/action/measure?
 - International
 - National
 - Other:

Charter

96. Which sub-type best describes your initiative/action/measure?

- National
- Other:

Baseline document

97. Which type best describes your initiative/action/measure?

- Plan
- State of the art
- Roadmap
- Guidelines

Plan

98. Which sub-type best describes your initiative/action/measure?

- International
- National



- Other:

State of the art

99. Which sub-type best describes your initiative/action/measure?

- Litter management
- Litter research review
- Other:

(Inter)national forum

100. Which type best describes your initiative/action/measure?

- Working group
- Conference

Working group

101. Which sub-type best describes your initiative/action/measure?

- International
- National
- Regional
- Other:

Conference

102. Which sub-type best describes your initiative/action/measure?

- International
- National
- Other:

Ban

103. Which type best describes your initiative/action/measure?

- Litter items

Litter items

104. Which sub-type best describes your initiative/action/measure?

- Balloons / Flying lanterns
- Other:



3. Target of the initiative

Please describe the target of your initiative/action/measure:

- Litter (type): initiative targeting an environmental compartment (e.g. Beach litter, Floating litter, Marine litter).

- Litter (item): initiative that targets an object (e.g. cigarette butts) or a category of object (e.g. fishing-related litter).

- Litter (impact): initiative that specifically targets an impact of marine litter (e.g. birds).

- Stakeholder: initiative that targets a specific audience or stakeholder (e.g. schools, general public, fishermen).

- Theme: initiative that targets a theme (e.g. circular economy, best practices, biodiversity).

103. Which target best describes your initiative/action/measure?

- Litter (type)
- Litter (item)
- Litter (impact)
- Stakeholder
- Theme

Litter (impact)

104. Which sub-target best describes your initiative/action/measure?

- Birds
- Other:

Litter (item)

105. Which sub-target best describes your initiative/action/measure?

- ALDFG (Abandoned, Lost or otherwise Discarded Fishing Gear)
- Balloons
- Cigarette butts
- Cotton buds
- Fishing-related litter
- Ghost nets
- Net mending pieces
- PET
- Plastic bags
- Used fishing nets
- Used mooring lines
- Used oyster bags
- Other:

Litter (type)

106. Which sub-target best describes your initiative/action/measure?



- Seabed litter
- Beach litter
- Floating litter
- Plastic litter
- Marine litter
- Urban litter
- Land litter
- Microplastics
- Other:

Stakeholder

107. Which sub-target best describes your initiative/action/measure?

- Firms/SMEs
- Fishermen
- Wives of fishermen and shellfish farmers
- Shellfish farmers
- General public
- MPA managers
- Sailors
- Sailors (children)
- Schools
- Snack bar at beach
- Various
- Other:

Theme

108. Which sub-target best describes your initiative/action/measure?

- Best practices
- Circular economy
- Biodiversity
- Training
- Other:



4. Stakeholders involved

Please indicate who the initiative/action/measure is intended for or who will be implementing it.

109. Which sub-target best describes your initiative/action/measure?

- Artist
- Agents / employees
- Consortium of stakeholders
- Contractor
- Contracting parties
- Fishermen
- Shellfish farmers
- Firm / SME
- Govt (service. agency)
- Local authorities
- Local communities
- NGO (environment)
- NGO (social inclusion)
- NGO (sport)
- Port authority
- Public foundation
- Professional association
- Research consortium
- Sailors
- Schools
- Professional institute
- Volunteers
- Technical institute
- Sports(wo)man
- Scientists

5. Status

110. Give the starting date of your initiative/action/measure:

- Unknown

111. Give the end date of your initiative/action/measure

- Initiative still in progress
- Unknown

6. Location

112. Where did you tackle or are you currently tackling litter?

113. In which designated area have you fought or are you currently fighting litter?

- International
- Cross border



- National
- Regional
- Local
- Zonal

7. Initiative logo and website

114. Provide the initiative's logo (if you give the link to the logo you authorise the use of the logo)

115. Website of the initiative:

8. New INITIATIVE / ACTION / MEASURE (you're involved in)

116. Do you want to describe a new INITIATIVE / ACTION / MEASURE you are involved in?

- Yes
- No

9. Document(s) to upload

If you wish to send us relevant documents (leaflets, infographics, reports...) about initiative(s)/action(s)/measure(s) then files can be uploaded online below or sent by email to <u>survey@cedre.fr</u>.

