Terms of reference (ToRs) for the procurement of services

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Monitoring and Impact Assessment for the National Action Plan on Marine Debris Handling Implementation as part to Supporting the Secretariat for National Coordination Team for Handling Marine Debris (TKN-PSL)	Project number/ cost centre: 19.2109.7-001.00

0. List of abbreviations 2

1. Context 3

2. Tasks to be performed by the contractor 4

3. Concept 5
   Technical-methodological concept 6
   Project management of the contractor 6

4. Personnel concept 6
   Team leader 6
   Key expert 1 7
   Short-term expert pool 1 7
   Short-term expert pool 2 7

5. Costing requirements 10
   Assignment of personnel and travel expenses 10
   Sustainability aspects for travel 10
   Travel 11
   Workshop, training 11

6. Requirements on the format of the bid 11

0. List of abbreviations

TKN-PSL	Tim Koordinasi Penanganan Sampah Laut Nasional. *National Coordinating Team for Marine Debris Handling*
ToRs	Terms of reference

1. Context

Marine debris is one of the most urgent environmental problems faced by almost all countries in the world, particularly Indonesia. In 2010, Indonesia contributed about 10% of plastic waste globally. This figure has beenforecasted to continue increasing until 2025 (Our World in Data, 2018). The problem of marine debris in Indonesia was highlighted in several international researches, including Jambeck's team (2015) that ranked Indonesia as second in the world for marine plastic waste production 0.48 million to 1.29 million tons per year. Lebreton's research in 2019 estimated that 1.63 million tons of annual plastic waste in Indonesia is not managed properly and ends up in the ocean.

If current trends continue, it is estimated that by 2050 there will be more plastic than fish in the ocean. Still, worldwide plastic consumption is expected to triple during this time. Plastic pollution has numerous adverseeconomic, social, and environmental impacts. In particular, marine plastic pollution costs up to $2.5 billion per year in lost marine ecosystem services. Tackling plastic pollution will require multi-stakeholder collaboration and engagement.

In order to address and properly handle the marine debris issue especially plastic, the Government of Indonesia issued a Presidential Decree no. 83/2018 on the National Plan of Action to Handle Marine Debris (NAP) until 2025, as a joint inter-sectoral framework to address the marine debris problem from end to end, encompassing five strategies:

a) National movement to increase the stakeholder awareness;

b) Land-based waste management;

c) Waste management in the coastal and marine area;

d) Funding mechanism, institutional-strengthening, supervision, and law enforcement; and

e) Research and development.

The sectoral coordination given the huge area of coverage is very complex. As to facilitating the coordination for the implementation of the NAP, the government then formed a National Coordination Team for Marine Debris Handling (TKN-PSL). One of the tasks of the TKN-PSL is to monitor the implementation of the NAP by each sector outlined in the NAP.

The ASEAN-German Cooperation Project "Reduce, Reuse and Recycle to Protect the Marine Environment and Coral Reefs" project (3RproMar) is implemented to support the ASEAN Member States (AMS) in the improvement of implementation capacities for reducing land-based waste leakage to protect the marine environment, based on the ASEAN Framework of Action on Marine Debris and the ASEAN Regional Action Plan (RAP) for Combating Marine Debris in ASEAN. The project works in the ASEAN region, with geographical focus on four AMS, namely, Cambodia, Indonesia, the Philippines, and Viet Nam. In Indonesia, monitoring marine debris is part of the project activities. In this regard, the project would like to support TKN-PSL in its monitoring and impact assessment related to the NAP implementation.

Thus, this work would like to support the TKN-PSL especially its Secretariat in relation to provision of data and information regarding the monitoring and impact assessment of marine debris. The work will be done by upgrading the marine debris monitoring website, with interoperability features linking with other existing information systems operated by different authorities.

2. Tasks to be performed by the contractor.

Currently, the existing website and server are being managed and operated by TKN-PSL. Meanwhile, waste data from land and ocean is available, however managed by different authorities. Thus, this initiative will enhance the existing digital service of TKN-PSL to be interoperable and link with other information system/data warehouse. This service will strengthen the role of TKN-PSL in providing numerical data on the performance of implementation of National Action Plan on Marine Debris.

To support the TKN-PSL, the contractor is responsible for providing the following services:

1. The existing website of Marine Debris Monitoring (www.sampahlaut.id) operated by the TKN-PSL, is upgraded with interoperability to receive data and information from other information systems operated by different authorities.
2. Other existing systems operated by different authorities, such as: SIPSN is synchronized to feed relevant data and information to the sampahlaut.id.
3. A fully functional website as a platform to show data and information on the performance of implementation of NAP (PERPRES 83/2018)
4. Validated data of marine debris that has been input to the system based on field visit by the experts.

