



EUROPEAN COMMISSION  
DIRECTORATE-GENERAL  
Joint Research Centre  
Institute for Environment and Sustainability  
**Water Resources Unit**

**MINUTES OF THE 7<sup>TH</sup> MEETING OF THE  
MSFD TECHNICAL GROUP ON MARINE LITTER**

**LISBON, PORTUGAL**

**11-13.12.2013**

**Participants:**

*Ania Budziak, Project AWARE*  
*Andreja Palatinus, IWRS, Slovenia*  
*Annemie Volckaert, ARCADIS*  
*Constança Belchior, EEA*  
*Emma Priestland, SEAS AT RISK*  
*Elisabete Dias, DGRM*  
*François Galgani, IFREMER, France*  
*Georg Hanke, European Commission JRC IES*  
*Isabel Moura, APA, Portugal*  
*Jan van Franeker, IMARES, Netherlands*  
*Jesus Gago, IEO, Spain*  
*Joana Mira Veiga, EUCC*  
*Leo De Vrees, European Commission DG ENV*  
*Lex Oosterbaan, RWS & OSPAR, Netherlands*  
*Maria Ferreira, EUCC*  
*Marco Matiddi, ISPRA, Italy*  
*Nuno Barros, SPEA*  
*Paula Sobral, FCT-UNL, Portugal*  
*Richard Thompson, Univ. Plymouth*  
*Stefanie Werner, UBA, Germany*  
*Sue Kinsey, MCS*  
*Tatjana Hema, UNEP/MEDPOL*  
*Tereza Vinhas, APA, Portugal*  
*Thomas Maes, CEFAS, United Kingdom*

***Invited experts***

*Antonio Marques, IPMA (ECsafeSEAFOOD)*  
*Lisbeth Van Cauwenberghe, Univ. Of Ghent (ECsafeSEAFOOD)*  
*Gijsbert Tweehuysen, Waste Free Waters Foundation*

***Not attending (with notice):*** *David Fleet, Heather Leslie, Kim Detloff, Per Nilsson, Jeroen Dagevos, Thomais Vlachogianni*

# Meeting minutes

## DAY 1:

### 1) OPENING OF THE MEETING

F. Galgani opened the 7<sup>th</sup> TG-ML meeting, welcomed all the participants and introduced the new TOR for the group. M. Ferreira provided some practical information, followed by a brief round of introductions of all attendees. F. Galgani welcomed Alexandre Simões (Portuguese Environmental Agency) who pointed to the importance of the problem of ML in Portugal and the need for cooperation.

### 2) MSFD D10 – STATE OF IMPLEMENTATION

By Leo de Vrees (DG ENV)

- New ToR was presented: TG ML becoming a technical group under the MSCG (formal); group should be referred to as “MSFD Technical Group Marine Litter”.
- The joint meeting of Water, Nature and Marine Directors: awareness of problems of different time lines to meet objectives of the different directives; discussion are on-going how to work together
- First regional action plan on ML was adopted for the Mediterranean region through MEPOL (Istanbul, November 2013); legally binding document for contracting parties of Barcelona Convention
- Need for a headline quantities reduction target for ML (non-binding, but “inspiring”): internal proposal on this target needs to be ready on 15/01/2014 (review of waste Directive); link to (reduction) targets set by Waste directive, packaging Directive and landfill Directive
- Consultation on plastic bags has finished: EC had an internal proposal of 80% reduction but a quantitative value was not approved, so specification was not made (e.g. Ireland had a 90% reduction in terms of demand for plastic bags after the levy was introduced in the country 10 years ago)
- Public consultation on the establishment of a quantitative reduction headline target for ML is still on going until 18/12/2013

### 3) GUIDANCE FOR MONITORING OF MARINE LITTER

Maria Ferreira (EUCC) informed TG ML that the guidance monitoring document has been accepted by GES and MSCG, meaning that the content of the guidance document is considered final. Last changes will be limited to corrections and editing.

L. de Vrees complimented the TG ML and especially the chairs for the high quality of the guidance monitoring report. Report will be finalized for formal publication.