Thank you very much for participating in our marine litter survey!

Thank you very much for participating in our survey!

This was an opportunity for you to share your experience with beach litter in the European Atlantic Area.

Do not hesitate to circulate this survey to the people concerned.

A summary of the results will be available in the coming months on the following page: http://www.cleanatlantic.eu/results/.

If you have any questions about the project or the survey, please send an email to: survey@cedre.fr



APPENDIX 2: COMPREHENSIVE IMAs CLASSIFICATION USED IN THE INTERACTIVE PLATFORM AND APPENDIX 3

| A. LITTER C | LEAN-UP / RECOVERY category | |
|---------------------------------------|--|---|
| Sub-category | Туре | Sub-Type |
| | | Manual (usual) |
| Clean-Up operations (on shoreline) | Citizen clean-up | By using kayak |
| | | By using paddle |
| | Professional clean-up | Manual (usual) |
| | | Mechanical + manual |
| Clean-Up operations | Professional clean-up | Manual (tool) |
| (in port) | Citizen eleen un | Mechanical Manual (tool) |
| | Citizen clean-up Fishing for litter | |
| Clean-Up operations (at-sea) | From dedicated vessel | |
| | By diving | Scuba diving Snorkelling |
| | Beach clean-up | Manual tool |
| Specific Equipment | Containment | Floating barrier |
| | At-sea recovery | Recovery barge |
| | On-board storage | Litter compactor |
| | Guideline | Shoreline clean-up Organisation of a Beach Clean-up |
| Support tool | Арр | Beach clean-up organisations list Location of Beach clean-up sites |
| | Web viewer | Beach clean-up organisations list Location of Beach clean-up sites |
| | Signage tool | Plague / tag |
| Incentive scheme | Equipment | Litter tide tank Belt bag Floating bin |
| | | Beach bin Litter bucket |
| | | Litter tide floating tank |

| B. LITTER OBSERVATION / MONITORING category | | | | |
|---|------------------------------------|------------------------|--|--|
| Sub-category | Туре | Sub-Type | | |
| | | Standardized protocole | | |
| Litter surveys Ops | (Inter)national monitoring network | OSPAR/MSFD protocole | | |
| (on shoreline) | | Own protocole | | |
| | Participative observations | Standardized protocole | | |
| | | Own protocole | | |
| | Research study | Methodology | | |
| | | Standardized protocole | | |
| Litter surveys Ops | (Inter)national monitoring network | Own protocole | | |
| (at Sea) | Participative observations | Standardized protocole | | |
| | | Own protocole | | |



| | Research study | Methodology | |
|-----------------------------|------------------------------------|------------------------------|--|
| | | Standardized protocole | |
| | (Inter)national monitoring network | OSPAR/MSFD protocole | |
| Litter surveys Ops | | Own protocole | |
| (in river) | | Standardized protocole | |
| | Participative observations | Own protocole | |
| | Research study | Methodology | |
| | | Birds | |
| | (Inter)national monitoring network | Turtles | |
| 1.1.1.1.1.1.1.1.1.1 | | Fauna | |
| Litter Impact Assessment | | Mammals | |
| | Participative observations | Birds | |
| | Research study | Trophic chain | |
| | Research study | Fauna | |
| | Guideline | Monitoring | |
| | | Observation | |
| | Database | Data Monitoring | |
| | Web viewer | Monitoring results | |
| Support Tool | | Litter accumulations mapping | |
| | | Litter location | |
| | Арр | Monitoring | |
| | | Observations | |
| | Model | Drift | |
| | Wiki | Litter identification | |
| Specific Equipment | | ROV | |
| | Observation | UAV | |
| | | Washing machine filter | |
| | | Retention nets | |

| C. LITTER AWARENESS RAISING Category | | | | |
|--------------------------------------|------------------------------|------------------------|--|--|
| Sub-category | Туре | Sub-Type | | |
| | Exhibition | / | | |
| | Artist exhibition | / | | |
| | Sport performance | / | | |
| | | Drawing | | |
| | Contest | R&D | | |
| Event | | Best practices | | |
| | Sciences conference | / | | |
| | (Inter)national Clean-up day | International | | |
| | | National | | |
| | | Regional/local | | |
| | (Inter)national programme | International campaign | | |
| | | National campaign | | |
| Education | General outreach | On beach | | |
| | | In port | | |



