



MIRAH
Ministère des Ressources
Animales et Halieutiques



NATIONAL ACTION PLAN ON SEA BASED MARINE PLASTIC LITTER FROM SHIPPING AND FISHERIES

CÔTE D'IVOIRE

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ABBREVIATIONS AND ACRONYMS

ALDFG	Abandoned, Lost, or otherwise Discarded Fishing Gear
CIAPOL	Centre Ivoirien Anti-Pollution (Ivorian Anti-Pollution Center)
CRO	Centre de Recherches Océanologiques d'Abidjan (Oceanology Research Center of Abidjan)
CSA	Country Status Assessment
DAJC	Direction des Affaires Juridiques et du Contentieux (Legal affairs and litigation Directorate)
EEZ	Exclusive Economic Zone
FAD	Fish Aggregating Device
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
GloLitter	Glolitter Partnerships Project
IMO	International Maritime Organization
ISMI	Institut de Sécurité Maritime Interrégional (Interregional Maritime Security Institute)
LPC(s)	Lead Partnering Country(ies)
MAE	Ministry of Foreign Affairs
MAM	Ministère chargé des Affaires Maritimes (Ministry in charge of Marine Affairs)
MARPOL	International Convention for the Prevention of Pollution from Ships
MBPE	Ministère du Budget et du Portefeuille de l'État (Ministry of Budget and Public Portfolio)
MEF	Ministère de l'Économie et des Finances (Ministry of Economy and Finances)
MESRS	Ministère de l'Enseignement Supérieur et de la Recherche Scientifique (Ministry of Higher Education and Scientific Research)
MINEDD	Ministère de l'Environnement et du Développement Durable (Ministry of Environment and Sustainable Development)
MIRAH	Ministère des Ressources Animales et Halieutiques (Ministry of Livestock Production and Fisheries Resources)
NAP	National Action Plan
NDP	National Development Plan

NFP	National Focal Point
NORAD	Norwegian Agency for Development Cooperation
NTF	National Task Force
PAA	Autonomous Port of Abidjan
PASP	Autonomous Port of San Pedro
PCU(s)	Project Coordination Unit(s)
PIP	Public Investment Program
PPP	Public-Private Partnership
PTF	Technical and Financial Partners
REFACC	Réseau des Experts africains pour les Forêts, l'Agriculture et la lutte contre les Changements Climatiques (Network of African Experts involved in Ecology and the Fight Against Climate Change)
RIL	Réseau Ivoirien des Leaders (Network of Ivorian Leaders)
SBMPL	Sea-Based Marine Plastic Litter
SIDS	Small Island Developing States
SYMAPECIDGP	Syndicat des Marins Pêcheurs de Côte d'Ivoire Détachés à la Grande Pêche (Union of Fishermen of Côte d'Ivoire Attached to Large-Scale Fishing)
VGMFG	Voluntary Guidelines on the Marking of Fishing Gear

1. INTRODUCTION

Ranked second in West Africa behind Nigeria, and fifth in Africa, Côte d'Ivoire is among Africa's top hotspots in terms of plastic leakage into the oceans (Meijer et al., 2021). While the contribution of land-based activities to marine plastic pollution has been reported, a critical lack of data generally exists regarding the extent of plastic debris accumulation resulting from sea-based activities. Côte d'Ivoire is strongly committed to the protection of the environment. This is reflected in a large number of international or regional conventions and treaties ratified in this regard, including all instruments relating to marine pollution, with the exception of the London Protocol. In addition, the Government of Côte d'Ivoire has undertaken several initiatives directly targeting the issue of ocean sources of plastic waste. Currently, the issue of sea-based marine plastic litter (SBMPL) is relatively encompassed in the National Development Plan (NDP) with objectives to strengthen the national system of monitoring and control of pollution of the marine environment, lagoons and coastal areas, which has an overall budget allocated over 5 years of about 5 million euros. The practical strategy to address SBMPL in Côte d'Ivoire remains largely based on the provisions of the MARPOL Convention, including the prohibition of disposal of plastics at sea and their reception by appropriate port facilities. However, a major weakness lies in the poor effectiveness of the control mechanism provided to monitor the compliance of vessels with the regulations on plastic pollution in the Ivorian territorial waters.

Moreover, there is a clear divide in Côte d'Ivoire between the level of information of the industrial sector (industrial fishing, shipping, etc.) and that of the local communities, especially artisanal fishers. While industrial vessels display placards onboard indicating the disposal requirements of the MARPOL Annex V, a large majority of artisanal fishers are unaware of the existence of regulations concerning the management of their waste at sea. In addition, scientific research to address marine plastic pollution, especially from sea-based sources, does not yet seem to be an explicit priority in Côte d'Ivoire. The few scientific innovations found were mainly related to plastic waste recycling (e.g., Silué et al., 2007; Traore, 2018), thus emphasizing the lack of a real scientific research strategy in Côte d'Ivoire dedicated to the fight against SBMPL.