Actions:

- Executive summary (max. 12 pages; requested by DG ENV): defining target audience+ discussion on title + final revision by TG ML (will be posted on basecamp + deadline for revision)
- Final English editing of guidance document by beginning 2014; sent for final revision to JRC administration (Georg Hanke)
- List of persons for dissemination of the guidance report (excl. known contacts/organisations) to be delivered by TG ML to Leo de Vrees

### 4) LESSONS LEARNED FROM MSFD REPORTING

Leo de Vrees (DG ENV) informed TG ML that the Art. 12 assessment (IA, GES, targets) has been finalized and the factual findings (excl. recommendations & conclusions) been sent to the MS beginning December 2013. Almost all MS (19 of 20 MS analysed) have defined reduction target(s) for ML but mainly on a qualitative basis and a variety of definitions was used (some used 1 criterion, others more). Mainly state indicators have been defined. The fulmar indicator is the best indicator we have at the moment related to impact; but does not give indication on population level/ ecosystem level. At this moment little coordination within the regions has occurred. Lack of time was generally mentioned by the MS. There is a general acknowledgement of the problem of ML by the MS, but also on the lack of data. Targets address

both the sources and the existing ML. Results of the MSFD implementation process will be presented during the HOPE (Healthy Oceans, Productive Ecosystems) conference (3.-4. March, Brussels).

## 5) REPORT ON NATIONAL MONITORING STRATEGY - GERMANY

Stefanie Werner (UBA) presented the results of the national workshop on ML monitoring in Germany and raised the following questions with respect to the role of TG ML (further discussed under agenda point 6. Support MSFD marine litter monitoring):

- What is the role of TG ML in relation to supporting national monitoring strategies?
- How is the monitoring guidance disseminated? Is language a problem? Who are the contact points? Do we want to update the guidance document/master list?
- Does TG ML have a role as exchange platform for national experiences?
- What research needs do MS have in terms of monitoring? Do we address them and how?

Summary discussion on role TG ML:

- Clarification is needed between role TG ML and role Regional Seas Conventions (RSC). First focus should therefore be on regional coordination (here exchange of operational experiences). OSPAR for example has based their guidance documents on the monitoring guidance provided by TG ML. Marine directors should distribute the information of the guidance towards the national level (not role of TG ML). Guidance can also be circulated through the EIONET, which is also used by persons actually involved in the monitoring.
- Role of TG ML: to consider update/review guidance (e.g. monitoring protocol, criteria) based on the analysis of MS experiences (question & issues raised by MS, first collected at regional scale and further distributed to TG ML)

Actions:

- Post issues, questions and upcoming topics for consideration by the group. Also feedback, eventually highlighting difficulties, on the national implementation process is welcome. This can lead midterm to identification of needs for updating the guidance document.

## 6) SUPPORT TO MSFD MARINE LITTER MONITORING

Discussion chaired by G.Hanke

We have concluded on the following role/goals of TG ML:

- Revision of monitoring guidance document (currently content closed)
  - (Informal) Up-date/ finalizing issues of monitoring guidance document (via basecamp): identification of issues that need to be up-dated, interim documents will be used as format (uploaded via basecamp), discussion of these interim documents within TG ML and within RSC (as stated before questions & issues raised within RSC will be further distributed to TG ML)
  - Formal revision of guidance document will occur on a regular basis (e.g. every 2-3 years) summarizing key issues discussed within interim reports. Up-dates of the master list of items could occur on a yearly basis, based on the experiences of one year monitoring, if needed. It should be clearly stated in the document that revision is foreseen.
  - Note: Caution should be taken to change of master list so that its main goal of harmonization is jeopardized. . Specific steps/procedure should be followed (e.g. never delete/change codes). Changes to technical issue (e.g. items on master list) should be clearly communicated within the 4 RSC and kept to a minimum. This can be done by mail to RSC secretariats, that will take care of further information exchange to MS.
  - Note: Problems on classification to certain categories should be addressed to the national delegates and regional sea conventions, then posted to TG ML (if no solution can be found on regional level) where it will be further discussed on how to solve the problem. For OSPAR their basecamp platform serves as an exchange platform for questions related to monitoring.
- Informal project platform: Network of expertise/ information on ML (exchange info through basecamp) with focus on technical/scientific issues (not institutional/ coordination: role of RSC). The RSC have the role in collecting these main issues of the MS and further distributing them to the TG ML.

