

# Report: The German MARLISCO

## Forum on Marine Litter

21 March 2015

University of Neubrandenburg



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# 1 Glossar

Die Küsten Union Deutschland e.V. – The Coastal Union Germany (German association)

Mecklenburg-Vorpommern (M-V) – Mecklenburg-Western Pomerania, German state

Landtag Mecklenburg-Vorpommern – Parliament of Mecklenburg-Western Pomerania

UBA – Federal Environmental Agency, Germany

LUNG – State Agency for Environment, Nature Conservation and Geology Mecklenburg-Western Pomerania

NABU – Nature And Biodiversity Conservation Union (NGO)

Umweltrat Fehmarn – Environmental Council of Fehmarn

Küste gegen Plastik – German association

Edeka – German supermarket chain

Tourismuszentrale – tourism main office

Verband der Mecklenburgischen Ostseebäder – German association

Verein AIDA Freunde der Meere e.V. – German association

Nationalpark Niedersächsisches Wattenmeer – The Lower Saxon Wadden Sea National Park

Umweltsenat – Senate for the Environment

Senator für Bau und Umwelt der Hansestadt Rostock – Senator for Building and Environment of the Hanseatic City of Rostock

BMU – Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, Germany

Schleswig-Holstein – German state

Niedersachsen – Lower Saxony, German state

IOW – Leibniz-Institute for Baltic Sea Research, Warnemünde

Landesamt für Küstenschutz – State Office for Coastal Protection



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## 2 Introduction

### 2.1 The national MARLISCO fora on marine litter

MARLISCO (MARine Litter in European Seas: Social Awareness and Co-Responsibility) is an EU-funded project (FP7), aiming to increase awareness of the complex issues associated with marine litter, to promote co-responsibility among different stakeholders and to define a holistic take to the issue towards a collective vision for the sustainable management of marine litter across all European seas. Considering that marine litter is a threat to marine habitats, species and ecosystem services, the MARLISCO project also aims to develop, evaluate and provide approaches, tools and mechanisms, which can widely be used and applied by society to significantly reduce the impact of marine litter ([www.marlisco.eu](http://www.marlisco.eu)).

Within the MARLISCO project, 12 national fora on marine litter were successfully implemented in different European countries between 2014 and 2015. The overall goal of each forum was to promote communication between multiple stakeholders across various sectors and to provide an environment for participants to discuss marine litter, its impact and potential solutions. There were a few guidelines given for the organisation of the fora, however, each country was allowed to adapt the structure, the content and the focus to its national conditions.

The Küsten Union Deutschland e.V. (EUCC-D) is the German MARLISCO partner, and the German forum was organised and conducted in cooperation with the University of Neubrandenburg on 21 March 2015. The German MARLISCO exhibition “Human-Litter-Sea” was shown at this venue at the same time.

## 3 The summary of the German MARLISCO forum on marine litter

### 3.1 Goals and procedure

EUCC-D focused on the marine litter problem in the Baltic Sea region in Mecklenburg-Vorpommern (M-V), especially in the area of Rostock-Warnemünde. The forum aimed to discuss with stakeholders from the North and the Baltic Sea, which local and regional strategies and measures already exist, and which can easily be implemented elsewhere to reduce the impact of marine litter.



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The opening of the event was held by Prof. Dr. Lutz Vetter (University of Neubrandenburg), by Nardine Stybel (EUCC-D) as well as by Sylvia Bretschneider, the president of the Landtag M-V, who introduced the activities related to marine litter and marine protection of the Baltic Sea Parliamentary Conference and HELCOM. In three talks, students (Jan Wüst, Stefanie Hansen und Sina Schendekehl) informed about sources, path of entries as well as ecologic and economic consequences of marine litter. A video interview, produced during the European Maritime Day 2014 in Bremen, was shown from Stefanie Werner (UBA), in which she embedded the topic of marine litter into a national and international frame. This was continued in the talk by Mario von Weber (LUNG). First results from the regular OSPAR macro-litter beach collection along the Baltic Sea Coast were introduced by Mario von Weber (LUNG), Kristina Klesse (EUCC-D) und Nils Möllmann (NABU). The complex topic of marine litter was then summarised by showing a marine litter animation video by Jane Lee, which was one element of all 12 national fora conducted around Europe.