However, the reception and processing of household waste, including plastic waste generated by ships, benefits from a particularly efficient and well-managed system in Ivorian ports. Ivorian ports have adequate collection and storage facilities, supported by a functional operational structure involving private and public actors (e.g., Ministries of Environment, Transport), and by a relatively well-defined regulatory text¹ that consistently transposes the provisions of the MARPOL Convention in this regard. Nevertheless, the amount of plastic waste collected on board ships between 2018 and 2020 has increased by 36% and 48% in the ports of Abidjan and San Pedro, respectively. Although not an explicit requirement of MARPOL, reducing waste generation on board ships should be a core environmental practice and part of general waste management practices on board ships. This last point may well be one of the most relevant elements to consider in reforms to improve this area.

To support the actions of coastal countries in the fight against marine pollution by plastic litter, the International Maritime Organization (IMO), in collaboration with the Food and Agriculture

¹ [Law No. 2017-442 of June 30, 2017 on the Maritime Code](#)
[Decree n° 99-318 of December 21, 1997 on the police regulations of the autonomous port of Abidjan](#)

Organization of the United Nations (FAO), have initiated since 2019 a global project to tackle sea-based marine plastic litter (SBMPL) from the maritime transport and fishing sectors: “**The GloLitter Partnerships Project**”. With initial funding from the Government of Norway via the Norwegian Agency for Development Cooperation (NORAD), the project aims to support the maritime transport and fishing sectors to move towards a low-plastics future. To achieve this goal, this initiative aims to assist developing countries, particularly Small Island Developing States (SIDS) and Least Developed Countries (LDCs), to strengthen their capacities to manage, prevent, reduce and control marine plastic waste from the fishing and shipping sectors. Some of the main objectives of the project are to improve government and port management capacities, and to instigate relevant legal, policy and institutional reforms (LPIRs) in existing policy and regulatory frameworks based on international requirements, lessons learned from interventions in other sectors, and successful global or regional initiatives on SBMPL management. Ten Lead Partnering Countries (LPCs), including Côte d'Ivoire, from 5 high priority regions (Asia, Africa, the Caribbean, Latin America and the Pacific), were selected to spearhead national actions in the context of the IMO Action Plan to address Marine Plastic Litter from ships and the FAO Voluntary Guidelines on the Marking of Fishing Gear.

Building on the existing gaps and priority actions to be undertaken to address the issue of SBMPL in Côte d'Ivoire, as outlined in the Country Status Assessment (CSA), the present document proposes a national action plan (NAP) for the prevention and reduction of plastic waste discharges at sea from shipping and fishing activities. Coordinated by the Ministry of Maritime Affairs (Ministère chargé des Affaires Maritimes) (MAM, by its French acronym), its development has involved the contribution of the following national agencies and organizations:

- General Directorate of Maritime and Port Affairs (Direction Générale des Affaires Maritimes et Portuaires) (DGAMP, by its French acronym);
- Ministry of Environment and Sustainable Development (Ministère de l'Environnement et du Développement Durable) (MINEDD, by its French acronym) ;
- Ivorian Antipollution Center (Centre Ivoirien Anti-Pollution) (CIAPOL, by its French acronym);
- Ministry of Livestock Production and Fisheries Resources (Ministère des Ressources Animales et Halieutiques) (MIRAH, by its French acronym);
- Directorate of Aquaculture and Fisheries (Direction de l'Aquaculture et des Pêches) (DAP, by its French acronym);
- Union of fishermen of Côte d'Ivoire detached to large scale fishing (Syndicat des Marins Pêcheurs de Côte d'Ivoire Détachés à la Grande Pêche) (SYMAPECIDGP, by its French acronym);
- Interregional Maritime Security Institute (Institut de Sécurité Maritime Interrégional) (ISMI, by its French acronym);
- Network of Ivorian leaders (Réseau Ivoirien des Leaders) (RIL, by its French acronym);
- Network of African Experts involved in Ecology and the Fight Against Climate Change (Réseau des Experts africains pour les Forêts, l'Agriculture et la lutte contre les Changements Climatiques) (REFACC, by its French acronym).

2. OBJECTIVES OF THE NATIONAL ACTION PLAN

The National Action Plan (NAP) targets the prevention and reduction of plastic waste from shipping and fishing through five axes, which are identified as the priority areas of the strategy, to combat marine plastic pollution in Côte d'Ivoire. Its specific objectives cover the strengthening of existing national regulations and policies with relevant international instruments explicitly addressing the disposal of plastics at sea, as well as the implementation of operational plans to improve the enforcement of relevant provisions on SBMPL. They also consider the critical needs of the country in terms of capacity building of fisheries and maritime transport actors and awareness raising on the issue of SBMPL and its impacts, especially in the field of artisanal fisheries and related activities. Finally, it provides for specific actions to promote national scientific research and technological innovations, to develop public-private partnerships and to establish international and regional cooperation regarding SBMPL management.

Marine pollution, including SBMPL, currently emerges as a growing concern for Ivorian authorities, as evidenced by its consideration in the fifth pillar of the 2021-2025 National Development Plan (NDP)². Decided by the Government for five years, the NDP describes the challenges, key objectives and strategic orientations targeted by the Government in its perspective of emergence and sustainable development. The strategies to achieve each of the NDP objectives are supported by a Public Investment Plan (PIP) mobilizing domestic revenues, Public-Private Partnerships (PPP), recourse to the financial market or to Technical and Financial Partners (TFP), and the use of innovative financing instruments such as the creation of specialized financing windows.

