MEETING DOCUMENT

**Task Group Management (TG-M 20-4)**

11 December 2020

Online meeting

**Agenda Item: 5. Implementation of the Leeuwarden Declaration**

**Subject: Marine litter inventory**

**Document No.:** TG-M 20-4/4/4rev

**Date:** 10 December 2020

**Submitted by: Floris van Bentum**

*This is the first revision of TG-M20-4-4-4-Marine litter inventory.docx, which includes changes to the cover note.*

At their TG-M 19-1 meeting in April 2019, the proposal was endorsed that the Netherlands would make a first inventory on marine litter in the three countries. In WSB 29 also the relation with the OPteam PH was discussed. Denmark has made a first inventory on activities going on in Denmark regarding Marine Litter. This first inventory was discussed at TG-M19-2 on 08 – 09 October 2019. Here, TG-M agreed with a two-step approach: 1) include five lines to the progress report of WSB 30 and 2) produce the inventory in the form as submitted as a quick and thorough overview to the next TG-M meeting, include UN, EU and OSPAR/ICES level as a second part of the inventory and then discuss on how to proceed for a possible Marine Litter document at WSB 31.

The attached documents contain an overview on marine litter activities in Denmark and the Netherlands regarding policy, monitoring, prevention, education/awareness, cleaning etc.

For Germany the situation is comparable to Denmark and he Netherlands. Monitoring of marine litter for the MSFD in Germany is dealt with at the Federal/State level in the working group “Erfassen und Bewerten (ErBe)” (data collection and evaluation) and its subordinate specialist group “Fach AG Abfälle im Meer” (litter in the sea).. Reports produced by “ErBe” are presented here https://www.meeresschutz.info/msrl.html.

Also there is a round table “Meeresmüll”, which is a stakeholder platform, which develops and implements measures against marine litter pollution for the MSFD. It deals with the national as well as regional and local levels. An overview of this can also be found on muell-im-meer.de (this is the website of the round table “Meeresmüll”). On the same website for example reports on the sources of marine litter and the distribution of micro plastics in marine species of the Wadden Sea along the coastline of Schleswig-Holstein can be found.

There is a very intensive cooperation between the Netherlands, Denmark and Germany regarding marine litter. The three countries work closely together in the OSPAR marine litter group and at the technical group at EU-level. This work includes monitoring and measures.

OSPAR (ICG-ML) is, amongst others, presently building up to its QSR (Quality Status Reports) 2023 and is also presently updating its monitoring guidelines (CEMP guidelines), developing new indicators (e.g. microliter) and revising its RAP (Regional Action Plan).

The Technical Group on Marine Litter is presently revising its Guidelines on monitoring litter and is in the process of collecting data with the aim of producing baselines for seabed, sea surface and micro plastic litter. It has recently produced reports on “harm” (D10 MSFD), baselines for beach litter and has produced a report on as well as agreed upon a threshold value for beach litter. It is also producing a new joint list of litter items for monitoring in the EU.

Reporting for the MSRL goes on at the national level (see https://www.meeresschutz.info/msrl.html for Germany). There are three types of reports: State reports were 2012 and 2018, Monitoring reports 2014 and 2020, Measures reports 2016 and in progress.

All three countries perform actions regarding monitoring, prevention, education, cleaning and have policy-measures, partly based on related EU-directives. In the QSR a separate chapter reports on marine litter in the Waddensea which gives recommendations on the basis of the existing Regional Action Plan for the North Sea. This Action Plan is part of the work for OSPAR, the recommendations from the QSR-authors vary from raising awareness to fines for littering at sea.

In the Leeuwarden Declaration it is stated that:

**“The Ministers**

**22. Strive** to substantially reduce the amount of marine litter in the Wadden Sea by the year 2030;

**23. Instruct** the Wadden Sea Board to make use of all relevant existing monitoring and action programmes, as well as existing action plans, taking into account local, national and multilateral initiatives to gain and exchange adequate additional knowledge on sources and impacts of marine litter (such as microplastics) on the Wadden Sea ecosystem and stimulate and support appropriate measures;”

Given this statement a broad range of further activities possible. To stimulate the discussion in TG-M possible options are:

* to investigate whether the current monitoring gives enough information to deal with potential land-based and/or riverine sources of marine litter
* to share good practices from country to country and by that learn from each other
* formulate indirect measures on the topic, for example to communicate a list of typical Waddensea litter which can be easily be avoided by different users
* to compare the trilateral implementation of the EU-Directive on Single Used Plastics and if necessary support the three countries by making a Waddensea-specific implementation plan
* to communicate trilateral on a regular basis on the development of monitoring results marine litter in the Waddensea to raise awareness or do this by other means.