To achieve the delivery of services mentioned above, the contractor shall perform the tasks including below, but not limited to:

1. Conduct inter-agencies coordination to ensure smooth development of the interlinkage of the information system, among others:
   - Conduct coordination meetings between ministries or other agencies and identify potential collaboration with sea and land-based sources.
   - Compiling and summarizing land-based waste data from National Waste Management Information System (SIPSN), Statistics Indonesia (BPS), and Report on Basic Health Research (RISKESDAS), or other related data.
   - Compiling and summarizing ocean-based waste data from Indonesian National Cruise (PELNI), River, Lake, and Crossing Transportation (ASDP) as well as Indonesian Harbor (PELINDO), including information about the waste generated from fishery activities (catch and aquaculture), or other related data.
   - Combining, reviewing, and calculating marine debris data to be integrated throughout Indonesia from land and ocean-based waste data (automatically or manual).
   - Assisting the coordination of marine debris monitoring data, which includes the activityinitiations and replication.
   - Supporting the technical issue of marine debris monitoring with relevant stakeholders including the communicating and developing agreements with NGOs/private sector, ministries/agencies, and civil society to share their data into the website.
2. Support the technical system of marine plastic debris monitoring website, including:
   - Contributing on user requirement
   - Designing the system architecture and system business requirement
   - Coding the system and setup the server as designed
   - Test the system to make sure align with the business process.
   - Test the system to ensure the scenarios are implemented.
   - Ensure the system is expandable and the security of the system.
3. Providing software/network development and technical service including maintenance of the system/software up to 6 months after the completion of the project.

4. If needed, advise the software or service hardware that are required to be purchased/rented in ensuring the operationalization of the interoperability of the information system.
5. Field visit to monitor and check the field condition which data has been submitted.
6. Provide dashboard and report system and report support to the Project Management Unit including:
   - Developing visualization of dashboard (data graphs, pivot) and generating report (excel, pdf format)
   - Project activities and provisioning the general website assistance such as response to requests and questions, reviews, logs, and routes of the server, and file or record maintenance.
7. The contractor shall provide regular report and sharing the knowledge to GIZ and coordinate in daily basis with TKN-PSL.
8. The task may also include other matters regarding technical or administrative aspect that will be needed to develop the system of monitoring marine debris by TKN-PSL.

Certain milestones, as laid out in the table below, are to be achieved by certain dates during the contract term:

Milestones/partial works	Deadline
1. Workplan including detailed methodology, strategy, activities, timeline, draft list of stakeholders, etc.	At least 3 weeks from the signing of the contract
2. Interim Report	31 October 2024
3. Final set up of the database and server of the System operated by TKN-PSL	15 November 2024
4. Final Interoperability Design and Development with SIPSN and other external system information	January 2025
5. Handover and knowledge transfer of the functional dashboard for monitoring	15 February 2025
6. Final Report	15 March 2025
7. Final Maintenance*	30 April 2025

*The free service for regular maintenance and updating software shall be made available up to 3 months after the handover and operationalisation of the system, or by the latest 30 April 2025 or whichever comes first.

Period of assignment: from 22 May 2024 until 30 April 2025

3. Concept

In the tender, the tenderer is required to show *how* the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.

Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to present and explain its approach to **steering** the measures with the project partners (1.3.1) and its contribution to the **results-based monitoring system** (1.3.2).

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed) (1.4.2).

The tenderer is required to describe its contribution to knowledge management for the partner (1.5.1) and GIZ and to promote scaling-up effects (1.5.2) under **learning and innovation**.

Project management of the contractor (1.6)

The tenderer is required to explain its approach for coordination with the GIZ project. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the contractor) must be explained in detail.

The tenderer is required to draw up a **personnel assignment plan** with explanatory notes that lists all the experts proposed in the tender; the plan includes information on assignment dates (duration and expert months) and locations of the individual members of the team complete with the allocation of work steps as set out in the schedule.

4. Personnel concept

The tenderer is required to provide personnel who are suited to filling the positions described, on the basis of their CVs (see Chapter 6), the range of tasks involved and the required qualifications.

<u>Team leader</u>

<u>Tasks of the team leader</u>

- Overall responsibility for the advisory packages of the contractor (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and others involved in the project
- Personnel management, in particular identifying the need for short-term assignments within the available budget, as well as planning and steering assignments and supporting local and international short-term experts
- Conduct analytical works on key policy and regulatory measures to enable the environment for waste management and circular economy.