This action plan proposes a specific strategy to address the issue of SBMPL, which, although incorporated in the current NDP, remains relatively blended in the overall framework of environmental preservation and pollution control in the country, through its objective of strengthening the national system of monitoring and control of marine pollution, lagoons and coastal areas. This NAP should be implemented within this period, i.e., by the end of 2025. However, the acceptance of this NAP in the Public Investment Programs (PIP) may be contingent on external assistance.

3. COUNTRY CONTEXT

3.1 General information

Côte d'Ivoire is a West African coastal country with a population in 2020 of approximately 26.5 million³. It is bordered to the south by the Atlantic Ocean over a length of 550 km. The country

² Available on the official website of the Côte d'Ivoire Government : <https://www.gouv.ci/grandossier.php?recordID=263> (accessed on May 30, 2022)

³ World bank data: <https://donnees.banquemondiale.org/indicateur/SP.POP.TOTL?locations=CI>, (accessed on May 30, 2022)

covers an area of 322,463 km² and an Exclusive Economic Zone (EEZ) of about 200,000 km². These natural assets provide an appropriate framework for the development of a blue economy focused primarily on maritime transport, port activities, oil and gas exploitation, and fishing.

3.2. Fisheries in Cote d'Ivoire

The fishing industry in Cote d'Ivoire represents an important sector that generates nearly 100,000 direct jobs and more than 580,000 jobs in the upstream and downstream sectors, according to the Ivorian Ministry of Livestock Production and Fisheries Resources (Ministère des Ressources Animales et Halieutiques) (MIRAH). Fisheries in Côte d'Ivoire are conducted in two distinct zones: coastal and offshore. The coastal zones are where all artisanal and subsistence fisheries are located, along with industrial trawlers. The Ivorian offshore fisheries target highly migratory species, especially tunas and tuna-like species. These fisheries activities are conducted in deeper waters and operate to the extent of the EEZ. Industrial tuna fishing is generally carried out by foreign tuna vessels (mainly from the European Union) operating under fishing agreements issued by the Ivorian authorities. Tuna catches consist of skipjack tuna, the dominant species, yellowfin tuna and bigeye tuna. Together with tuna vessels (longliners and purse seiners), trawlers (targeting small pelagic and demersal species on the narrow continental shelf of Côte d'Ivoire) and sardine vessels (using seine nets) constitute the main segments of the industrial fishing sector in Côte d'Ivoire.

The artisanal maritime fisheries in Côte d'Ivoire are estimated to represent around 1,600 fishing vessels, almost all of which are pirogues that actively operate on the Ivorian continental shelf (Shep *et al.*, 2016; Chavance et Morand, 2020). Women play a significant role in artisanal fishing in Côte d'Ivoire, as they act as investors, and manage and lead commercial aspects, including recruitment and organization of this fishery. Artisanal fishing techniques on the Ivorian coast are mainly based on the use of a wide range of gillnets and entangling nets (surface or bottom, drifting or fixed), which vary according to the fishing season, the targeted species, the type of boat or the fishing area. Hand lines and seines account for the other two most used fishing gears (Koffie-Bikpo, 2010; Chavance et Morand, 2020). With an estimated annual production of about 40,000 tons, the catches of the artisanal marine fisheries are dominated by coastal pelagic species (e.g., clupeids: sardines, mackerel, triggerfish), crustaceans, tunas, swordfish, sharks, rays and various other pelagic fish species such as wahoo or dolphinfish. (Yacouba *et al.*, 2010; Shep *et al.*, 2016).

3.3. Shipping and offshore oil and gas activities in Côte d'Ivoire

Maritime transport plays an essential role in the economic development of Côte d'Ivoire. The impact of this sector is illustrated by the activities of the two Ivorian ports: The port of Abidjan (built in 1951) and that of San-Pedro (1970). They both constitute a gateway for local and foreign investors as well as a vast market to the hinterland.

Built in 1970, the autonomous port of San Pedro (PASP), in the southwest of Côte d'Ivoire, had estimated traffic of more than 4.7 million tons of goods in 2020. Located in the southeast of Côte d'Ivoire, the autonomous port of Abidjan (PAA) is the oldest of the Ivorian ports (built in 1951), and represents, in terms of tonnage, the leading port of Côte d'Ivoire and the second

leading port in West Africa after the port of Lagos (Nigeria). In 2020, the PAA hosted 4,642 ship stopovers, representing estimated port traffic of around 25.3 million tonnes. This contributes to 90% of customs revenue and 60% of State revenue. Furthermore, 65% of the country's industrial units carry out their activities on the Abidjan port platform and about 70% of the Ivorian GDP passes through the port of Abidjan.

In addition, in Côte d'Ivoire, the exploitation of offshore oil and gas is another asset of the maritime sector. Indeed, with 4 producing blocks comprising 8 deposits, the production in 2021 from the Ivorian sedimentary basin amounted to 8,773,263 barrels of crude oil (about 24,036 barrels per day) and 83,787 barrels of natural gas (about 230 barrels per day)⁴.