**Proposal:** The group is invited to discuss further activities on the topic on basis of above mentioned suggestions.

**Litter in the Danish Oceans**

1. **Policy**

The ministry of Environment and food protection Denmark wants to move Denmark towards more recycle less waste and litter production. The Municipalities plays an important role in contributing and reaching the goal. The municipalities are in charge of the practical part concerning cleaning the beaches, and they can contribute in the ways that are best suited for them, as long as the goal is met. With guidance and an appropriation to keep the beaches clean from the government, they can do it in ways suited best for each municipality. Many organizations are collaborating with the policymakers and the municipalities. The colla-borators are; Havmiljøvogterne, Dansk Sejlunion, Danmarks Fiskeriforening PO, Dansk Sportsdykker Forbund, Danmarks Amatørfiskerforening, Hold Danmark Rent, Danmarks Sportsfiskerforbund, Dansk Tursejlere and KIMO International.

1. **Monitoring**

The beaches in Denmark are visited very well during summer, and municipalities are in charge of checking and replacing the garbage bins on the beaches and keeping the surroundings clean. Through winter, many storms are raging and many litters’ ends on land. Because of the harsh weather, the beaches will not be cleaned before spring, when the storms has passed. A lot of cleaning is done throughout springtime. In areas with wide flat beaches, machinery is used to collect litter. In areas with dikes and slopes, the collecting of litter is done manually by hand. The municipalities has a crew collecting litter, but many organizations and volunteers are helping cleaning the beaches as well. The statistics estimates 1.000 ton of litter are collected on the beaches along the west coast every year.

* 1. **KIMO Denmark** is an international environmental organization for local authorities and municipalities with beaches along coastal areas. The organization has a broad international and nationally network and they cooperate with NGOs, national and international authorities and research institutions. Through KIMO the Danish municipalities get guidance and help in case a environmental catastrophe occur, and KIMO helps the affected municipalities in presenting a case to the authorities and politicians for quicker action.

1. **Beach clean-up activities**

Many different organizations organize days or activities where the seas, beaches and ports are cleaned, and litter is collected. It can be a day where they encourage people to come and collect litter at the beaches, school classes go out and collect litter from the beaches and learn, what can be recycled. Some use it in art class and so on. Some of the organizations organizing activities are; Havmiljøvogterne, Danmarks Amatørfiskerforening, Hold Danmark Rent og Sportsdykker Forbund.

* 1. **Marine environment patroller**: are often yachtsmen, anglers, surfers, divers and rowers, who are active around or on the sea. A number of Danish amateur aviators also keep an eye on the sea from the air. Defense Command Denmark monitors ships from the time they sail into Danish, until they leave again. Planes, ships, coastal radar and AIS (Automatic Identification Systems) carry out the surveillance. The Naval Home Guard and commercial sailors, who have a duty to report their observations, support them. (<http://en.xn--havmiljvogter-hnb.dk/>)

1. **Prevent**

The plastic industry is trying to reduce their release of plastic to nature and the seas. They do so by implementing stricter rules at the workplace so less plastic ends up in nature.

* 1. **Operation Clean Sweep**: aims to combat waste of plastic granules from production companies to the environment. It comes with ways to avoid plastic being a source of pollution and the solution is a part of the overall “Marine Litter Solutions”, started by industry of association for plastic companies around the world to contribute to solving the world’s marine environment problems. Marine Litter Solutions has been signed by 68 68 organizations from 35 countries and works for a cleaner environment, increased recycling, local collection and information campaigns on the consequences of plastic pollution of the sea. <https://plast.dk/operation-clean-sweep-undgaa-plastraavarer-ender-havet/>.
  2. **Project plastic free oceans**: is a partnership between the plastic industry, plastic change (NGO) and the Ecological Council (NGO). Over DKK 11 million is allocated to four different projects that will contribute to solutions to problems with plastic in the seas. <https://plast.dk/projekt-plastfrit-hav-plastindustrien-ngoer-faelles-kamp-plast-havet/>

1. **Communication / Education**

The ministry of environment and food protection made a campaign in 2018 about litter in the oceans to inform people about the consequences regarding litter. Different organizations either do similar information with the public, through campaign, educating schoolchildren or involve volunteers. Some of them are described below:

* 1. **The Ministry of Environment and food protection** in 2018 performed a campaign against waste and litter in the oceans surrounding Denmark. The campaign is called “Together for an ocean without litter” and approached ‘us whom use the oceans, beaches and harbors must stand together – and work together – for an ocean without litter’. The campaign works together with different organizations, NGOs, people whom walks, and uses the beaches. The campaign was used to make people aware of the negative consequences of litter in the oceans, and give practical advice to inform people alternatives, to avoid their waster to end up in the oceans. <https://mst.dk/natur-vand/vandmiljoe/havet/havmiljoe/sammen-om-et-hav-uden-affald/>.
  2. **Keep Denmark Clean** is an organization that informs the Danish people what to do with their waste. They have a sub-group called “Strandet” who collect waste and litter along the west coast of Jutland, and they go further and recycle the collected litter. Throughout sharing their knowledge, tests and innovative product development they wish to inform that litter do not belong in nature and the seas, but is a resource, which can and must be recycled. <https://www.strandet.io/> , <https://www.holddanmarkrent.dk/article/5020-Strandet-affald-faar-nyt-liv>.
  3. Danish amateur anglers: small group of anglers who corporates with schools and kindergartens and inform the children about the sea and wildlife there. In connection with this, they also talk with the children about litter and the consequences it has on wildlife. <http://danskefritidsfiskere.dk/?page_id=792>.

Marine litter in the Dutch Waddensea

1. **Introduction**

The mainstream of activities regarding marine litter in the Wadden Sea can be distinguished into three different categories:

* EU-Directives (Marine Framework Directive etc.)
* Volunteers, ngo’s, individuel smaller companies, local site-managers
* Community Plasticfree Waddensea

All of these have different kind of relationships depending on the activity like monitoring, recycling or the like. Overall it has to acknowledged that mainly volunteers, ngo’s and individual companies clean up for the most and have put the problem on the agenda of Rijkswaterstaat. To support these activities the Community Plastic Free Waddensea is set up by RWS (see plasticvrijewaddenzee.nl for more information).

The Marine Framework Directive has lead to the most attention to the problem of marine litter in the North Sea and adjacent rivers and Waddensea.

1. **EU-directives and the like**

At this moment the EU-Marine Framework is the most important framework. The government has defined two goals in the Marine Strategy for 2020 to reduce the amount of marine litter on the coast and the impact in marine organisms. These targets are: 1) The amount of visible litter on the coast has diminished according to EU threshold values and 2) there is a downward trend of marine litter in marine organisms.

For the North sea the Marine Strategy of 2015 is the basis for an overall approach in the Netherlands. This Strategy is the implementation of the Marine Framework Directive in the Netherlands. More specific the Program of Measures, part of the Marine Strategy, contains three Green Deals which are relevant in this perspective:

* Green Deal Clean Beaches aimed at reducing marine litter on beaches by cleaning and facilities near beaches. This will be replaced by a Program Clean Beaches in 2022.
* Green Deal Fishing for a clean sea to search for alternative methods, like for example fish fluff which is used to protect fishing gear and for recycling of fishing gear. RWS is financing and coordinating this search. This Green Deal will be replaced by a cooperation Fishiing for a clean sea as of 2022.
* Green Deal Ship Waste Chain to diminish the amount of litter when supplying ships and to separate waste in the harbor for better recycling.

Also a policy program on micro plastics has started in 2018 with the aim to reduce emissions to surface- and drinking water which includes like for example the ban of micro plastics in paint and cosmetics. These policies are aiming at reduction of pollution of the North sea, but will also effect the Wadden sea.

The Netherlands aim at prevention by means of an integral measure at the source, communication and raising awareness and closing of production chains (for example via Green Deals, product regulations and litter policy). Also mitigation of the effects like beach clean-ups and [Fishing for Litter](http://www.kimonederlandbelgie.org/fishing-for-litter/) is part of the policy. By means of this program of measures this contributes towards SDG 14 of the UN regarding sustainable use of oceans, seas and marine sources.

Implementation of the EU Directive on Single Use Plastics (SUP): this EU-directive will lead to ban on products which are found on the beach, like straws, balloonsticks, plastic cutlery as well as plastic bags. Also products made of so-called oxo-decradable plastic will be forbidden. Producers of products like cigarettefilters and balloons wil have to pay for cleaning of litter as of januari 2023 and 2024. Fishing gear is also part of this Directive, meanly aiming at the collection of used fishing gear.

Program on microplastics with projects aimed at litter in rivers: prevention by means of behavorial pilots regarding recreational and inland shipping litter, pilots with litter-collecting systems in riviers and the development of a monitoringsystem.