- Give advice requested by MS to implement the MSFD at EU level

## 7) REPORT FROM REGIONAL SEA CONVENTIONS

An update was given of the status on RAP and targets/indicators on ML by the 4 RSC.

**OSPAR** (Lex Oosterbaan/ Stefanie Werner):

- Agreement on development of RAP in 2014 incl. an ambitious reduction target: Germany organised in Hamburg, on 6-7 November 2013, a workshop on RAP (follow up Berlin conference): Questionnaire was sent out to CPs beforehand on existing and planned monitoring, applied and considered measures and (environmental/potential regional) targets, workshop had three breakout group for land-based and sea-based measures and smarter production. Minutes are now circulating amongst the participants, who consisted of national authorities, stakeholders of different (industrial) sectors and NGOs. Second workshop foreseen in February 2014 in the Netherlands with the aim to have a final draft ready for the EIHA-meeting in April.
- Issue paper of the workshop summarized on OSPAR checklist, prioritized measures of Berlin conference and outcome of questionnaire – info could also be used for development of programmes of measures of EU-MS in 2015/2016. There is a need to cover also other stakeholders in the further run to be able to close the plastic cycle loop (waste industry, etc.).
- Agreement on common and candidate (potential to become full indicator in some years (next cycle) and prioritized candidate (become full in 1-2 years) indicators. Goal is that they will be used by as many MS as possible (no obligation).
  - common: beach ML monitoring and Fulmar (only for North Sea Region) as indicator for floating litter
  - prioritized candidate: IBTS seafloor litter
  - candidate: because fulmars not applicable outside North Sea: other target species needed – in development
  - candidate: microplastics (currently not defined, but research will be continued to close data gaps)

**HELCOM** (Stefanie Werner)

- RAP to be developed by 2015 (according to Ministerial Declaration)
- Targets/ indicators: ML mentioned to be further worked out as common indicator, currently not included as indicator
- Others: MARLIN project finalised (monitoring data available)
- Monitoring assessment group (MONAS) meeting (nov 2013): new ML network, thematic session at next MONAS-meeting in April 2014, group/network should be linked to the new ICES group.

**MEDPOL** (Tatjana Hema)

- Adopted RAP ML MEDPOL (Istanbul) – legally binding measures (incl. timeline) related to solid waste management, prevention measures (EPR, sustainable consumption, etc.) and ML removal (on land, at sea). National action plan to be made up by each contracting party
- GES targets/indicators on ML: no quantitative reduction target for ML; only decreasing trend for ML
- Main needs: financial means for implementation, support parties (on monitoring programmes, based on guidance document TG ML), assessment baseline on existing data
- Final version of RAP ML will be posted on Basecamp

**BLACK SEA COMMISSION** ((No direct info was provided from BSC)

- No RAP developed yet, but ML is included as an issue under Black Sea report (check correct formulation?)
- Others: Ass. Prof. Anton Iliev Krastev is new delegate from BG for TG ML

## 8) REPORTS ON ON-GOING RESEARCH PROJECTS

Constanța Belchior (EEA): Marine Litterwatch

- Mobile app (based on master list) for reporting monitoring data available on google; iPhone version of app + data management website foreseen by early 2014

- Question: Availability in other languages (A: language app will depend on language iPhone; the master list however is currently in English); Further worldwide distribution through UNEP as also done for app 'beat the microbeat'? (A: remark will be taken into account)

António Marques (IPMA)/Lisbeth Van Cauwenberghe (Univ. Ghent): ECsafeSEAFOOD

- Priority environmental contaminants in seafood: safety assessment, impact and public perception (4 years project: 2013-2017)

Joana Veiga (EUCC): Marlisco

- Awareness raising & co-responsibility of ML
- Question: How can the initiatives/measures collected for the Berlin Conference be coupled with MARLISCO data-base best-practices? Discussions between Stefanie and MARLISCO partners will continue to find the best way to establish synergies among these 2 data-bases and assure the centralization and longevity of these sources of information.