Afterwards, six stakeholders introduced different strategies and measures for the reduction and avoidance of marine litter, respectively: Nils Möllmann (NABU) „Fishing for litter“; Nils Möllmann (NABU) by proxy Beate Burow (Umweltrat Fehmarn) „Less plastic in the sea“; Jennifer Timrott (Küste gegen Plastik) „Not in my name! Coastal people against plastic litter“; Jan Meifert (Edeka retailer) „The plastic bag is a symbol of our discard society and easy to replace“; Matthias Fromm (Tourismuszentrale Rostock-Warnemünde) „The beach ashtray“ (in cooperation with the Verband der Mecklenburgischen Ostseebäder and the Verein AIDA Freunde der Meere e.V.); Nardine Stybel (EUCC-D) by proxy Dr. Gerald Millat (Nationalpark Niedersächsisches Wattenmeer) „The beach litter box“.

The ideas of different actions were discussed and evaluated together with the audience and the podium. The podium consisted of Matthias Fromm (director of the Tourismuszentrale Rostock & Warnemünde), Holger Matthäus (Senator für Bau und Umwelt der Hansestadt Rostock), Jennifer Timrott (chairwoman of Küste gegen Plastik, Hallig Hooge), Jan Meifert (Edeka retailer, self-employed, Neumünster) und Kristina Klesse (EUCC-D).

### 3.2 Stakeholders and participants

Many different stakeholders were invited to participate in the forum: plastic industry; tourism industry; diving and recreational industry; fisheries and shipping industry; hotel and restaurant industry; retail; politics; ministries; governmental departments; administrations; event managements; NGOs; associations and the general public.



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Altogether, 50 people participated in the forum. Representatives of the Tourismuszentrale and Umweltsenat of Rostock-Warnemünde, the LUNG, the Landtag M-V, the coast guard, the diving company as well as retailers, companies, administrations, NGOs, associations, students and general public. Carsten Klehn (economic journalist) was the facilitator for the forum event.

## 4 Discussions and outcomes

### 4.1 The macro-litter beach collection in Mecklenburg-Vorpommern

The OSPAR macro-litter beach collection is coordinated by the LUNG since 2011 at approximately 30 beaches along the coast of M-V involving many different actors. The macro-litter beach collection takes place every 3 months (4 times a year) at a chosen beach section (100 m survey area). This long-term and constant data collection gives information about the marine litter impact such as amounts, compositions and potential sources. Looking at the OSPAR litter categories, first results show that plastic is on the top place (69.3 %), followed by paper/cardboard (12 %), whereof cigarette butts have a rate of about 77.5 % of the latter category. Based on 229 surveys in total, approximately 68 items/100 m beach area per survey were found on average.

Between 2012 and 2014, litter was collected at a selected beach survey area (100 m) in Warnemünde and Hohe Düne. However, this monitoring was stopped due to daily professional cleaning activities during high season and weekly professional cleaning activities during off-season. Looking at the total of five surveys that have been conducted at each beach section, there were approximately 61.6 items/100 m in Warnemünde and 73.8 items/100 m in Hohe Düne found on average, respectively. Regarding the OSPAR litter categories, the percentage of plastic found is the highest on both beaches (45.8 % and 50.0 %, respectively), followed by paper/cardboard (37.7 % and 32.8 %, respectively), whereof the cigarette butts in this latter category have a rate of 82.7 % and 86.1 %, respectively. Despite conducting professional beach cleaning activities on a regular basis there is still a high amount of litter found on both beach sections. The reason for this phenomenon remains unknown. It may be due to the fact that the professional cleaning activity is not effective enough or that bigger items are removed only whereas smaller items can mechanically not be detected and caught and thus remain on the beach. Regular beach litter collection on Fehmarn showed that there is less plastic found but more paper, glass and hygiene articles instead. Cigarette butts are also a big problem on Fehmarn similar to the



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beaches in Warnemünde and Hohe Düne. By conducting the regular OSPAR beach litter monitoring and based on the litter items found, it is possible to identify the local problem as well as potential sources in different beach regions. This is used as an efficient basis to develop strategies and measures to reduce and to avoid the impact of marine litter adapted to these specific local conditions. The success of each measure and action can in turn be evaluated by continuing the regular beach litter monitoring, and if necessary, it can then be further adapted and changed. These results stated still need to be treated with caution because litter data is currently analysed and evaluated in the frame of a cooperative publication (UBA, IOW, EUCC-D, AquaEcology, LUNG, NABU).