- Facilitate communication from the government to stakeholders outside the government as to increase awareness and participation to actively manage solid waste and to prevent marine debris
- Regular reporting in accordance with deadlines

Qualifications of the team leader
- Education/training (2.1.1): PhD holder from Aquatic Biosciences, Urban Environmental Management and other related fields
- Language (2.1.2): C2-level language proficiency in English
- General professional experience (2.1.3): 10 years of professional experience in the environment and/or ocean sector
- Specific professional experience (2.1.4): 7 years in working on plastic waste and marine debris
- Leadership/management experience (2.1.5): 4 years of management/leadership experience as project team leader or manager in a company
- Development cooperation (DC) experience (2.1.7): 2 years of experience in DC projects

Key expert 1: Waste Management expert

Tasks of key expert 1
- Conduct analysis of policies related to plastic waste and marine debris in Indonesia
- Assess data of plastic waste and marine debris in Indonesia
- Provide analysis of waste data and marine debris data in related institutions
- Contribute to the final report.

Qualifications of key expert 1
- Education/training (2.2.1): Master in Environmental Engineering/Environmental Science
- Language (2.2.2): C2 -level language proficiency in English
- General professional experience (2.2.3): 8 years of professional experience in the environment and/or ocean sector
- Specific professional experience (2.2.4): 5 years in working on plastic waste and marine debris
- Development Cooperation (DC) experience (2.2.7): 2 years of experience in DC projects

Short-term expert pool 1 (maximum 3 members):

For the technical assessment, an average of the qualifications of all specified members of the expert pool is calculated. Please send a CV for each pool member (see below Chapter 7 Requirements on the format of the bid) for the assessment.

Tasks and qualifications of the short-term expert pool 1

1) **Environmental Engineer**
   - Conduct analytical works on waste modelling in Indonesia comparing with baseline.
   - Support numerical analysis and marine debris data assessment.
   - Contribute to the final report.

   Qualifications of expert
   - Education/training (2.6.1): Bachelor's degree on Environmental engineering or related field
   - Language (2.6.2): B1 -level language proficiency in English

- General professional experience (2.6.3): 4 years of professional experience in waste management
- Specific professional experience (2.6.4): 2 years in working on waste modelling engineering
- Development Cooperation (DC) experience (2.6.6): 1 years of experience in DC projects

2) Marine Biologist

- Conduct analytical works on marine debris modelling in Indonesia comparing with baseline.
- Support numerical analysis and marine debris data assessment.
- Contribute to the final report.

Qualifications of expert

- Education/training (2.6.1): Master's degree on marine biology, environment or related field
- Language (2.6.2): B2 -level language proficiency in English
- General professional experience (2.6.3): 5 years of professional experience in marine issues and/or environment
- Specific professional experience (2.6.4): 3 years in working on marine debris issues, oceanography, ocean modelling
- Development Cooperation (DC) experience (2.6.6): 1 years of experience in DC projects

3) Statisticians

- Conduct analytical works on re-measure and re-confirm the existing marine debris data in Indonesia comparing with baseline.
- Support identification of marine debris land-base and sea-based data in Indonesia
- Contribute to the final report

Qualifications of expert

- Education/training (2.6.1): Bachelor's degree in mathematics, statistics or related field
- Language (2.6.2): B1 -level language proficiency in English
- General professional experience (2.6.3): 4 years of professional experience in statistics
- Specific professional experience (2.6.4): 2 years in working on calculation and monitoring marine debris
- Development Cooperation (DC) experience (2.6.6): 1 years of experience in DC projects

Short-term expert pool 2 (maximum 3 members):

For the technical assessment, an average of the qualifications of all specified members of the expert pool is calculated. Please send a CV for each pool member (see below Chapter 7 Requirements on the format of the bid) for the assessment.

Tasks and qualifications of the short-term expert pool 2

1) Website/Information system Developer

- Conduct analytical works on developing marine debris monitoring system.
- Assist the identification of social change and community empowerment in each program of marine debris task forces.
- Contribute to the final report.

Qualifications of expert

- Education/training (2.7.1): Bachelor's degree on Computer Science
- Language (2.7.2): B2 -level language proficiency in English
- General professional experience (2.7.3): 5 years of professional experience in IT
- Specific professional experience (2.7.4): 3 years in working on website, monitoring and system
- Development Cooperation (DC) experience (2.7.6): 1 years of experience in DC projects

2) Website Designer

- Developing visualization of dashboard website and final report (data graphs, pivot, infographs, etc.).
- Designing overall layout and template for websites.
- Contribute to the final report.