| | | On board a dedicated vessel | |
|--------------|-----------------------|-----------------------------|--|
| | | Lecture | |
| | | Training Course | |
| | | Sea professional | |
| | | Fishermen | |
| | | shellfish farmers | |
| | Targeted outreach | SME | |
| | | Sailors | |
| | | Surfers | |
| | | Schools | |
| | | Art | |
| | Workshop | Training Course | |
| | Travelling exhibition | Marine litter | |
| | | Litter recycling workshop | |
| | Awareness kit | Guidelines | |
| | | Miscellaneous | |
| | | Workshop | |
| Support tool | | Miscellaneous | |
| | Platform | Training courses | |
| | | Ocean literacy | |
| | Game | / | |
| | Quiz | / | |
| | Tale | / | |
| | Infography | / | |
| | Video | / | |

| D. LITTER CIRCULAR ECONOMY category | | | | |
|-------------------------------------|--------------------------|-----------------------------|--|--|
| Sub-category | Туре | Sub-Type | | |
| | For litter | Beach litter | | |
| | | From fishing for litter ops | | |
| | | Used fishing nets | | |
| | | Used EPS fishing boxes | | |
| Recovery chain | For used materials | Used fishing lights | | |
| organisation | | Used batteries | | |
| | | Used mooring lines | | |
| | | Single use mask | | |
| | For specific litter item | Cigarette butts | | |
| | | Neoprene wetsuit | | |
| | Tool | EPR implementation | | |
| Valorisation chain | | Recycling entrepreneurship | | |
| organisation | Developing local economy | Re-use | | |
| Litter recycling | Production of plastic | R-Plastic pellets | | |



| | | 3D printing filament « Precious Plastic » machine |
|------------------------|-----------------------------------|--|
| | Production of energy | Fuel |
| | | Kayak / surfboard |
| | | Clothes sport wear |
| | | Clothes |
| | Manufacture of plactic object | Design objects |
| Lice of regulad litter | Manufacture of plastic object | Pots |
| Use of recycled litter | | Glasses |
| | | Mesh bags |
| | | Orthotics |
| | Incorporation in another material | In concrete |
| | Bio-sourced bioplastic | / |
| New material for sea- | | Fishing nets |
| related uses | New gear | Oyster trays |
| | New Seal | Mussel nets |
| | | Biodegradable nets |

| E. LITTER POLICY Category | | | | |
|---------------------------|-----------------------|----------------------------|--|--|
| Sub-category | Туре | Sub-Type | | |
| | Mobilization compaign | International | | |
| Engagement | Mobilisation campaign | National | | |
| Engagement | Charter | National | | |
| | Charter | Regional | | |
| | Plan | National | | |
| | | International | | |
| Baseline document | Roadmap | / | | |
| baseline document | Guidelines | / | | |
| | State of the art | Litter management | | |
| | State of the art | Litter research review | | |
| | | International | | |
| | Working group | National | | |
| (inter)national forum | | Regional | | |
| | Conference | National | | |
| | Conference | International | | |
| Ban | Litter items | Balloons / Flying lanterns | | |
| Dall | | Pellets | | |

| Target | Target details |
|----------------|-----------------|
| | Marine litter |
| | Seabed litter |
| | Floating litter |
| | Beach litter |
| Litter (types) | Urban litter |
| | Land litter |
| | Plastic litter |
| | Microplastic |
| | ADFLG |
| Litter (items) | Ballons |
| | Butts |



| | Cotton bud | |
|------------------|--------------------------------|--|
| | Fishing related litter | |
| | Ghost nets | |
| | Net mending pieces | |
| | PET | |
| | Plastic bags | |
| | Used fishing nets | |
| | Used mooring lines | |
| | Used oyster bags | |
| | Туге | |
| | Neoprene wetsuit | |
| | Filter media | |
| | Birds | |
| Litter (impacts) | Sea mammals | |
| | Firm/SME | |
| | Fishermen | |
| | Shellfish and fishermen women | |
| | Shellfish farmers | |
| | General public | |
| Stakeholders | Protected natural site manager | |
| Stakenoiders | | |
| | Sailors | |
| | Sailors (kids) | |
| | School | |
| | Snack-bar at beach | |
| | Various | |
| | Best practices | |
| Theme | Circular economy | |
| | Biodiversity | |
| | Training | |