4. PRINCIPLES AND APPROACHES OF THE NATIONAL ACTION PLAN

Seven core principles, included in Article 35 of the Title III of the Environmental Code of Côte d'Ivoire⁵, have guided the development strategy of this action plan:

1. **The precautionary principle**, this principle justifies decision-making in the implementation of environmental protection measures when the scientific evidence of a danger to the environment or human health is uncertain and the stakes are high.
2. **The principle of substitution**, this principle recommends replacing any action that may have a detrimental impact on the environment by an alternative of lesser impact, even if it is relatively more expensive.
3. **The principle of preservation of biological diversity**, this principle aims to avoid any action that could have a significant detrimental effect on biological diversity.
4. **The principle of non-degradation of natural resources**, which aims to avoid damaging natural resources including water (sea), which is an integral part of the development process.
5. **The "Polluter pays" principle**, this principle stipulates that any natural or legal person whose actions and/or activities cause or are likely to cause damage to the environment is subject to a tax and/or a fine. Following this principle, Articles 1096 of the Ivorian Maritime Code and Article 99 of the Environmental Code provide that any person responsible for marine pollution is liable to a fine of 5 to 100 million CFA francs (between about 7,500 and 150,000 USD), which may be accompanied by a prison sentence of 1 to 5 years depending on the seriousness of the damage.
6. **The principle of information and participation**, according to this principle, every person has the right to be informed about the state of the environment and to participate in decision-making relating to it.

⁴ General Directorate of Oil and Gas (Ministry of Mines and Energy of Côte d'Ivoire): <https://www.dgh.ci/amont-petrolier/production> (accessed on May 12, 2022)

⁵ [Law No. 96-766 of October 3, 1996 instituting the Environment Code](#)

7. ***The principle of cooperation***, this principle integrates public authorities, international institutions, defense associations and individuals in the protection of the environment at all possible levels. As such, the involvement of public and private partners in the fight against marine plastic waste and abandoned, lost or otherwise discarded fishing gear (ALDFG) is to be taken into consideration.

5. SPECIFIC ACTIONS, RESPONSIBLE AUTHORITIES/AGENCIES/ INSTITUTIONS, AND TIMELINES

The national actions to be carried out cover four priority areas of intervention identified from the diagnosis of the Ivorian situation in terms of the fight against marine plastic pollution (See: *Cote d'Ivoire Status Assessment report on Sea-Based Marine Plastic Litter from Shipping and Fisheries*), namely:

- Legal, Policy, Institutional capacity and enforcement reforms
- Education, outreach and knowledge management
- Regional and global cooperation
- Private sector engagement

The following sections summarize, for each of these areas, the key findings emerging from the Country Status Assessment (CSA), and list in order of priority the actions to be taken as well as the main goals that they pursue. Annex 1, below, provides a complete description of each action, indicating the responsible authorities, agencies, or institutions, timelines, and relevant monitoring and evaluation tools.

5.1. Legal, Policy, Institutional capacity and enforcement reforms

Priority findings from CSA: Lack of capacity to monitor vessel compliance with plastic pollution regulations in Ivorian territorial waters, which are not very effective.

Goal: Undertake legal, policy, and institutional reforms (LPIR) to strengthen SBMPL regulations, including better monitoring of their compliance.

Legal, policy and enforcement reforms:

1. Integrate the SBMPL issue into annual public investment programs (PIPs), noting that the SBMPL issue is already included in the National Development Plan (NDP).
2. Update the Environment Code or drafting a secondary legislation to implement the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972.
3. Update the Fisheries Law with relevant and legally binding provisions regarding the marking of fishing gear (including measures aiming to prevent and reduce fishing gear

loss, abandonment and discard), in accordance with FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG).

4. Update the national Maritime Code with relevant provisions for the reduction and prevention of SBMPL.
5. Implement a mandatory reporting system for lost fishing gear.
6. Promote a coordinated and consistent approach to the control of marine plastic pollution among relevant agencies.

Institutional capacity and reforms:

1. Capacity building of the different actors involved in the enforcement of the relevant regulatory instruments concerning SBMPL.
2. Implement an operational plan for monitoring the application of the relevant regulatory instruments concerning SBMPL.
3. Provide/ensure necessary equipment to the administrations in charge of control missions (e.g., vehicles, personal protective equipment).
4. Acquire, provide or enhance facilities to control SBMPL (e.g., port facilities for the reception of end-of-life fishing gear).
5. Develop proposals for a marking and identification scheme for fishing gears in accordance with the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG).
6. Develop subsidy mechanisms for the systematic return and renewal of artisanal fishing gear.
7. Develop proposals for effective strategies for the prevention and resolution of conflicts between the artisanal and industrial fishing sectors, as they rank among the major causes of artisanal gear losses in Côte d'Ivoire.
8. Strengthen the legal capacities of the actors involved in the drafting and updating of the regulations relating to SBMPL.