Qualifications of expert

- Education/training (2.7.1): Bachelor's degree on Computer science, Graphic Design or related field
- Language (2.7.2): B1 -level language proficiency in English
- General professional experience (2.7.3): 4 years of professional experience in IT and website
- Specific professional experience (2.7.4): 2 years in working on website design, web programming languages
- Development Cooperation (DC) experience (2.7.6): 1 years of experience in DC projects

3) Software Quality Insurance

- Conduct analytical works on developing marine debris monitoring system.
- Support a website developer to develop the monitoring website.
- Contribute to the final report.

Qualifications of expert

- Education/training (2.7.1): Master's degree on Computer Science
- Language (2.7.2): B2 -level language proficiency in English
- General professional experience (2.7.3): 5 years of professional experience in IT
- Specific professional experience (2.7.4): 3 years in working on environment, software development
- Development Cooperation (DC) experience (2.7.6): 1 years of experience in DC projects

The tenderer must provide a clear overview of all proposed short-term experts and their individual qualifications.

5. Costing requirements

Assignment of personnel and travel expenses

Per-diem is reimbursed as a lump sum up to the maximum amounts permissible by GIZ. Accommodation costs which exceed this up to a reasonable amount and the cost of flights and other main forms of transport can be reimbursed against evidence.

All business travel must be agreed in advance by the officer responsible for the project.

Sustainability aspects for travel

GIZ would like to reduce greenhouse gas emissions (CO2 emissions) caused by travel. When preparing your tender, please incorporate options for reducing emissions, such as selecting the lowest-emission booking class (economy) and using means of transport, airlines and flight routes with a higher CO2 efficiency. For short distances, travel by train (second class) or e-mobility should be the preferred option.

Specification of inputs:

Fee days	**Number of experts**	**Number of days per expert**	**Total**	**Comments**
Designation of Team Leader	1	45	45	Lump sum against timesheet
Designation of Waste Management Expert	1	35	35	Lump sum against timesheet
Designation of short-term expert pool 1	3	30	90	Lump sum against timesheet
Designation of short-term expert pool 2	3	30	90	Lump sum against timesheet
Travel expenses	**Quantity**	**Price in IDR**	**Total in IDR**	**Comments**
Per-diem allowance in location of assignment	7	530.000	3.710.000	Lump sum. GIZ travel regulation is applied
Overnight allowance in location of assignment	6	1.200.000	7.200.000	Against evidence. GIZ travel regulation is applied.
Transport	**Quantity**	**Price in IDR**	**Total in IDR**	**Comments**
Domestic flights (round-trip)	3	4.000.000	12.000.000	Against Evidence. Travel to Bali for event, for up to 3 experts.
Travel expenses (train, car)				Lump sum.

• Car/taxi/public transport, etc • Airport transfer (round-trip)	6 3	600.000 750.000	3.600.000 2.250.000	Travel within the location of assignment, transfer to/from airport etc.
Other costs	**Number**	**Price in IDR**	**Total in IDR**	**Comments**
Workshops	200	925.000	185.000.000	Against evidence. The budget contains the following costs: meeting package, printed materials.

Travel

Travel outside Jabodetabek in order to conduct data calculation and coordination with relevant institutions shall be facilitated with **indicative locations** (the travelling should be proposed and received approval by GIZ, confirmation of the location can be decided upon consultation with GIZ and TKN-PSL). The number of persons is up to 2-3 persons from consultant and/or TKN PSL.

Workshops, training

Meeting package (as well as other necessities to facilitate the meeting) **up to 10 meetings with up to 20 pax of full day meeting package per each meeting or 200 pax in total.** Such meeting must be participated by at least 60% external participants (outside of the TKN-PSL, contractor, and GIZ 3RproMar). The contractor must inform GIZ in advance for the plan to conduct such meeting.

6. Requirements on the format of the bid

The structure of the bid must correspond to the structure of the ToRs. In particular, the detailed structure of the **concept** (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The complete concept must not exceed 10 pages (excluding CV). The bid must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English. External content (e.g. links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 4 of the ToRs must be submitted using the format standard for application. The CVs shall not exceed 4 pages. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs must be submitted in English.

Please calculate your financial bid based exactly on the parameters specified in Chapter 5 Quantitative requirements. The contractor is not contractually entitled to use up the days, trips, workshops or budgets in full. The number of days, trips and workshops and the budgets will be contractually agreed as **maximum limits**. The specifications for pricing are defined in the price schedule.