## 4.2 Litter from the shipping and the fisheries industry

The “no special fee” system implies that there are no additional costs for the disposal of litter from ships because the costs are already included within the harbour fee. This system aims to encourage ships to dispose the litter professionally instead of throwing it over board. The “no special fee” approach already exists in Germany on a voluntarily basis only, which means that it has not been established area-wide throughout the whole country. The harbour in Rostock is a positive example because the system has already been introduced in this area. In order to have no national or international economic disadvantages, it would be necessary that these approaches such as the “no special fee” system as well as other environmental laws are implemented area-wide (nationally and internationally). However, Germany (the North and the Baltic Sea) shall continue to be a positive example on a European and a global level, and they shall cooperate to make progress towards sustainable and environmentally friendly goals and solutions.

Another aspect is that it would also be important to have strict and regular controls regarding environmental specifications, not only associated with shipping litter but also associated with any kind of ship emissions for example.

The „fishing for litter“ project has been conducted since 2011 together with the NABU and small-scale fisheries in Schleswig-Holstein and in Niedersachsen. Sassnitz is the only harbour in M-V, where the “fishing for litter” project has been established. Fishermen receive information about the marine litter topic, and big bags are provided to collect the litter they fish out from the oceans in their nets. The litter can professionally be discarded in the harbours. The problem in the area of M-V is that there is more gillnet fisheries and only little coastal fisheries using trawling nets left, but which in turn is a requirement for successfully



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implementing the “fishing for litter” project. In the future, it would also be important to work on solutions regarding cost and space problems of large-scale fisheries in order to include them into the “fishing for litter” project as well.

### 4.3 Regional and local strategies

#### **Schleswig-Holstein – “Less plastic in the sea”**

The pilot project „less plastic in the sea“ has started on Fehmarn and it is sponsored by the UBA and the BMU. It is used as an accompanying project for the implementation of measures from the Marine Strategy Framework Directive. This project aims to connect municipal initiatives against marine litter pollution. At the same time it is used for motivational purposes of other coastal communities. Additionally, the experiences gained from this project are supposed to be integrated into future political decisions regarding marine litter impact strategies. The leading partner in this project is the Umweltrat Fehmarn, supported by many different stakeholders. The overall goal is the voluntarily abandonment of plastic bags. The long-term goal is a positive regional marketing as a plastic-free island. Specifically for this project, there is a declaration for participation available signed by all stakeholders, a project logo and a homepage were created and an alternative environmental friendly bag was designed. For the duration of the project, different events are planned: measures against cigarette butts on the beach, regular beach clean ups, activity days, beach adoptions and sponsorships as well as deposit systems along the coast, beaches and harbours.

#### **Mecklenburg-Vorpommern – “The beach ashtray”**

There is no over-regional effective measure for the cigarette butt problem available yet. In M-V a “beach ashtray” activity was conducted in 2014. The initiators were the Tourismuszentrale Rostock-Warnemünde, the Verein AIDA Freunde der Meere e.V. and the Verband der Mecklenburgischen Ostseebäder and the Umweltsenat Rostock. 3000 beach ashtrays were provided for free at tourist information offices, beach chair and water sports renters in Rostock-Warnemünde and its surrounding areas. The goal was to raise awareness of the marine litter problem, but specifically to bring the cigarette butt problem on the beach into focus, approaching guests, visitors, tourists and natives and to increase their encouragement to take responsibilities and become active. Further information was provided on the website as well as through a QR code on the ashtrays. Press and public relations including flyers were used to catch people’s attention. This activity will be repeated



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in the season of 2015. It is planned to further include tobacco shops, hotels and retailers as distributors for the ashtrays in order to increase the degree of popularity of this activity.

### **Niedersachsen – “The beach litter box“**

A cooperative idea from the administration of the Nationalpark Niedersächsisches Wattenmeer and other stakeholders from the North Sea is called the „beach litter box“. These boxes are placed at isolated beach areas and are used for litter that is found by walkers in order to keep the beaches clean.