NB: The new categories and sub-categories added in the Clean Atlantic project extension are colored in green in the tables



APPENDIX 3: NEW IMAS IDENTIFIED IN THE CLEAN ATLANTIC PROJECT EXTENSION

| COUNTRY | INITIATIVE NAME | CATEGORY | SUB-CATEGORY | ТҮРЕ | SUBTYPE | | |
|---------|--|-------------------|--------------------------------|-----------------------|---------------------------|--|--|
| | CLEAN-UP/RECOVERY | | | | | | |
| SP | Proyecto NeumaticOUT | Clean-up/Recovery | Clean-up Ops (at-sea) | By diving | Scuba diving | | |
| SP | Proyecto NeumaticOUT | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| SP | REMAR | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| SP | Unnamed | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Manual (usual) | | |
| SP | Observatorio de Basura Marina II | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Manual (usual) | | |
| SP | Proyecto LIBERA | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| SP | Recogida de residuos de aparejos de pesca | Clean-up/Recovery | Clean-up Ops (in port) | Professional clean-up | Mechanical and manual | | |
| FR | Bac a maree flottant | Clean-up/Recovery | Incentive scheme | Equipment | Litter tide floating tank | | |
| FR | Les Sentinelles Citoyennes | Clean-up/Recovery | Clean-up Ops (at-sea) | From dedicated vessel | NA | | |

| FR | Bac à marée trait bleu | Clean-up/Recovery | Incentive scheme | Equipment | Litter tide tank |
|----|--|-------------------|--------------------------------|-----------------------|------------------|
| FR | Poubelles de tri sélectif de plage | Clean-up/Recovery | Incentive scheme | Equipment | Beach bin |
| FR | Je Navigue Je Trie | Clean-up/Recovery | Incentive scheme | Equipment | Litter bucket |
| FR | Unnamed | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) |
| FR | Unnamed | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Manual (usual) |
| FR | Art beach, Clean beach | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) |
| FR | Operation de nettoyage differencie du littoral landais | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Manual (usual) |
| FR | Unnamed | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) |
| FR | Les Sentinelles Citoyennes | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) |
| FR | Shellfish farming Clean-up day | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Manual (usual) |
| FR | Cap Lahoussay'sale | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) |

| FR | Initiatives oceanes | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
|----|--------------------------------------|------------------------|--------------------------------|---------------------------|-------------------------------------|--|--|
| FR | Unnamed | Clean-up/Recovery | Clean-up Ops (in port) | Professional clean-up | Manual (usual) | | |
| IE | Waterford Estuary Litter Clean Up | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| IE | Unnamed | Clean-up/Recovery | Clean-up Ops (on shoreline) | Professional clean-up | Mechanical and manual | | |
| IE | Clean Coast Cleanups | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| υκ | Beach Cleaning Programme | Clean-up/Recovery | Clean-up Ops (on shoreline) | Citizen clean-up | Manual (usual) | | |
| UK | Wildlife aware beach cleans | Clean-up/Recovery | Support tool | Guideline | Organisation of a beach clean-up | | |
| | OBSERVATION/MONITORING | | | | | | |
| SP | Observatorio de Basura Marina II | Observation/Monitoring | Litter survey Ops (at sea) | Research study | Methodology | | |
| SP | Observatorio de Basura Marina II | Observation/Monitoring | Litter survey Ops (at sea) | Participative observation | Standardized protocole | | |