5.2. Education, outreach and knowledge management

Priority findings from CSA: Local communities (especially in the artisanal fishing sector) are poorly aware of the impacts of SBMPL and related regulations. In addition, a serious lack of scientific data and research on SBMPL prevails in Cote d'Ivoire.

Goal: Improve and promote scientific research and technological innovations and increase stakeholder awareness and commitment to address the challenges raised by SBMPL.

1. Carry out feasibility and diagnostic studies to develop a full monitoring plan for SBMPL (including feasibility for periodic checks of fishing gears, and implementation of financial and technical mechanisms to facilitate the retrieval operations of lost fishing gear).
2. Provide technical and financial support for priority scientific research activities regarding SBMPL:
 - a. Characterization and assessment of SBMPL levels.
 - b. Identification of relevant SBMPL mitigation strategies.
 - c. Assessment of environmental and socio-economic impacts from SBMPL in Côte d'Ivoire.
3. Promote the popularization of the scientific research achievements on SBMPL among fisheries and shipping stakeholders through appropriate channels (e.g., national radio and TV, social networks, publicity campaigns).
4. Improve international scientific and technical cooperation on SBMPL (e.g., enhancing regional and international scientific exchange and assistance on SBMPL-related issues).
5. Organize information and outreach campaigns focusing primarily on artisanal fisheries stakeholders on SBMPL, their impacts and how to prevent and reduce them.
6. Train and engage women involved in the artisanal fishing sector to become frontline sensitizers in the fight against SBMPL.
7. Organize large-scale social publicity actions including awareness-raising games to ensure high visibility of the actions undertaken.
8. Educate fishers on the benefits of fishing gear marking.

5.3. Regional and global cooperation

Priority findings from CSA: Lack of regional cooperation specific to SBMPL issues.

Goal: Take advantage of the framework provided by the GloLitter project and other relevant collaboration mechanisms (notably the Abidjan Convention) to implement effective regional and global agreements regarding the fight against SBMPL, at least between LPCs and PCs.

1. Strengthen collaboration with international organizations and institutions in the fight against marine plastic waste from shipping and fishing sectors.
2. Define a legal framework for sub-regional cooperation by harmonizing certain national legislations in the fight against plastic waste generated by maritime activities.
3. Establish a sub-regional committee to combat SBMPL, including ALDFG.
4. Capacity building and experience sharing between countries for the control of marine litter.

5.4. Private sector engagement

Priority findings from CSA: The country has a relatively well-managed system for handling ship-generated plastic waste, but consideration should be given to educating ships to reduce their waste at source.

Goal: Enhance the management of ship-generated plastic waste.

1. Promote public-private partnerships for recycling and revalorization initiatives of plastic waste, including end-of-life fishing gears collected from ships.
2. Raise awareness among crews and ship owners of appropriate practices to reduce plastic waste at source.

6. MONITORING PROGRESS

For all objectives, key indicators have been proposed for monitoring progress. The relevant authorities supported by the NTF will ensure the assessment of these indicators, according to the defined timeframe.

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ANNEX I. CÔTE D'IVOIRE NATIONAL ACTION PLAN ON SEA-BASED MARINE PLASTIC LITTER FROM SHIPPING AND FISHERIES

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
1.	Actions related to the legal, policy and enforcement reforms							
Action 1.1	Integrate the SBMPL issues into annual public investment programs (PIPs), noting that SBMPL is already included in the National Development Plan (NDP).	High	- MAM	2023	2024	<ul style="list-style-type: none"> NFP Unit for project coordination and implementation National Budget 	SBMPL issues are integrated into the investment priorities of the PIP (2023-2025)	The issue of SBMPL is taken into account by the NDP / PIP
Action 1.2	Update the Environment Code or drafting a secondary legislation to implement the 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter 1972.	High	- MINEDD - MAM	2023	2025	<ul style="list-style-type: none"> MINEDD (legal department) MAM (legal department) National legal consultant Experts and guidance documents 	No of specific provisions relating to SBMPL included in the Environment Code or No. of Decrees and other regulations published <i>Target:</i> At least one specific provision.	Copy of the revised version of the Environmental Code published in the Official Journal of Côte d'Ivoire or Copy of Decrees and other regulations published

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 1.3	Update the Law No. 2016-554 of July 26, 2016 on Fisheries and Aquaculture with relevant and legally binding provisions regarding the loss and marking of fishing gear, in accordance with FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG)	High	- MIRAHA - MAM	2023	2025	<ul style="list-style-type: none"> • MIRAHA (fishery department) • MAM (legal department) • National legal consultant • Experts and guidance documents from 	<p>No of specific provisions relating to the loss and marking of fishing gear included in the Fisheries Law.</p> <p><u>Target:</u> At least two specific provisions, one relating to the marking of fishing gear and the other to the measures to be taken in case of loss.</p>	Copy of the revised version of the Fisheries Law published in the Official Journal of Côte d'Ivoire.
Action 1.4	Update the national Maritime Code to explicitly consider SBMPL	High	- MAM (NFP)	2023	2023	<ul style="list-style-type: none"> • DAJC • MAM (DGAMP) • National legal consultant • Experts and guidance documents 	<p>No of specific provisions relating to SBMPL included in the national Maritime Code.</p> <p><u>Target:</u> at least one specific provision.</p>	Copy of the revised version of the Maritime Code published in the Official Journal of Côte d'Ivoire.