### **Schleswig-Holstein – “Not in my name! Coastal people against plastic litter!“**

Küste gegen Plastik on Hallig Hooge started a campaign for a plastic-free environment. They conduct beach clean ups with visitors and children on a regular basis. The Landesamt für Küstenschutz is actually responsible for the cleaning activity of the dykes, however, a cooperation has developed for the litter being picked-up and discarded that is collected during beach clean up events. This is a win-win situation for both parties and no further disposal costs arise for either of them. A new initiative is a petition, which was given to the mayor of Schleswig-Holstein. This petition collected signatures to introduce a fee on plastic bags. The association has contacts to different retailers, for example to an Edeka retailer in St. Peter Ording and to a pharmacist in Bredstedt. Both managers have decided to fully abandon the use of plastic bags in their shops. Another cooperative activity is planned with an Edeka store, aiming that customers take pictures of their favourite products, which they want to have without any plastic packaging, and this written feedback will be send back to the producers.

### **Schleswig-Holstein – „The plastic bag is a symbol of our discard society and easy to replace“**

The Edeka supermarket in Neumünster has totally abandoned the plastic bags from the tills. Due to the fact that biodegradable bags as well as paper bags are expensive in its purchase in the long run (if paper bags are cheaper than plastic bags customers still tend to buy plastic bags), the project of a re-usable bag was implemented. This bag can be purchased for a small donation, and a part of this money goes to an environmental campaign (there is a cooperation between the Edeka shop and the WWF for a project called “ghost nets in the Baltic Sea”). In former times, within the two supermarkets, which are managed by the owner, approximately 3000 plastic bags were sold in just one week. For the launch of the



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plastic bag free activity this amount of plastic bags were build up in the shop showing a hill of plastic bags to visualise the problem of plastic and to explain customers why the supermarket resigned using plastic bags at all. Additionally, they were also trying to raise awareness about the problem of marine litter in general. The marketing and commercial for this campaign of the environmental friendly shopping bag was very important among Edeka retailers as well as towards the public. The next planned step is to abandon the small plastic bags from the fruit and vegetable section, to replace them with paper bags, and to find a solution how to reduce plastic packaging in the meat section in cooperation with the veterinary department (regional guidelines are different for the meat and packaging standards). There is already a cooperation with an organic baker for the fresh bread and bakery section using paper bags as packaging.

### **Deposit systems and plastic reduction**

On festivals and other public events it would be important to increase the use of deposit systems and less disposable plastic items (for example the cup deposit system for Glühwein on Christmas markets works very well everywhere). It would be an idea to use part of the deposit money as a donation for environmental projects as well as for the advertisement of these deposit systems. The organisers and communities of those events and festivals shall communicate and cooperate with each other much stronger in order to find solutions for the increased plastic and litter problem, e.g. if people bring their own bottles or plastic items, which are then discarded in the surrounding nature instead of in the provided bins. There are a lot more possibilities to take action for communities for example they have certain policies on their side once there are calls open to organise events or festivals. This money could be used for further developing deposit systems and plastic reduction strategies.

On markets and during events such as Hanesail, Warnemünder Woche or BioErleben (annual public festivals in Rostock-Warnemünde) there is still a high use of plastic bags, which shall be drastically decreased, especially for organic stands, where plastic bags shall be totally removed.

In terms of plastic bags usage in Germany and in the rest of Europe we can certainly learn a lesson from other countries. There are quite a few positive examples proving that abandoning plastic bags (with or without fees) can be easily implemented and is additionally a very successful measure. Increasing the use of deposit systems and reducing unnecessary



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plastic packaging of products need to be further expanded and intensified in the near future. At the same time, plastic alternatives should be further researched and developed.