| | | | | 1 | |
|----|--|------------------------|----------------------------------|---------------------------------------|------------------------|
| SP | Observatorio de Basura Marina II | Observation/Monitoring | Litter survey Ops (at sea) | (Inter)national monitoring network | Own protocole |
| SP | MEDPELLETS | Observation/Monitoring | Litter survey Ops (on shoreline) | Research study | Methodology |
| SP | Modelizacion de macro y micro plasticos | Observation/Monitoring | Support tool | Model | Drift |
| FR | Protocole de caractérisation "OSPAR" des déchets échoués sur les berges de la Seine | Observation/Monitoring | Litter survey Ops (in rivers) | (Inter)national monitoring network | OSPAR/MSFD protocole |
| FR | Recensement des zones d'acumulation de déchets échoués sur les berges de la Seine | Observation/Monitoring | Litter survey Ops (in rivers) | Participative observation | Own protocole |
| FR | Filtre microplastiques (lave linge) | Observation/Monitoring | Specific equipment | Observation | Washing machine filter |
| FR | Projet interreg Preventing Plastic Pollution | Observation/Monitoring | Specific equipment | Observation | Retention nets |
| FR | Projet PLASTOC | Observation/Monitoring | Specific equipment | Observation | Retention nets |
| FR | Protocole de caractérisation "OSPAR" des déchets échoués dans un champs rivulaire | Observation/Monitoring | Litter survey Ops (in rivers) | Participative observation | Own protocole |

| | Réseau national de surveillance des | | Litter survey Ops (on | (Inter)national monitoring | |
|-----|--|-------------------------|----------------------------|----------------------------|------------------------|
| FR | macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | shoreline) | network | OSPAR/MSFD protocole |
| | Réseau national de surveillance des | | Litter survey Ops (on | (Inter)national monitoring | |
| FR | macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | shoreline) | network | OSPAR/MSFD protocole |
| FR | Les Sentinelles Citoyennes | Observation/Monitoring | Litter survey Ops (at sea) | Participative observation | Standardized protocole |
| | | | | | |
| FR | InSPection subaquatique | Observation/Monitoring | Specific equipment | Observation | POV |
| FN. | Inspection subaquatique | Observation/Monitoring | specific equipment | Observation | ROV |
| | | | Litter survey Ops (on | | |
| FR | Fish&Click | Observation/Monitoring | shoreline) | Participative observation | Own protocole |
| 50 | | Observation (Manitoring | Guenertteel | 4 | Littor loootion |
| FR | Fish&Click | Observation/Monitoring | Support tool | Арр | Litter location |
| | | | Litter survey Ops (on | | |
| FR | Projet interreg INDIGO | Observation/Monitoring | shoreline) | Research study | Methodology |
| | Réseau national de surveillance des | | Litter survey Ops (on | (Inter)national monitoring | _ |
| FR | macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | shoreline) | network | OSPAR/MSFD protocole |
| ED. | Cuivi des modies filtrant | Observation (Maniteria | Litter survey Ops (on | Participativo obconuction | Own protocolo |
| FR | Suivi des medias filtrant | Observation/Monitoring | shoreline) | Participative observation | Own protocole |

| FR | Suivi des medias filtrant | Observation/Monitoring | Litter survey Ops (on shoreline) | Participative observation | Own protocole |
|-------------------|--|------------------------|-------------------------------------|---------------------------------------|------------------------|
| FR | Réseau national de surveillance des macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | Litter survey Ops (on shoreline) | (Inter)national monitoring network | OSPAR/MSFD protocole |
| FR | Réseau national de surveillance des macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | Litter survey Ops (on shoreline) | (Inter)national monitoring network | OSPAR/MSFD protocole |
| FR | Observatoire du Plancton | Observation/Monitoring | Litter survey Ops (on shoreline) | Participative observation | Own protocole |
| FR | OSPARITO | Observation/Monitoring | Litter survey Ops (on shoreline) | (Inter)national monitoring network | OSPAR/MSFD protocole |
| FR | Réseau national de surveillance des macrodéchets sur le littoral (RNS-MD-L) | Observation/Monitoring | Litter survey Ops (on shoreline) | (Inter)national monitoring network | OSPAR/MSFD protocole |
| FR | Projet EXPLOPE | Observation/Monitoring | Litter survey Ops (in rivers) | Research study | Methodology |
| IE | ICES/IBTS fisheries surveys | Observation/Monitoring | Litter survey Ops (at sea) | (Inter)national monitoring network | Standardized protocole |
| AWARENESS RAISING | | | | | |

