
Measures against Plastic Pollution -- Plastic Monitoring and National Plan--

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Policies against Marine Plastics Pollution in Japan

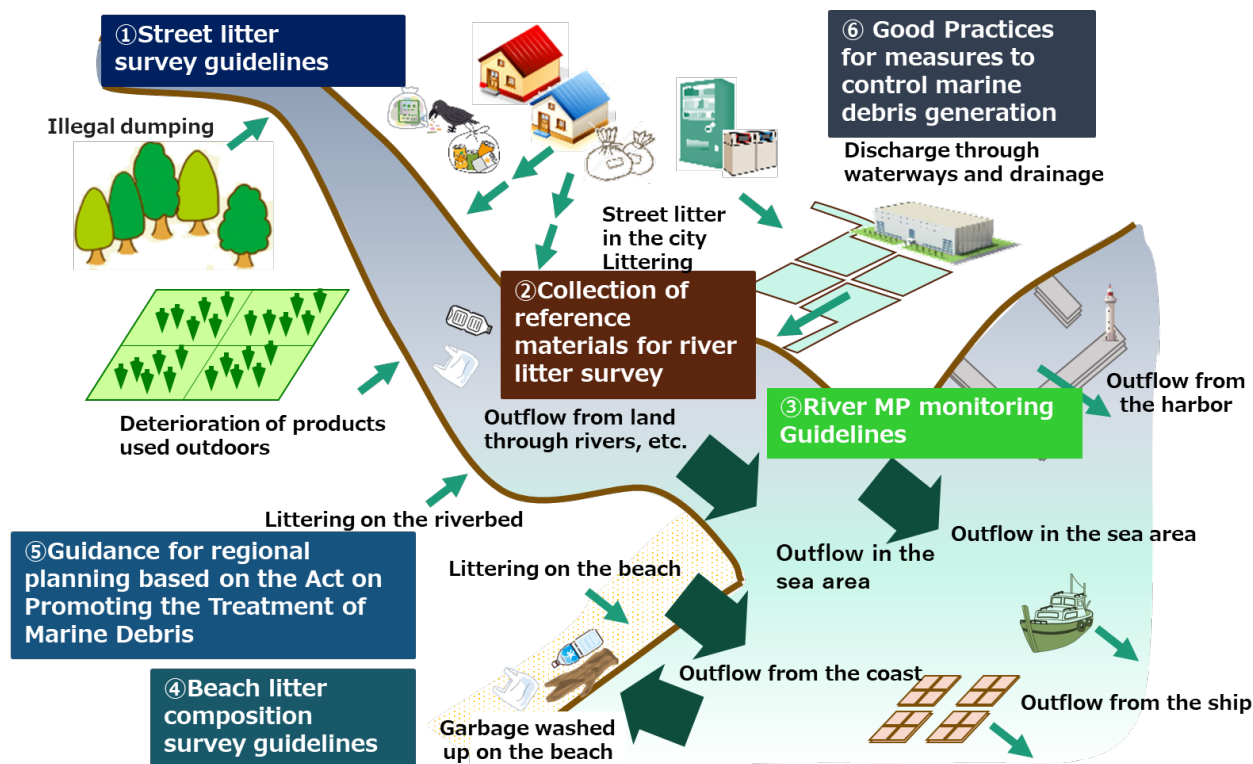
Legal / Policy Framework

- the Act on Promoting the Treatment of Marine Debris (2009, amended in 2018) → the Basic Policy on the Comprehensive and Effective Promotion of Measures Against Articles that Drift Ashore under the Act (2009, 2019) --- Promotion Council for Marine Litter Policy
- Resource Circulation Strategy for Plastics (2019) ; Japan Action Plan for Marine Plastic Litter (2019)
- Act on Promotion of Resource Circulation for Plastics (2021 (enforced in 2022))
- + the Act on Prevention of Marine Pollution and Maritime Disaster (1970, amended in 2017) etc.

Measures



MOE's Guidelines related to plastics discharged into Ocean



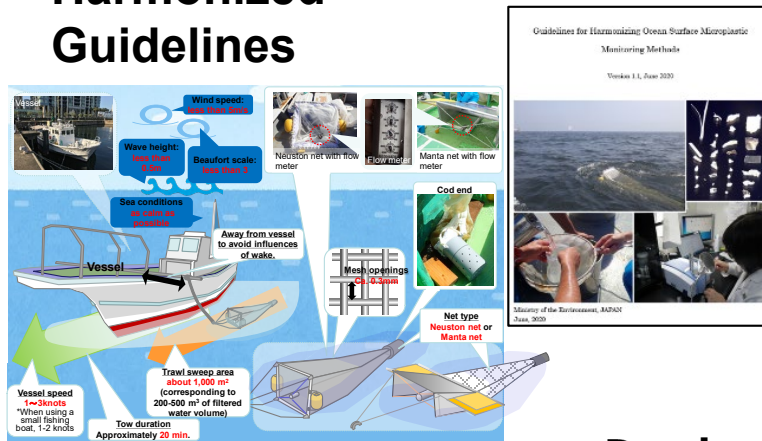
⑧ Guidelines for Harmonizing Marine Litter Monitoring Methods using Remote Sensing Technology (Under Development)