Others:

- CLEANSEA (not present): Cleansea is a project dedicated to provide specific input to MSFD. A potential conflict raised by F. Galgani in timing CLEANSEA results on monitoring to fit into setting up national monitoring programmes; closer collaboration is needed between CLEANSEA and TG ML,
- DeFishGear (Andreja Palatinus): Derelict fishing gear removal Adriatic Sea, – WP6 ghost net collection, FFL, DFG removal
- JPI (F. Galgani): JPI Water & JPI Oceans (preparing call on microplastics; trying to harmonize research)
- MARELITT (A. Volckaert): the project assesses existing marine litter removal projects in the regional seas, in particular this is being done from an organizational, economic and environmental point of view. This assessment is under development and will result in a list of good practices.. Currently the project is inviting organizations to become a host of a project under MARELITT (“MARELITT-projects”) and to continue developing the good practices after the project period. The Call; for expression of interest for host organizations and the flyer of MARELITT have been made available to the group (via basecamp)
- MICRO (T. Maes): impact of microplastics (results expected by Sept 2014)
- Others mentioned : Guardians of the Sea (MED sea), international meeting on microplastics on 15 January 2014 (Brest)

## DAY 2:

### MARINE LITTER IN PORTUGAL – AN OVERVIEW

Presentation by Tereza Vinhas (Portuguese Environment Agency) and Paula Sobral (FCT/UNL)

- Early stages of ML monitoring: beach, fish, bird observation to identify target species for indicators (start Jan 2014)
- One beach of Portugal situated in OSPAR region, but very little results due to bad weather + proposal to set up common monitoring protocol for microplastics (even if OSPAR will not define common indicator on microplastics for the first cycle)
- Recently founded the Portuguese Association for Marine Litter: platform existing of Portuguese partnership incl. fisheries, administrations, port authorities, waste industry, NGOs, plastic industry, scientists

Discussion:

- Comparable results of items of ML (plastics) ingested by fish: Portugal (average of 1,4 fragments) comparable to UK data (R. Thompson); in North Sea less items ingested in fish (J. van Franeker))
- Is there a need for regional databases for beach monitoring data allowing the identification of data compatibility?
  - Already exists for beach ML within OSPAR and will further be developed for ML in birds. Issue is of course that MS should fill in their data.
  - Problem of one database is that the ownership of the data gets lost; more an issue of access to data.

- Setting up such a platform is very valuable and should be set up in all MS.

#### **TOPICS FOR TG MARINE LITTER 2014**

Mandate of TG ML has been presented and discussion chaired by Georg Hanke.

Topics: 1) sources & pathways of ML, 2) riverine litter, 3) follow up monitoring guidance, 4) possible review of MSFD commission decision, 5) science-policy interface, 6) communication exchange platform for regional sea action plans, 7) assessing harm, 8) harmonizing protocols for assessments, 9) reporting (to MSCG) and 10) link to other activities (WG chemicals, RSC, ICES).

Focus on three topics with deliverables foreseen in 2014: Riverine litter monitoring, Litter Source identification and Harm. The other activities as will go on, without a specific product planned currently.

Other roles of TG ML discussed under Day 1 - 6) SUPPORT TO MSFD MARINE LITTER MONITORING.

#### **RIVERINE LITTER**

L. De Vrees mentioned that a Pilot project on riverine litter has been initiated by the EC, also aiming to involve other authorities (land-based) in the discussion on ML.

Presentation on river monitoring project in The Netherlands (river Meuse) by Gijsbert Tweehuysen, including monitoring equipment, processing of sampled material, conditions of sampling, classification categories, etc. These elements will be further discussed in the TG ML report on riverine litter.