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 1.5	Implement a mandatory reporting system for lost fishing gear	Medium	- MIRAHA - MAM	2023	2025	<ul style="list-style-type: none"> • MIRAHA (fishery department) • MAM (DGAMP) • National legal consultant • Experts and assistance 	<p>No of decrees and Laws instituting a mandatory reporting regime for gear losses.</p> <p><u>Target:</u> at least one Decree or Law.</p>	Copy of Decrees and Laws published in the Official Journal of Côte d'Ivoire.
Action 1.6	Promote a coordinated and consistent approach to addressing SBMPL among relevant agencies	High	- MAM (NFP)	2023	2025	<ul style="list-style-type: none"> • MAM (DGAMP) • MIRAHA (fishery department) • MINEDD (technical service) 	<p>No of meetings held between agencies implicated in SBMPL control, aimed at ensuring coordination and facilitation of the implementation of the NAP.</p> <p><u>Target:</u> At least two coordination meetings per year throughout the project.</p>	Minutes and attendance list of coordination meetings held.

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
2.	Actions related to institutional capacity and reforms							
Action 2.1	Capacity building of the different actors involved in the enforcement of the relevant regulatory instruments concerning SBMPL	High	- MAM	2023	2025	<ul style="list-style-type: none"> • MAM (DGAMP) • Experts and Advice 	<p>No of courses and training given to people responsible for enforcing the SBMPL regulations (e.g., CIAPOL officers, marine surveyors, etc.).</p> <p><i>Target:</i> At least two coordination meetings per year throughout the project.</p>	Attendance list, training certificates, and training reports
Action 2.2	Implement an operational plan for monitoring the application of the relevant regulatory instruments concerning SBMPL	High	- MAM - MINEDD	2023	2025	<ul style="list-style-type: none"> • MAM (DGAMP) • MINEDD (technical service) 	An operational plan for enforcement of SBMPL regulations is effective	Biannual activity reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 2.3	Provide/ensure necessary equipment to the administrations in charge of control missions (e.g., vehicles, personal protective equipment).	High	- MEF	2023	2025	<ul style="list-style-type: none"> National financial services (MEF / MBPE) 	<p>No and type of equipment provided to administrations in charge of control missions (e.g., CIAPOL, DGAMP, DDSIC, etc.)</p> <p><i>Target:</i> As specified by the operational plan (Action 2.2)</p>	Administrative documents (e.g., minutes of acceptance)
Action 2.4	Acquire, provide or enhance facilities to control marine pollution especially those related to SBMPL (e.g., port facilities for the reception of ship-generated plastic waste and end-of-life fishing gear)	High	<ul style="list-style-type: none"> MAM MINEDD 	2023	2025	<ul style="list-style-type: none"> MAM (DGAMP) CIAPOL 	<p>No and type of upgraded or new equipment provided to control marine pollution.</p> <p><i>Target:</i> As specified by the operational plan (Action 2.2)</p>	Administrative documents (e.g., minutes of acceptance)

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 2.5	Develop proposals for a marking and identification scheme for fishing gears in accordance with the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG).	High	- MIRA - MAM	2023	2025	<ul style="list-style-type: none"> MIRA (fishery department) MAM (DGAMP) Experts and training courses 	No of proposals for a fishing gear marking and identification scheme <u>Target:</u> At least one proposal	Copy of proposals.
Action 2.6	Develop subsidy mechanisms for the systematic return and renewal of artisanal fishing gear	High	- MIRA - MEF - MAM	2023	2025	<ul style="list-style-type: none"> MIRA (fishery department) MAM (DGAMP) National financial services (MEF / MBPE) 	No of subsidy mechanisms implemented for fishing gears return and renewal <u>Target:</u> At least one subsidy mechanism	Activity and financial reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 2.7	Develop proposals for effective strategies for the prevention and resolution of conflicts between the artisanal and industrial fishing sectors	High	- MIRAHA - MAM	2023	2024	<ul style="list-style-type: none"> MIRAHA (fishery department) MAM (DGAMP) 	<p>No of proposals for strategic tools identified for the prevention and management of conflicts between the artisanal and industrial fishing sectors</p> <p><i>Target:</i> At least one proposal</p>	Copy of proposals
Action 2.8	Strengthen the legal capacities of the actors involved in the drafting and updating of the regulations relating to marine plastic pollution especially from SBMPL	High	- MINEDD - MAM	2023	2024	<ul style="list-style-type: none"> MINEDD (legal department) MAM (legal department) MAM (DGAMP) Trainers and legal advisor 	<p>No of people in charge of drafting regulations trained.</p> <p><i>Target:</i> at least one representative from MINEDD, MAM and DGAMP</p>	Attendance list, training certificates, and training reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
3.	Actions related to education, outreach and knowledge management							
Action 3.1	Carry out feasibility and diagnostic studies to develop a full monitoring plan for SBMPL (including an initial assessment of SBMPL pollution levels in Ivorian maritime waters, feasibility studies for periodic checks of fishing gears, and implementation of financial and technical mechanisms to facilitate the retrieval operations of lost fishing gears)	High	- MINEDD - MAM	2023	2024	<ul style="list-style-type: none"> • MAM (DGAMP) • MINEDD (technical service) • Technical Assistance 	<p>No of feasibility and diagnostic studies conducted to develop a full monitoring plan for SBMPL</p> <p><u>Target:</u></p> <ul style="list-style-type: none"> • At least one assessment of SBMPL pollution levels in Ivorian maritime waters, • one feasibility study for the periodic checks of fishing gears, • one study on the financing mechanisms for the recovery of lost fishing gear 	Copy of study reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 3.2	Provide technical and financial support for priority scientific research activities regarding SBMPL (a-Characterization and assessment of SBMPL levels; b-Identification of relevant SBMPL mitigation strategies; c-Assessment of SBMPL environmental and socio-economic impacts in Côte d'Ivoire)	High	- MESRS	2023	2024	<ul style="list-style-type: none"> Nangui Abrogoua University CIAPOL CRO (Oceanology Research Center of Abidjan) (Centre de Recherche Océanologiques d'Abidjan) Technical Assistance 	<p>No of research programs specifically conducted on SBMPL</p> <p><u>Target:</u> At least one research program</p>	Copy of reports of scientific activities undertaken and publications.
Action 3.3	Promote the popularization of the scientific research achievements on SBMPL among fisheries and shipping stakeholders through appropriate channels (e.g., national radio and TV, social networks, publicity campaigns)	High	- MESRS	2023	2025	<ul style="list-style-type: none"> Nangui Abrogoua University CIAPOL CRO 	<p>No. of consultation meetings held with different sectors and institutions</p> <p><u>Target:</u> At least one consultation meeting</p>	Reports of the meetings

