



MARITIME FORUM

Workshop on circular design of fishing gear

Event date:

19/02/2020 (All day) to 20/02/2020 (All day)



Circa 11.000 tons of end of life fishing gear end up into European seas yearly. Single-use Plastics Directive, adopted 5 June 2019, among other things provides a requirement for the European Commission to request European Standardization Organization (ESO) to develop a **standard for the circular design of the fishing gear**. Indeed, 80% of negative environmental impact of products at the end of life could be reduced at the product design stage. To date design and development of fishing gear has not incorporated environmental considerations (ecodesign) including circularity. A European standard will provide guidelines on how to voluntarily improve this.

To better understand recyclability and reuse of fishing gear at the end-of-life, to identify existing challenges (legal, practical), solutions, best practices and technologies to design, reuse and/or recycle end-of-life fishing gear and to prepare the above request to the ESO the **Commission in cooperation with EASME has launched a study led by MRAG**.

To create a useful and workable standard, all relevant stakeholder groups are involved in the

collaborative consultation process from academia, plastic producers, fishing industry, gear assemblers to NGO's, national- and port authorities.

To gather collective intelligence and useful input from relevant players, **an international multi-stakeholder workshop was organized by MRAG in collaboration with CEFAS and OSPAR on 19 and 20 February 2020 in Brussels** to identify recommendations for effective, useful and harmonized standards for the circular design of fishing gear and to feed into the work of OSPAR on the design and recycling of fishing gear. The workshop was attended by 59 stakeholders (see the list below)"

Several speakers provided a rich input to the workshop to successfully kick off subsequent breakout discussions:

- DG MARE provided EU policy context on marine litter, including future perspectives stemming from the European Green deal, thanked relevant stakeholders for excellent collaboration and engagement so far on working towards circular design of fishing gear and wished that the workshop is the "beginning of the end of the waste fishing gear".
- Wouter Jan Strietman from Wageningen University led the warming up exercise by presenting some materials used in fishing gears and pointing out consequent recycling challenges.
- MRAG presented the circular design of fishing gear study, to which the current workshop is an integral part and which aims to provide substantial recommendations on objectives, criteria, and fishing gear classifications considered for the development of a standard for circular design of the fishing gear
- Mareike Erfeling, coconvenor of the OSPAR working group on marine litter, presented monitoring results concerning fishing gear in the seas as well as the OSPAR Project on Design and Recycling of Fishing gear. Preliminary results of the project, presented by one of the project leads Roos Bol, include: *Modification of the fishing gear design is a potential solution to improve future fishing gear recycling. Fishing gear is particularly difficult to recycle because of the number of different materials that are used and mixed during the production, and because of the logistics involved in recycling such a relatively small waste stream..*
- Bernard Merckx from Plastix Global emphasized the challenge of recycling gear components that are manufactured from several polymers (this was many times emphasized by consequent speakers), some 700 polymer mixtures have been identified so far. He pointed out the importance of gear design for subsequent disassembly, recyclability and capture at end of life. He also emphasized the advantage of having just one EPR scheme for fishing gears in Europe.
- Martin Charter of the University for the Creative Arts highlighted that circular design should incorporate reuse, regeneration and recycling and shared many innovative examples of recycling.
- Vikas Aggarwal from BASF made the distinction between different types of recycling that can be used in different situations: mechanical recycling from polymer to polymer, chemical recycling from polymers to monomers and thermochemical recycling from a polymer mix to a raw material. He also stated that the collection of recyclable materials is a challenge within the complicated value chain of fishing gear.
- Gillian Herpers from Dutch Standardization Institute presented different types of standards that NEN supports developing. Standards are always voluntary, but as they are set up in cooperation with all stakeholders, they are a powerful instrument for self-regulation.

With input from all the participants throughout different breakout sessions recommendations were collected in 4 areas. Each set of recommendations was voted by the participants. Below are the 4

topics and the highest ranked recommendation per topic:

1. Design for recyclability and reuse:

Recommendation: EMFF blue economy calls, or similar funding for: a. R&D for dismantling (incl. mechanisation); b. joint EU call for material development considering new materials and coatings; c. test for implication of using high quality recyclates; d. research and innovation for design for recyclability, which includes pilot with expert input/advice.