Presentation of the EC Pilot Project on identification & assessment of riverine input of marine litter by Andreja Palatinus: Projects will be initiated in four rivers (~four RS) based on the monitoring guidelines prepared by TG ML. A final decision has to be made on the rivers (potential Rhine, Po, Elbe, Danube, Oder, etc.) – focus on downstream parts close to sea (mouth)). Results of study foreseen for October 2014 (input for next MSCG planned for November 2014)

##### **Actions:**

- Short note to be posted on basecamp by members of TG ML on potential contacts with riverine authorities in MS. Proposal to go through WFD contacts (responsible for the part of river close to sea (mouth river)). + Information on riverine projects
- Following contributions already stated: Danube (Georg), Rhine (Lex), Po (Marco & Georg).
- Close interaction with work done under WFD (land-based measures). Issue has been presented at WFD WG E/chemicals in 2013. Main task of TG ML & related projects: the collection of more data on riverine input to confirm the relevance of riverine input with respect to the ML problem and to serve as input to build a strong case towards relevant authorities and discuss further actions (monitoring, measures).

#### **SOURCES**

Presentation by Joana Mira Veiga (EUCC): Methodology used in DG-ENV Pilot Project 4 Seas. The method will be proposed in the TG ML deliverable on sources, including both link to sources based on likelihoods and geographical link (e.g. status on back tracking modelling). In principle the method can be applied for other litter compartments, as long as the collected information is detailed enough. The bottom-up approach involving key actors that have a certain relevant sectors, to help establishing the likelihoods of origin from different sources, is a process that can also be described in the deliverable. Not only brings in the local solid knowledge on deficiencies of certain activities that may be contributing to ML but it engages the actors that need to be involved in the identification and implementation of sources, i.e. increases awareness and support for the next step of the MSFD.

##### **Actions:**

- Interest in using the sheet with the parameters and likelihoods in MCS/UK data (Sue) and OSPAR
- A note to be provided by the regional seas: determine likelihoods sources linked to top ML items found at the beach ('the big 5') /
- Focus on top items/ items that raise more concern (prioritisation) and identifying possible measures (low hanging fruits; quick wins) (*note: list of measures at Berlin conference/ link to RAP*)
- A new folder on measures will be opened on Basecamp

## **HARM**

Presentation by Stefanie Werner on 'Harm seen as risk assessment' as a basis for discussion for the TG ML deliverable on harm. It has been noted during the discussion that from a scientific point of view it is important to continue research on harm (be careful: if there is little evidence on harm; this does not mean that there is no harm). For target setting (short term) mainly the socio-economic harm of ML has been mentioned by MS as driver. Information we look for: What is the good evidence of harm? Which creatures have been affected and to which extent? Where are these organisms living? Approach the topic through a risk-assessment framework, using a few better studied species. Leadership on sub-topics and themes within this report has been allocated to specific members present at the meeting.

### Actions:

- Literature collection on basecamp (avoid duplicating efforts done by other projects/ work groups ENSIS, GESAMP WG 40? – timelines should be checked)

## **DISCUSSION OF REPORT OUTLINE AND WORK PROCESS**

First draft report outlines have been prepared for the three topics (riverine litter, sources, harm) and discussed. (See also Day 3)

## **RISK ASSESSMENT OF OSPAR BEACH LITTER MONITORING IN THE NETHERLANDS**

An analysis of all available beach monitoring data within OSPAR has been revised by Jan van Franeker. As mentioned earlier care should be taken when changing the categories/ list of items or not further reporting certain categories as this could result in misinterpretation of results or loss of historical trend analysis. The added value of 1 km surveys was also discussed (a significant decrease in overall number of large debris items for 1 km surveys, while no change is observed in overall number of debris items for 100m surveys).

## **RESEARCH NEEDS**

Research needs to be defined within the Regional Sea action plans, TG ML, STAGES presented by Francois Galgani (Ifremer). While considerable efforts are on-going there are still major gaps. Apparently projects are typically at pilot scale, i.e. they do not provide regionally or EU-wide data.