⑦ Guidelines for Harmonizing Ocean Surface Microplastic Monitoring Methods

- Survey & Monitoring of plastics in the environment (Beach, Floating, Sea Floor, River, Lake)
- International cooperation:
 - Capacity building on plastic waste management
 - Technical training of monitoring of plastics
 - G20 report on Actions against Marine Plastic Litter
 - Knowledge sharing through RKC-MPD, ERIA

Harmonized Guidelines



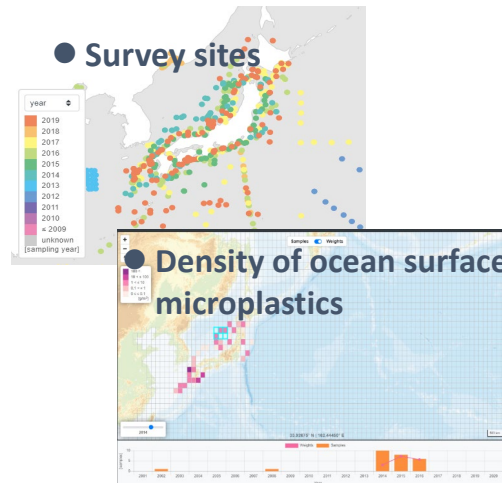
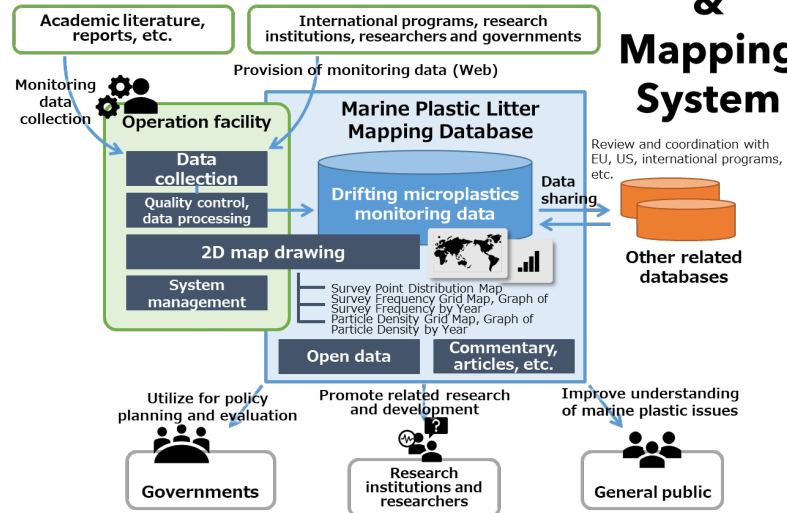
Harmonized monitoring and data compilation

Sources, pathways, impacts and measures to combat plastic waste leakage

Innovative solutions for reducing marine plastic litter

From 2019 G20 WS on Scientific Knowledge and Innovative Solutions

Database & Mapping System



Measures against Plastic Pollution Domestically & Internationally

International Workshop on Marine Debris Data Harmonization 2023



OVERALL GOAL

To enhance the level of data
- including associated metadata identification

For supporting **global data harmonization** for selected key marine debris indicators

Underpin the successful mitigation of plastic pollution

OUTCOME:

- A **coordinated network** of ocean surface microplastic data providers initiated under the auspices of GOOS and IMDOS, with an agreement to adhere to agreed common sampling protocol and metadata and data requirements.
- **Draft metadata and a data requirements sheet** based on the data sheet provided by MOE Japan, the European Marine Observation and Data Network (EMODnet), and NOAA National Centers for Environmental Information (NCEI), and any other potential large data integrators.
- **Recommendations for standardized metadata and data requirements for the UNEP GPML Digital Platform data matrix.**
- **Roadmap** towards a federated data management system for ocean surface microplastics and selected global-scale marine debris indicators.