2. Design to reduce impact on the marine environment:

Recommendation: Promote durability into design and development and material for longer performance and reuse/recycling.

3. Collection and logistics for recycling

Recommendation: Further research: Perform mapping exercise of fishing gear supply chain. Approach at national level, potential for cross border issues at regional seas level. Should include: links to money flow; different stakeholders; different levels (eg EU, national, port); needs analysis per port.

4. Practical recycling

Recommendation: Collect data/weight on gear inventory in all member states with a standardized methodology.

A more comprehensive report on the workshop will follow.

 [all the presentations in pdf](#) [3]

Participants of the Circular design of fishing gear workshop, 19-20 February 2020, Brussels

Andrea Stolte - WWF
Bernard Merckx - Waste Free Oceans and PLASTIX Global, Founder of Waste Free Oceans & Honorary President of Plastics Recyclers Europe
Brian Skovgaard - Frydendahl Fiskenet, Denmark
Marcelo Hidalgo - Seafoodmatter; Aquaculture Stewardship Council (ASC) standard and certification coordinator
Claire Potter - Claire Potter Design
Dina Margrethe Aspen - Blue Circular Economy
Eduardo Grimaldo - Senior research scientist, SINTEF Ocean
Einar Skaftason - Hampidian Iceland
Erik Goksøyr - Marine Recycling Center in Sotenäs municipality
Ioana Popescu - ECOS
Jac Spijkers - Application Manager at DSM Dyneema
Jan Joris Midavaine - KIMO
Joan Drinkwin - Natural Resources Consultants
Karin Dubsy - Coastwatch
Koen Van Goethem - I-Coats
Krzysztof Stanuch - Baltic Net Ltd
Marc-Philip Buckhout - Aquaculture Policy Officer at Seas At Risk
Marta Ruiz - HELCOM Secretariat
Martin Charter - University of Creative Design; Circular Ocean
Michael Engel - Engel-Netze
Nadia Moalla Gil - Cepesca / Spanish Fishing Confederation

Patrick Murphy - Irish South and West Fish PO
Pedro Sá - Lankhorst Euronete
Philippe Verschueren - Eurocord
Rob Thompson - Odyssey Innovations Ltd / Fathoms Free
Rodney O'Sullivan - Swan Net Gundry
Senne Aertbeliën - Federal Public Service Health
Siegfried Anton Schmuck - Policy Officer, Sciaena
Thomais Vlachogianni - Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSD)
Uwe Lichtenstein - Johann Heinrich von Thünen Institute Federal Research Institute for Rural Areas, Forestry and Fisheries
Vikas Aggarwal - BASF
Pim Visser - North Sea Advisory Council
Wouter Jan Strietman - Wageningen University, Economic Research
Catherine Barrett - Bord Iascaigh Mhara, Ireland
Benôit Caillart - Directeur associé chez F&S Fisheries / Maritime Affairs
Morag Campbell - Scottish Government
Guillaume Carruel - European Association of Fish Producer Organisations
Mogens Frydendahl - Frydendahl Fiskenet, Denmark
Jos Lobée - Innovation expert at Modified Materials BV
Amparo Pérez - Food and Agriculture Organization of the United Nations
Pavel Salz - Framian
Caroline van Beelen - Van Beelen Group
Stefanie Werner - German Federal Environment Agency (UBA)
Gillian Herpers, NEN - Royal Netherlands Standardization Institute
Zarra de Laat, NEN - Royal Netherlands Standardization Institute
Luis Arregi - AZTI, Spain
Oihane Cabezas - AZTI, Spain
Roos Bol - Convention to protect the marine environment of the North-East Atlantic (OSPAR)
Mareike Erfeling - OSPAR
Jennifer Godwin - OSPAR
Celia Rose Halifax - DEFRA (OSPAR)
David Feary - MRAG Europe
Stephen Hodgson - MRAG Europe
Silvia Rodriguez-Climent - Cefas
Josie Russell - Cefas
Fernando Nieto Conde, EASME
Alena Petrikovicova - DG MARE A1, Maritime Innovations, Investments and Knowledge
Bernike van Werven - DG MARE A1, Maritime Innovations, Investments and Knowledge
Maris Stulgis - DG MARE A1, Maritime Innovations, Investments and Knowledge

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