| SP | Programa "Pequeños gestos que implican una gran solución : La basura marina" | Awareness raising | Education | Targeted outreach | Schools |
|----|---|-------------------|--------------|-------------------|---------------|
| FR | Un ideal, des idees-eaux | Awareness raising | Education | Targeted outreach | Schools |
| FR | Initiative oceane | Awareness raising | Education | General outreach | On beach |
| FR | Ecogestes Mediterranee | Awareness raising | Education | General outreach | In port |
| FR | Unnamed | Awareness raising | Education | Targeted outreach | Schools |
| FR | Unnamed | Awareness raising | Education | Targeted outreach | Schools |
| FR | Unnamed | Awareness raising | Education | Targeted outreach | Schools |
| FR | Localisation macaron "ici commence la mer" | Awareness raising | Support tool | Platform | Miscellaneous |
| FR | « Ici commence la mer » | Awareness raising | Support tool | Infography | NA |

| FR | " Gardez et triez vos dechets" | Awareness raising | Support tool | Infography | NA | |
|------------------|--|-------------------|-----------------------------|--------------------------------------|-----------------------------|--|
| FR | Video "Sur le sentier on ne jette pas ses mégots n'importe où" | Awareness raising | Support tool | Video | NA | |
| FR | "Le plastique c'est quoi?" | Awareness raising | Support tool | Infography | NA | |
| FR | "Faisons des MERveilles, pour une Occitanie sans dechets" | Awareness raising | Support tool | Awarness kit | NA | |
| IE | Take 3 for the Sea | Awareness raising | Support tool | Awarness kit | Guidelines | |
| IE | The Sea Starts Here | Awareness raising | Support tool | Awarness kit | Guidelines | |
| UK | Preventing Plastic Pollution from source to sea (activity pack for schools) | Awareness raising | Education | Workshop | Formation | |
| CIRCULAR ECONOMY | | | | | | |
| SP | Proyecto NeumaticOUT | Circular Economy | Used of recycled litter | Incorporation in another material | In concrete | |
| SP | Las manos de mama | Circular Economy | Recovery chain organisation | For litter | From fishing for litter Ops | |

| SP | Proyecto interreg Oceanwise | Circular Economy | Valorisation chain organisation | Developing local economy | Recycling entrepreneurship |
|----|---|------------------|---------------------------------------|----------------------------------|-------------------------------|
| SP | Las manos de mama | Circular Economy | Used of recycled litter | Manufacture of palstic object | Clothes |
| FR | Projet REIPLIC (Reduction de l'impact des plastique en conchyliculture) | Circular Economy | New material for sea- related uses | New gear | Mussel nets |
| FR | Projet FILALTIQ | Circular Economy | New material for sea- related uses | Bio-sourced bioplastic | NA |
| FR | Projet interreg INDIGO | Circular Economy | New material for sea- related uses | New gear | Biodegradable nets |
| FR | SOÖRUZ | Circular Economy | Recovery chain organisation | For specific litter item | Neoprene wetsuit |
| FR | Glokis | Circular Economy | Recovery chain organisation | For used materials | Used fishing nets |
| FR | Mobilisation mégots | Circular Economy | Recovery chain organisation | For specific litter item | Cigarette butts |
| FR | Eco 2PR | Circular Economy | Valorisation chain organisation | Developing local economy | Recycling entrepreneurship |
| FR | Cycl'OP | Circular Economy | Valorisation chain organisation | Developing local economy | Recycling entrepreneurship |
| FR | Give Box | Circular Economy | Valorisation chain organisation | Developing local economy | Re-use |
| FR | Etude "Les déchets plastiques en Occitanie" | Circular Economy | Valorisation chain organisation | Developing local economy | Recycling entrepreneurship |

| FR | Knauf circular | Circular Economy | Used of recycled litter | Production of plastic | R-Plastic pellets | |
|--------|--|------------------|---------------------------------|--------------------------|-------------------|--|
| IE | Ghost Fishing Gear | Circular Economy | Valorisation chain organisation | Developing local economy | Re-use | |
| POLICY | | | | | | |
| SP | MEDPELLETS | Policy | Ban | Litter items | Pellets | |
| FR | Pack Zero emballage Occitanie | Policy | Engagement | Charter | Regional | |
| FR | Charte "Faisons des MERveilles, pour une mer sans déchets" | Policy | Engagement | Charter | Regional | |