UNEP GPML Data Harmonization CoP



CoP coordinated by: Maija Bertule, Alexandra Murray, Nicola Balbarini (UNEP-DHI)

GPML: Global Partnership on Plastic Pollution and Marine Litter

Metadata items identified through the WS



Required Metadata items -- in case of ocean surface microplastic

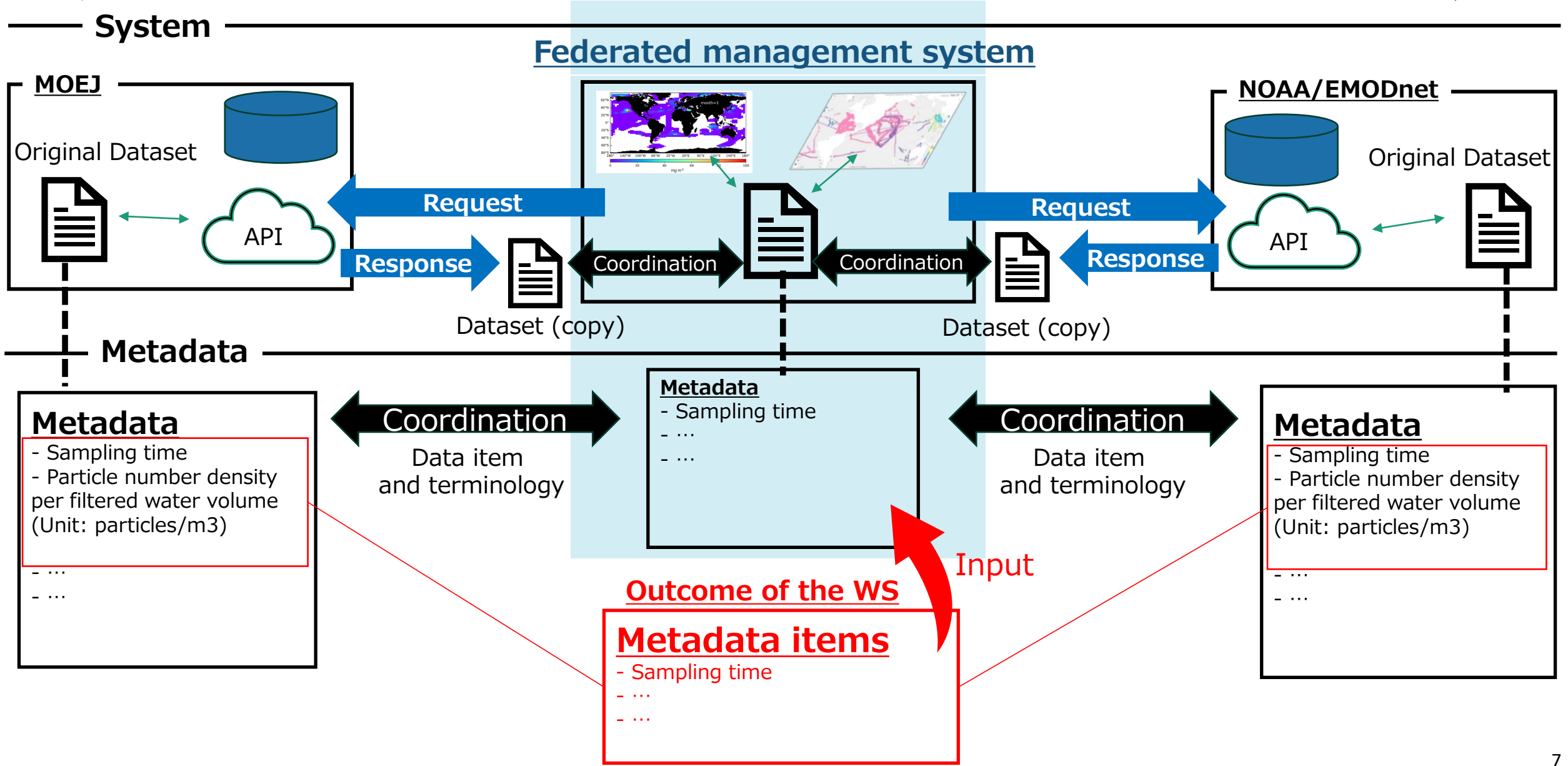
Minimum requirements
Sampling time
Start date (GMT)
End date (GMT)
Sampling Location
Latitude of start point
Longitude of start point
Latitude of end point
Longitude of end point
Particle number density per filtered water volume (Unit: particles/m3)
300 μ m \leq d<5mm
5mm \leq d
Sampling equipment
Type of equipment
Mesh openings size (Unit: mm)
Filtered water volume
Water volume (Unit: m3)
(*In case flowmeters is not available)
Sampling equipment
Width of water intake (Unit: m)
Depth of the water intake
Lower end depth (Unit: m)
Sampling distance
Sweep distance (Unit: m)
Vessel speed
(Unit: knot)

Recommended
Particle number density per filtered water volume (Unit: particles/m3)
d \leq 25 mm
d \leq 300 μ m
Particle weight density per filtered water volume (Unit: g/m3)
300 μ m \leq d<5mm
5mm \leq d
Percentage per material(Unit: %)
Fiber percentage
Weather, sea conditions, water quality
Wind speed (Unit: m/s)
Significant wave height (Unit: m)
oceanic conditions
Biota, marine life activity
Biota
Marine life activity
Others
Pictures of MP fragments
Small sample

! This is a living document !

