

PEER REVIEW TO DATE SUMMARY (DRAFT TEXT)

In our previous discussions, we asked experts to identify priority terms, missing terms and terms with definitions that required changes. Find below a summary of the feedback received so far:

Task 1: Suggestions to the Marine litter and Plastic Pollution Ontology terms and definitions

- Missing and priority terms or group of terms:
 - **Environmental impact assessment**
 - **Environmental indicator**
 - **Technical lab terminologies**
 - **Technical terms fisheries**
 - **Renewable based plastic**
 - **Quantitative/qualitative indicators**
 - **Floating plastic patch**
 - **Managed landfill**
 - **Sanitary landfill**
 - **Requirement**
 - **Informal plastic waste picked**
 - **Plastics along life cycle/value chain (e.g. resins, primary/pellets, secondary, half products, end of life stage, waste, leakage)**
 - **Units**
 - **Open burning**
 - **Illegal dumping**
 - **Marking of fishing gear**
 - **Marine plastic litter**
 - **Port reception facilities**
 - **Nature-based solutions**
 - **Plastic credit**
 - **Dimensions for definitions (e.g. tons of plastic leakage/yr.)**
 - **Total solid waste**
 - **Household similar waste.**
- Suggested changes and clarifications on terms and definitions:
 - **Entanglement process** [ENVO:06105120] 'Action through which material entities become entrapped, wrapped, twisted, entwined, or otherwise caught in one another'
 - **Water column** [ENVO:06105011] 'The body of water that extends from the sea surface to the seafloor'
 - **Biodegradation** [ENVO:06105014] 'Natural process through which bacteria or other microorganisms alter and convert organic molecules into simpler substances, such as fatty acids and CO₂'
 - **Ghost fishing** [ENVO:06105114] 'The accidental capture of aquatic organisms by fishing gear that has been lost, abandoned or discarded into the sea and which continues to catch aquatic animals'. The ALDFG definition differs from the one

used in the recent GESAMP Report #108 on Sea-based source of marine Litter: <http://www.gesamp.org/publications/sea-based-sources-of-marine-litter>. Since we don't know how the fishing gear is lost or abandoned it might be good to combine the terms.

- **Biopolymer** [ENVO:06105122] 'A polymer which is the output of a biological process.' It conflicts with other definitions used e.g., based on source material.
- **Synthetic polymer** [ENVO:06105123] 'A polymer which is the output of a manufacturing process'. The definition is missing semi-synthetic e.g., rayon manufactured from cellulose.
- **Piece of plastic** [ENVO_01000776] is imprecise; use "macroplastic" and different microplastic designations instead

Task 2: Terms currently in related ontologies that should be updated and officially added to the Marine litter and Plastic Pollution Ontology

- **Waste management service** [SDGIO_00010077] "waste management service" seems like it should be "waste management system" based upon the definition given
- **Household waste** [ENVO_01000372]

Task 3: Terms currently in the Glossary that should be officially added to the Marine litter and Plastic Pollution Ontology

- Terms:
 - **Ship-based marine pollution** (ID: 679)
 - **Private sector** (ID: 636)
 - **Research** (ID:652)
 - **Recycling** (ID:649)
 - **Sea-based sources** (ID: 672)
 - **Microplastics** (ID:582)
 - **Primary microplastics** (ID:632)
 - **Secondary microplastics** (ID: 675)
 - **Marine biodiversity** (ID:559)
 - **State of knowledge** (ID:691)
 - **Marine spatial planning** (ID:572)
 - **Solid waste** (ID:685)
- Suggestions on glossary terms that should be prioritised and included in the Marine litter and Plastic Pollution Ontology:
 - **Marine debris** (ocean debris) (ID: 561) vs **marine litter** (ID:565). Draft definitions don't offer a clear distinction or overlap. Marine litter is often used interchangeably with **beach litter**. **Marine plastic litter** (ID: 568) should replace marine litter.
 - **Transboundary waste** (ID: 725) 'DRAFT: Moving or having effect across a boundary or boundaries.' It needs to be better defined/sub-divided depending on use – political, geographical

- **Seafloor litter** (ID: 673) draft definition is not very clear
- **Floating litter** (ID: 478) draft definition does not explain the term floating
- **Lin biota** (ID:551) definition not adequate

Task 4: Other general queries include the following suggestions:

- Define dimension/indicators for certain definitions (e.g., plastic leakage in tons of plastic/yr.)
- Include abbreviations
- Use of international English e.g., tyre rather than tire
- Reorganize the glossary to facilitate review by simply generating spreadsheet by broad subject area and arrange alphabetically
- SDGIO ontology terms are all good and should be included in the Marine Litter and Plastic Pollution Ontology
- Some definitions were clarified during SDG method development process for 11.6.1, 12.5.1 - might be worth checking there
- The sections of waste management may each need definitions - someone already put recycling but could have "collection" "disposal" and then I see dumpsite, but not "open burning" or illegal dumping. The World Bank What A Waste report will contain many of the terms needed
- Reference GESAMP Report #99 for a comprehensive set of expert-agreed definitions around marine litter see the: <http://www.gesamp.org/publications/guidelines-for-the-monitoring-and-assessment-of-plastic-litter-in-the-ocean>