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 3.4	Improve international scientific and technical cooperation on SBMPL (e.g., enhancing regional and international scientific exchange and assistance on SBMPL-related issues)	High	- MESRS	2023	2025	<ul style="list-style-type: none"> • Nangui Abrogoua University • CIAPOL • CRO 	<p>No. of cooperation ventures or scientific and technical partnership agreements initiated regarding the SBMPL</p> <p><u>Target:</u> At least one cooperation agreement</p>	Copy of agreements
Action 3.5	Organize information and outreach campaigns focusing primarily on artisanal fisheries stakeholders	High	<ul style="list-style-type: none"> - MIRAHA - MAM 	2023	2025	<ul style="list-style-type: none"> • MIRAHA (fishery department) • MAM (DGAMP) • Guidance documents 	<p>No. of information and outreach campaigns executed.</p> <p><u>Target:</u> At least one campaign per year.</p>	Copy of reports of campaigns

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 3.6	Train and engage women involved in the artisanal fishing sector to become frontline sensitizers in the fight against SBMPL	High	- MINEDD - MAM - MIRAH	2023	2025	<ul style="list-style-type: none"> • MINEDD (technical service) • MIRAH (fishery department) • MAM (DGAMP) • Trainers 	<p>No of SBMPL training and awareness courses given to women leaders involved in fishing</p> <p><u>Target:</u> At least one training carried out in each of the main Ivorian artisanal fishing centers.</p>	Attendance list, training certificates, and training reports
Action 3.7	Organize large-scale social publicity actions including awareness-raising games to ensure a high visibility of the actions undertaken in the framework of this National Action Plan	High	- MAM (NFP) - MINEDD - MIRAH	2023	2025	<ul style="list-style-type: none"> • MINEDD (technical service) • MIRAH (fishery department) • MAM (DGAMP) • Technical Assistance 	<p>No of social publicity actions organized</p> <p><u>Target:</u> At least one social publicity action organized</p>	Copy of activity reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 3.8	Educate fishers on the benefits of fishing gear marking.	High	<ul style="list-style-type: none"> - MAM (NFP) - MIRAH 	2023	2025	<ul style="list-style-type: none"> • MIRAH (fishery department) • MAM (DGAMP) • Training packages 	<p>No of training courses on the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG)</p> <p><u>Target:</u> At least one training carried out in each of the main Ivorian fishing centers.</p>	Attendance list, training certificates, and training reports
4.	Actions related to regional and global cooperation							
Action 4.1	Strengthen collaboration with international organizations and institutions in the fight against marine plastic waste from shipping and fishing.	Medium	<ul style="list-style-type: none"> - MAM - MIRAH - MINEDD - MAE 	2023	2025	<ul style="list-style-type: none"> • MAE (legal department) • MINEDD (technical service) • MIRAH (fishery department) • MAM (DGAMP) • Representatives from sub-regional PCs and LPCs 	<p>No of international agreements signed</p> <p><u>Target:</u> At least one international agreement</p>	Copy of agreements