### **Education, awareness and communication**

It is questionable whether prohibition signs (e.g. “do not throw your litter into nature”) at beach entries would be a constructive and successful measure. If prohibitions generally are not controlled and fined with a penalty on a regular basis, it most likely does not make sense to use them. It is therefore suggested to use information signs on the beach and at the seafront instead in order to increase awareness of the marine litter problem and catch people’s attention. Information and transparency are especially important for people, who have not dealt with this topic before. Information signs should not contain shocking or dramatic images because this may have the psychological effect of turning away rather than dealing with this problem. It is crucial to draw people’s interest, to encourage them to take part and to clearly visualise that everyone can do something even if it is just a little bit. This means on the one hand, the context of these signs shall provide information about marine litter to strengthen education and awareness (e.g. “what is the topic of marine litter all about? What is the problem and what are the consequences? Why do we have to take action and how are we doing it? What do we want to achieve? What are the top 10 litter items found at this beach?” etc.), while on the other hand, it is important to encourage people to take action (e.g. “please take your rubbish with you and discard it into the litter bins provided; if you find litter on the beach during your beach activities or walks you can discard it into the beach-litter-boxes provided; you can use the marine litter app to report if you find weird litter items; help and support us to keep our beaches and our sea clean”). Indeed, it is required to have the possibilities to dispose the waste throughout the year.

A key word is “positive instead of negative influences”, which means connecting and integrating people within the topic marine litter, encouraging them to take action and help them to positively experience their time on the beach and in nature.

Another idea is to define a „clean“ beach section, to supply litter bins and to provide information signs at this specific section. Everyone staying in this particular beach section is supposed to help to keep it clean. To show the opposite, there could also be a defined “dirty” beach section, which is not cleaned (professionally) at all to visualise what happens as a consequence. This may be a way to increase awareness of the marine litter problem, to make people think and to encourage them to take action.



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Working with children or youngsters plays a very important role because it can effectively contribute to positive changes through a combination of games and education. Hereby, it is important that children (and adults) experience that our nature and environment is valuable and that their love and care for coastal habitats and the sea is strengthened (watch out that it is no point shocking kids with the horrible reality, to increase their fears or to make them feeling guilty because the older generation actually has to take on the responsibility for the current situation). It is possible to do different trips with children and youngsters into nature or to organise games on the beach (e.g. scavenger hunt) to collect beach litter and to do arts out of litter items. By doing these kinds of activities, young people can be educated about the problem and potential solutions. Marine litter art could also be exhibited at beach entries or on beaches, which in turn again is an awareness raising method for people to effectively visualise the problem of marine litter.

Communities and cities could use part of the money, which they receive for waste removal and disposal, or which they make through the visitor's tax for awareness activities. If the waste treatment is already working without any problems it is about time to focus on increasing the success of litter reduction and avoidance strategies. Although the main power for significant changes is on the side of the plastic industry as well as of the politics, we – the customers and society – can increase the pressure and express what we do not want anymore, and we can start to make changes now. Specifically retailers supporting the initiative “plastic-free” can strongly contribute for the first important steps of changes. The hotel and restaurant industry can also reduce their plastic use (e.g. unnecessarily plastic packaging or removing shower gels containing microplastic etc.) and raise awareness addressing their guests. Good ideas and good concepts are an essential need for successful changes. Positive feedback and the “green image” is certainly a long-term success. Information signs or postcards about the marine litter problem, its impact and why it is so important that everyone becomes active are strategies that can be easily implemented everywhere, and which are crucial steps towards education and awareness of the broad public. Stakeholders across various sectors need to communicate and cooperate among each other and they need to promote and implement actions, strategies and initiatives together. Due to the fact that we are dealing with “wealth-litter” it must be possible that we can and we will do something to reduce the pollution.

Besides after-care strategies such as beach clean ups or „fishing for litter“ it is equally important to work on preventative strategies to reduce and avoid the litter from the start.



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Hereby, it is important to look at the local situation and condition, to understand and identify sources in order to be able to find and apply the right measures (e.g. focus on cigarette butts, balloons or plastic bags). In order to successfully implement them there has to be an institutional frame as well as municipal or regional politicians and local stakeholders, who are fully involved and who in turn are able to motivate others. While planning activities or initiatives it is important to keep in mind the local condition. This means for example that the use of a picture from a sea turtle tangled in litter would not make sense in Germany because this picture would be far away from our local reality and therefore it would lose its informative value.

Further aspects, which came up during the discussion, but which have to be further discussed in more detail are:

- Dog excrement bags (using biodegradable instead of plastic material; more discard possibilities and awareness; many people remove faeces but plastic bags end up being thrown into nature)
- Balloons (awareness; alternatives; abandonment of balloons, especially on events and festivals because they usually end up in the sea and are flushed onto beaches)
- Recreational fishery sectors (anglers shall be more integrated as a stakeholder sector; a lot of angling utensils are made out of plastic and are lost in the sea, therefore it would be efficient to think about alternative materials)
- Water leisure activities (how would it be possible to include this group as effective stakeholders?)