Attention was pointed to: 1) Horizon 2020 (Blue growth) as new funding source (wider scope: main focus on the economic part), 2) JPI Oceans, 3) Stages: giving overview of all research done per descriptor and identifying main gaps + policy-science interface and 4) Others: Life+, EU Fisheries fund, etc.

### Actions:

- Excel file 'Overview research projects' to be completed by members TG ML using the OSPAR overview table as a start (Lex Oosterbaan). Will be uploaded on basecamp.
- TG ML should communicate very clear on what has been done, and what are the further needs. A priority list should be developed on the main needs, and indicating if it has been addressed or is currently addressed by other projects.

## **DAY 3**

### **1) PRESENTATION AND DISCUSSION OF DRAFT REPORT OUTLINE 2014**

First draft report outlines have been prepared for the three topics (riverine litter, sources, harm) and discussed. Following lead authors have been identified: riverine litter (Lex), sources (Joana), harm (Stefanie). Existing outline templates should be used: front page incl. header & deadlines, in addition a summary should be included in the document as a first chapter.

### Actions:

- Draft outlines will be placed on basecamp for additional comments by TG ML (deadline 13 January 2014)
- A table with the updated list of group members and their respective areas of interest and expertise will be uploaded on basecamp. Please amend that table with your information and availability to work on certain tasks.

**Deadlines:** 13.1.2014 (Comments to outline), 30.5.2013 (draft), 30.9.2014 (final draft) in order to submit the reports to MSCG end of October.

## **2) POSSIBLE REVISION PROCESS OF COM DEC 2010/477**

Leo de Vrees (DG ENV) presented the current status on MS reporting (see Day 1 – 4) lessons learned MSFD reporting). There is an on-going discussion with MS on possible revision process on criteria and indicators. A potential approach could be to define better the GES definition/criteria on EU level and allow for more flexibility on identifying the indicators on regional (e.g. common indicators for beach litter within OSPAR) and/or national level. Maximum use should be made of existing information within RSC, RAP, etc.. Georg Hanke (JRC) added that JRC will be providing an in-depth analysis on the MS reports. The MSFD TG Marine Litter will be the MS platform for the review of MSFD D10.

## **3) DISCUSSION OF NEXT STEPS AND WORK PLAN TIMING**

Following steps and deadlines have been discussed during the meeting.

- Revision structure of basecamp to check if new folders are needed: riverine (ok), source (3 folders, maybe to be restructured), harm (maybe extra folders will be needed), new RAP folder, etc.
- Message will be sent on basecamp on the three deliverables for 2014, incl. the structure of the deliverables. Excel sheet with mapping of expertise and willingness for active contribution.
- Presentations during the meeting will be placed on basecamp (Pdf format)
- Deadlines:
  - Comments on draft outline reporting structure (3 documents): 13/01/2014
  - Interim deadlines ML reports (riverine, sources, harm): to be decided by task leaders
  - Draft of ML reports (riverine, sources, harm): 30/05/2014
  - Next TG ML: 4-6 June 2014 (Baltic region, proposal Riga) (dates to be further confirmed)
  - (internal) Final draft ML reports (riverine, sources, harm): 30/09/2014
  - Work meeting on draft ML reports (for Task leaders reporting; and main authors (open invitation): first week of October 2014
  - Final draft ML report to MSCG: 30/10/2014
  - Finalization ML reports (for publication): end 2014
- New group members TG ML (on basecamp):
  - PT: Paula Sobral is additional delegate from Portugal
  - BE: active membership will be searched
  - NL: Gijsbert Tweehuysen

## **4) Next meeting of MSFD GES TG Marine Litter**

Next meeting in June 2014 (proposal 4-6 June) has been proposed to be held in Riga, Latvia (date to be confirmed). The group thanked Maria Ferreira and colleagues warmly for the work done on the guidance document and the great organisation and hosting of this meeting in Lisbon. The group also thanked Tereza Vinhas, the Portuguese Environment Agency and the University of Lisbon for the hospitality! Special thank was given to Leo de Vrees and his work done in the past years. The meeting was closed by Francois Galgani.

Finalized 3.2.2014