Group
1

How to realize data harmonization with the identified metadata items?



Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment

(Prepared by the INC Chair before INC3)

Part I

1. Preamble (placeholder), 2. Objective, 3. Definitions (placeholder), 4. Principles (placeholder), 5. Scope (placeholder)

Part II

1. Primary plastic polymers
2. Chemicals and polymers of concern
3. Problematic and avoidable plastic products
4. Exemptions available to a Party upon request
5. Product design, composition and performance
6. Non-plastic substitutes
7. Extended producer responsibility
8. Emissions and releases of plastic throughout its life cycle
9. Waste management
10. Trade in listed chemicals, polymers and products, and in plastic waste
11. Existing plastic pollution, including in the marine environment
12. Just transition
13. Transparency, tracking, monitoring and labelling

Part III

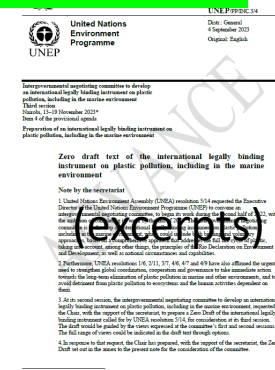
1. Financing
2. Capacity-building, technical assistance and technology

Part IV

1. National plans
2. Implementation and compliance
3. Reporting on progress
4. Periodic assessment and monitoring of the progress of implementation* and effectiveness evaluation
5. International cooperation
6. Information exchange
7. Awareness-raising, education and research
8. Stakeholder engagement

(Part V Institutional arrangements, Part VI Final provisions)

<https://www.unep.org/inc-plastic-pollution/session-3>



Global Commitment and Cooperation

2023 G7's commitment to end plastic pollution

Sapporo Env. Ministers Mtg: April 15-16; Hiroshima Summit: May 19-21, 2023

<Summit and Env Ministers communiqués>

*“We are committed to **end plastic pollution**, with the ambition to reduce additional plastic pollution to zero by **2040**.”*

<Env Ministers>

*“...we are also committed to playing an **active and constructive role** to make **substantial progress in the negotiations** and bring us closer to specifying the key provisions of an **ambitious international legally binding instrument** on plastic pollution...”*



Osaka Blue Ocean Vision (June 2019)

“We aim to reduce additional pollution by marine plastic litter to zero by 2050 through a comprehensive life-cycle approach that includes reducing the discharge of mismanaged plastic litter by improved waste management and innovative solutions while recognizing the important role of plastics for society.”



G20 Report on Actions against Marine Plastic Litter (2019~)



5th Report in 2023:

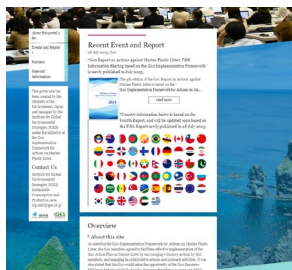
- Actions reported: by **30 countries** and **10 organizations**
- 21 countries have **national action plans** on marine plastic litter, and 16 countries have **specific indicators** to measure progress of efforts on MPL.





Table of contents of the 5th G20 Report on Actions against Marine Plastic Litter (2023)

- Policy Framework for Marine Plastic Litter (MPL)
 - ✓ National Action Plan (Countries) and Action
 - ✓ Legal Framework (Countries and Intl. Organisations)
 - ✓ Indicators (Countries and Intl. Organisations)
- Measures and Achievements
 - ✓ Prevention and reduction of plastic waste generation
 - ✓ Environmentally sound waste management
 - ✓ Clean-up of marine plastic litter
 - ✓ Promotion of innovative solutions
 - ✓ Education and awareness
 - ✓ Monitoring and scientific research on marine plastic litter



<https://g20mpl.org/>

Zero draft text of the international legally binding instrument on plastic pollution, including in the marine environment (Prepared by the INC Chair before INC3)



Excerpt from Part IV. 1 National Plans

1. National plans

Each Party shall develop and implement a national plan to fulfil its obligations under this instrument* and to achieve its objective(s). The national plans shall be based on the format in annex G and shall include at least relevant elements related to:

- Primary plastic polymers;
- Chemicals and polymers of concern;
- Problematic and avoidable plastic products;
- Product design and performance;
- Reduce, reuse, refill and repair of plastics and plastic products;
- Use of recycled plastic contents;
- Extended Producer Responsibility;
- Emissions and releases of plastic through its life cycle;
- Waste management;
- Fishing gear;
- Existing plastic pollution, including in the marine environment; and
- Just transition....