## 5 Conclusions

The German MARLISCO forum on marine litter was used as a platform to bring together stakeholders from the North and the Baltic Sea, to build up new networks and to talk about the marine litter pollution, with a special focus on potential strategies to reduce and to avoid marine litter, respectively. The forum showed that there different approaches already exist, which can be easily implemented elsewhere, and which should be merged to have a big pile of solutions that can be applied on a large-scale area.

Although many different stakeholders representing various sectors were present at the forum (e.g. NGOs; the coast guard; retailers; the diving industry; administrations; politics;



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the tourism industry) some stakeholders from other important sectors were missing (e.g. plastic industry; hotel and restaurant industry; recreational, fisheries and shipping industry) to discuss the holistic problem of marine litter and to develop far-reaching strategies. Further round tables shall be organised with the attendance of all important stakeholder groups.

„Reuse – Reduce – Recycle“ are key words, which can be used for general orientation. It is important to keep in mind that it is not worth waiting for changeable movements from the politicians or the plastic industry. Every single one of us shall start being active now, and this includes changing behaviour, attitudes and habits. Communication and network among all stakeholders are crucial fundamentals for successful changes. Planning big cooperative events such as beach clean ups and other public awareness-raising activities, educational programs, sensitisation, guidelines or positive antecedents for the reduction and avoidance of litter are possibilities to provide an incentive, to draw interest and attention for a sustainable handling of our nature and environment.

In Rostock-Warnemünde but also in other coastal regions of M-V and Schleswig-Holstein are many different stakeholders, who are already active or who are ready to become active now. The examples of initiatives and activities, which were presented during the forum are ready to be implemented and tried out on a local and regional scale. Besides gaining a very positive regional marketing strategy as well as contributing to solve a global problem, these changes will be a long-term advantage for our seas, ecosystems and us.

## 6 Outreach

The summary and results of the forum will be provided to the Baltic Sea Parliamentary Conference and HELCOM as well as to all national working groups dealing with the marine litter topic. Additionally, this report, the presentations, pictures and a short video will be available online on the MARLISCO website:

**[www.marlisco.eu/National\\_Fora\\_Outcomes.de.html](http://www.marlisco.eu/National_Fora_Outcomes.de.html)**

Short contributions about the German MARLISCO forum on marine litter are available online, for example in the Baltic Sea Newspaper, on public websites or in social media channels:

<http://www.eucc-d.de/news/items/Nationales-Forum-zum-Thema-Meeresm%C3%BCII.html>



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<http://www.ostsee-zeitung.de/Region-Rostock/Rostock/Fischernetze-Kippen-und-Plastik-verschmutzen-den-Strand>

<http://www.warnemuender-woche.com/Quickmenu/Startseite/Meeresm%C3%BCII-Forum.php?object=tx%7C2135.1&ModID=7&FID=2135.530.1&NavID=2135.12>

<http://www.bio-mv.de/termine/meeresm%C3%BCII-forum>

<http://www.landtag-mv.de/mediathek/pressemitteilungen.html>

<https://www.facebook.com/pages/EUCC-Die-K%C3%BCsten-Union-Deutschland-eV/177164695644547?fref=ts>

<https://www.facebook.com/kuestegegenplastik?fref=ts>

[https://twitter.com/NBBretschneider/status/579263984404135937?utm\\_source=fb&utm\\_medium=fb&utm\\_campaign=NBBretschneider&utm\\_content=579263984404135937](https://twitter.com/NBBretschneider/status/579263984404135937?utm_source=fb&utm_medium=fb&utm_campaign=NBBretschneider&utm_content=579263984404135937)

During the time of preparation and organisation of the forum, the sheet „Have your say“ was distributed, which was used to collect questions and comments about the marine litter topic in order to be integrated into the forum. Furthermore, people were invited to send pictures of marine litter to show them during the forum.

During all MARLISCO activities, questionnaires and surveys were conducted. There was a pre-survey and an after-survey for the forum as well. All surveys, which were completed will be analysed by the British MARLISCO partner the University of Plymouth, and survey results will also be shown on the MARLISCO website.



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