As of mid 2021 the new EU-Directive on harbor intake facilities (EU/2019/883) has to be implemented. This means 100% indirect financial means for litter, fishing nets and passively fished litter (Fishing for Litter). Per ship a contribution on litter will be demanded depending on the amount of litter. Facilities for fishing for litter will be obliged in harbors.

In the framework of MARPOL ships sailing between Gibraltar and Northern Norway have to deposit paraffin rests via washing of tanker hulls in harbors by the beginning of 1st of January 2021.

1. **Monitoring**

When it comes to monitoring in the Waddensea this is going on now for three years, started in 2018. On three uninhabited islands/sandbanks in the Dutch Waddensea marine litter is monitored three times per year whereby the OSPAR-method is the standard. Monitoring does not take place during the breeding or migrating season for birds. The OSPAR-method had to be adjusted a little bit, because of the absence of large beaches on these sites. Because this kind of monitoring gives only an indication be it quite rough, a so-called Litter-ID has been carried out on the basis of marine Litter collected on the uninhabited bird island of Griend near Harlingen. This type of monitoring gives more insight into the sources and probable routes of the different types of litter.

On the beach of Terschelling monitoring takes place every year as part of the OSPAR-program.

A specific so-called Litter-ID research was undertaken in 2020 to investigate thoroughly into the sources of marine litter found on the bird island of Griend near Harlingen.

MSC Zoë: the effects on the marine environment because of the loss of the two different kind of plastic pellets and beads are under investigation at the moment.

1. **Clean-up activities**

Municipalities clean up the beaches on the Wadden islands, mainly near beach entrances. There are different local parties who organize clean-up activities on a more regular basis also on the more remote parts of the islands.

National ngo’s like Stichting de Noordzee organize yearly the Boskalis Beach Clean-up Tour where all the beaches in the Netherlands are cleaned with the help of volunteers during a two-week campaign. And special dedicated ngo’s organize also clean-up campaigns, also with the aim to help people who are unemployed.

A lot of fishermen are involved in the program Fishing for litter which aimes at bringing to the shore the litter fishermen find in their nets when fishing at sea, partly on the Dutch Wadden sea. KIMO Netherlands is the coordinator for this program.

Lots of volunteers and ngo’s organize clean-up activities alongside dikes and salt marshes bordering the Wadden sea.

Water boards clean up their dikes bordering the Waddensea whereby marine litter as well as organic matter is being removed a few times per year. This also counts for Rijkswaterstaat regarding the Afsluitdijk, sometimes helped by volunteers.

In some cases an entrepreneur goes out sailing on the Wadden sea with paying guests where also cleaning up is part of the program.

To try to help each other with solutions to get rid of marine litter, Rijkswaterstaat started the Community Plastic Free Litter Wadden sea in the beginning of 2019. This is a consequence of the fact that there are a lot of stakeholders and ngo’s who, each in their own way, are cleaning up the Wadden sea and are willing to do more. Like for example the ban of so-called single-used plastics in restaurants, café, beach bars and the like on the Wadden islands.

1. **Prevention**

Bubble barrier: the municipality of Harlingen is investigating with the Province of Fryslan and Rijkswaterstaat the use of a bubble barrier before the sluice near Harlingen where the Frisian surface water runs into the Wadden sea.

Different parties are trying to reduce the riverine input towards the sea by organizing clean-up activities. Also in the harbour of Amsterdam a bubble barrier is constructed in 2019, while in the harbour of Rotterdam a waste collector is already working for a few years now.

Balloons: more then 60% of the municipalities in the Netherlands have a ban or restriction on ballooning (only small ones) and mostly all municipalities surrounding the Waddensea have a ban on balloons.

Recreational fishing lead: the target is to reduce the use of recreational fishing lead by 30% in 2021. After evaluation of this goal perhaps new measures will be developed for a complete ban in 2027.

1. **Communication / Education**

As part of the Community Plastic Free Waddensea the website Plasticvrijewaddenzee.nl is being developed as part of the website Waddenzee.nl.

People working for parties like Staatsbosbeheer and Groningen Seaports give lessons at different schools for children regarding the topic of marine litter, partly in their spare time. Also at NHL/Stenden (a bachelor institute in Leeuwarden) a lot of attention is being given to the subject and one of the teachers takes actively part in the Community Plastic free Waddensea.

At Terschelling the so-called Jutfabriek has started to produce new products out of marine litter found on the island of Terschelling and by doing so also demonstrate this to different school classes.