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
Action 4.2	Define a legal framework for sub-regional cooperation by harmonizing certain national legislations in the fight against plastic waste generated by maritime activities.	Medium	<ul style="list-style-type: none"> - MAM - MIRAH - MINEDD - MAE 	2023	2025	<ul style="list-style-type: none"> • MAE (legal department) • MINEDD (technical service) • MIRAH (fishery department) • MAM (DGAMP) • Legal advisor • Representatives from sub-regional PCs and LPCs 	<p>No of proposals prepared for the harmonization of national legislation on plastic waste with the sub-regional legal framework.</p> <p><u>Target:</u> At least one proposal</p>	Copy of proposals
Action 4.3	Establish a sub-regional committee to combat SBMPL, including ALDFG	Medium	<ul style="list-style-type: none"> - MINEDD - MAM (NFP) 	2023	2025	<ul style="list-style-type: none"> • MINEDD (technical service) • MAM (DGAMP) • Representatives from sub-regional PCs and LPCs 	<p>No of meetings held by the committee</p> <p><u>Target:</u> At least one meeting per year throughout the project</p>	Copy of meeting minutes
Action 4.4	Capacity building and experience sharing between countries for the control of SBMPL	Medium	<ul style="list-style-type: none"> - MAM 	2023	2025	<ul style="list-style-type: none"> • MAM (DGAMP) • Assistance on twinning arrangement • Representatives from sub-regional PCs and LPCs 	<p>No of training courses conducted</p> <p><u>Target:</u> At least one training course or workshop</p>	Attendance list, training certificates, and training reports

	Description	Priority Level	Responsible authority	Start Date	End Date	Resources required (staff, tech, etc.)	Progress indicators	Methods of verification
5.	Actions related to private sector engagement							
Action 5.1	Promote public-private partnerships for recycling and revalorization initiatives of plastic waste, including end-of-life fishing gear collected from ships	High	- MINEDD - MAM	2023	2024	<ul style="list-style-type: none"> MAM (DGAMP) MINEDD (technical service) CIAPOL 	No of public-private partnership agreements signed <u>Target:</u> At least one partnership initiated	Copy of partnership agreements
Action 5.2	Raise awareness among crews and ship owners of appropriate practices to reduce plastic waste at source.	High	- MAM (NFP) - MINEDD - MIRAH	2023	2025	<ul style="list-style-type: none"> MAM (DGAMP) MINEDD (technical service) MIRAH (fishery department) Technical Assistance (Conventional brochures) 	No of outreach campaigns conducted on waste reduction strategies at source targeting crews and ship owners. <u>Target:</u> At least a campaign per year throughout the project.	Copy of reports of campaigns

ANNEX II : External support required

Action	Action description	External support required
1.2	Update the Environment Code with relevant provisions for the reduction and prevention of SBMPL	Recruitment of the national consultant and guidance documents
1.3	Update the Fisheries Law with relevant and legally binding provisions regarding the loss and marking of fishing gear, in accordance with FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG)	Recruitment of the national consultant and guidance documents
1.4	Update the national Maritime Code to explicitly consider SBMPL	Recruitment of the national consultant and guidance documents
1.5	Implement a mandatory reporting system for lost fishing gear	Recruitment of the national consultant and technical assistance in drafting of regulations for the mandatory reporting of gear losses
2.1	Capacity building of the different actors involved in monitoring the application of the relevant regulatory instruments concerning SBMPL	Training on enforcement
2.5	Develop a marking and identification scheme for fishing gears in accordance with the FAO Voluntary Guidelines on the Marking of Fishing Gear (VGMFG)	Technical assistance in the drafting of identification schemes adapted to Côte d'Ivoire
2.8	Strengthen the legal capacities of the actors involved in the drafting and updating of the regulations relating to marine plastic pollution especially from SBMPL	Training on regulations regarding marine plastic pollution especially from SBMPL
3.1	Carry out feasibility and diagnostic studies to develop a full monitoring plan for SBMPL (including an initial assessment of SBMPL pollution levels in Ivorian maritime waters, feasibility studies for periodic checks of fishing gears, and implementation of financial and technical mechanisms to facilitate the retrieval operations of lost fishing gears)	Recruitment of consultant for feasibility and diagnostic studies to develop a full monitoring plan for SBMPL

3.2	Provide technical and financial support for priority scientific research activities regarding SBMPL (a-Characterization and assessment of SBMPL levels; b- Identification of relevant SBMPL mitigation strategies; c-Assessment of SBMPL environmental and socio-economic impacts in Côte d'Ivoire)	Technical and financial assistance to support SBMPL-related scientific research in Côte d'Ivoire
3.5	Organize information and outreach campaigns focusing primarily on artisanal fisheries stakeholders	Guidance documents
3.6	Train and engage women involved in the artisanal fishing sector to become frontline sensitizers in the fight against SBMPL	Training and raising awareness about SMBPL
3.7	Organize large-scale social publicity actions including awareness-raising games to ensure a high visibility of the actions undertaken in the framework of this National Action Plan	Support for the organization of the actions proposed by the committee
3.8	Educate fishers on the benefits of fishing gear marking	Trainers and training packages
4.4	Capacity building and experience sharing between countries for the Control of SBMPL	Assistance for twinning arrangement
5.2	Raise awareness among crews and ship owners of appropriate practices to reduce plastic waste at source.	Assistance with design and organizations of outreach campaigns