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**Agenda item 4 (c): Review of technical annexes to the NAP update *Guidelines*
(UNEP(DEPI)/MED WG. 393/10)**

**Proposed list of indicators to assess the LBS, Dumping,
Hazardous waste Protocols, NAP and Regional Plans implementation**

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1. Introduction

The UNEP/MAP programme of work 2014-2015 adopted by the eighteenth meeting of the Contracting parties (COP 18), 3-6 December 2013, Istanbul, Turkey, mandated the Secretariat to update the MAP reporting system with the view to make it more user friendly, further strengthen its indicator-based dimension as well as complete it with the reporting requirements of the Regional Plans adopted under Article 15 of the LBS Protocol.

COP 18 also requested the contracting parties to update their National Action Plans (NAPs) that were endorsed by COP 14, Portoroz, Slovenia, 2005, in accordance with Article 5 of the LBS Protocol of the Barcelona Convention.

With the view to deliver the above tasks, the Secretariat developed the draft Guidelines for updating the NAPs, including an annex on “NAP follow-up and reporting indicators”. The Annex provided a comprehensive list of indicators of relevance for the follow-up of NAPs implementation. The listed indicators were indicators already in use and/or in process of negotiation within and/or outside MAP system, consistent with regional and international reporting requirements relevant to MAP. This document was presented at the MEDPOL Focal Points (FP) meeting on 26-28 March 2014 in Athens, Greece.

The MEDPOL FP asked the Secretariat to:

- a) continue its work and conduct an in-depth analysis of the reporting requirements of the LBS, Dumping and Hazardous waste Protocols as well as of the Regional Plans adopted in the framework of the LBS Protocol and recommend a list of ranked indicators for assessing their implementation.
- b) streamline the Protocols and Regional Plans indicators with the NAP follow up and reporting indicators.

With the view to propose the list of potential ranked indicators that fit the reporting requirements of the LBS, Dumping and HW protocols, the Regional Plans and the NAPs the Secretariat carried out a two-step analysis:

The first step included a prioritization exercise of the list of indicators presented at the March 2014 MEDPOL FP meeting. The prioritization/scoring methodology based on UNEP/MAP Plan Bleu and EEA experience with indicators is described in Annex I of this document. In addition, the Secretariat used the opportunity of the workshop on PRTR held in the framework of SEIS Project, in Ankara, Turkey, in June 2014 to review again and carry out a second scoring exercise with participation of several country experts with experience on indicators.

In the second step, **indicators receiving more than 50% of the total scores were** further analyzed and complemented by the Secretariat with other potential indicators based on the in-depth and concrete legal and policy analysis of the relevant provisions of the Barcelona Convention and Protocols. This analysis is described in the Section 2 of this document.

2. Proposed candidate indicators to assess the implementation of the LBS, Dumping and Hazardous Waste Protocols, LBS Regional Plans and NAPs

In case of LBS&Regional Plans&NAPs implementation, the indicators should respond to questions related to pollution reduction and prevention trends in the Mediterranean region and the improvement of marine and coastal environment (to achieve the relevant ECAP GES targets) through the implementation of the LBS Protocol, its Regional Plans, Dumping as well as the Hazardous Waste Protocols of the Barcelona Convention as well as the NAPs.

The proposed candidate indicators are organized according to the following structure:

- SAP MED/NAP sectors (based on Annex I of the LBS Protocol).
- Relevant legal and policy questions (from the Protocols and Regional Plans).
- Title of the candidate indicators per each sector and the related codes.
- Units.
- Link to other initiatives and policy/legal frameworks (to be further completed).
- Type.
- Indicator description.
- Information on data sets and sources (to be further completed).
- Reference to the mandatory related obligations under the Barcelona Convention and related Protocols as well as the Regional Plans.
- Total scoring per each candidate indicator (from both steps of the prioritization analysis).

Annex II of this document contains all elements of the candidate indicators as described above.

For ease of reference, the legal and policy questions raised per each NAP/SAP sector are presented below together with the title of the candidate indicators as well as related ECAP indicator.

I. Urban development

a) WASTEWATER (NAP/LBS and RP on BOD from WWTP)

Are the agglomerations (areas with a population of more than 2.000 inhabitants and/or economic activities sufficiently concentrated) collecting and treating their urban waste waters before discharging them directly or indirectly into the Mediterranean Sea?

- WW01. Share of population with access to an improved sanitation system (total, urban, rural).
- WW02. Volume of wastewater collected.
- WW03. Volume of wastewater treated.

Do collecting systems consider the best technical knowledge notably regarding: (a) the volume and characteristics of urban waste water; (b) the maintenance of piping system for the prevention of leaks; (c) the maintenance of pumping and boosting equipment; and (d) the separation of storm water pipes from collection pipes of WWTP, when applicable?

- WW04. Share of the treated wastewater according to the type of treatment (primary, secondary, tertiary).

Pressure indicator IND07 “Total loads of BOD5, Total nitrogen, Total phosphorus discharged to the Mediterranean sea” is valid both for urban development and industrial development.

Are the coastal and marine environment and health protected from the adverse effects of the urban waste water direct and or indirect discharges, in particular regarding adverse effects on the oxygen content of the coastal and marine environment and eutrophication phenomena?

ECAP common indicator 7/[WW05]. Concentration of key nutrients in the water column.

ECAP common indicator 8/[WW06]. Chlorophyll A concentration in the water column.

b) BATHING WATER QUALITY (Decision IG 20/9)

Is the quality of bathing waters in the Mediterranean countries being improved?

- BW01. Share of bathing water categories: A (Excellent quality), B (Good quality), C (Sufficient) and D (Poor quality) with respect to total number of assessed bathing waters.
- **ECAP Common Indicator 15/[IND04]** “Percentage of intestinal enterococci concentration measurements within established standards”)

c) MUNICIPAL SOLID WASTE AND MARINE LITTER (NAP/LBS and RP on Marine Litter management)

Is marine litter pollution in the Mediterranean being prevented and reduced to the minimum?

ECAP Common Indicator 16/[MW01] Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source.

[ECAP Common Indicator 17/[MW02] Trends in the amount of litter in the water column including microplastics and on the seafloor.

[ECAP Common Indicator 16/[MW03]. Trends in the amount of litter ingested by or entangling marine organisms focusing on selected mammals, marine birds and turtles.] (trial basis)

Is the municipal solid waste management based on the waste hierarchy (prevention, preparing for re-use, recycling, other recovery, e.g. energy recovery and environmentally sound disposal) as a priority order in waste prevention and management legislation and policy?

- MW04. Municipal waste generation per capita.
- MW05. Share of recycled, composted, incinerated or landfilled municipal waste with respect to collected amount.

- MW06. Share of generated municipal waste per waste composition category: paper/paperboard, textiles, plastics, glass, metals, other inorganic material, organic material.
- MW07. Number of illegal dumpsites at coastal area that have been closed/remediated.

Are prevention measures related to: (a) Extended Producer Responsibility, (b) Sustainable Procurement Policies, (c) Voluntary agreements with retailers and supermarkets, (d) Fiscal and economic instruments, (e) Deposits, Return and Restoration System and, (f) Procedures and manufacturing methodologies with plastic industry, being explored and implemented to the extent possible in order to reduce the fraction of plastic packaging waste that goes to landfill or incineration without energy recovery?

- MW08. Share of supermarkets applying deposit, return and restoration system for plastic beverage bottles.
- MW09. Annual Amount of plastic bags consumption at national level.
- MW10. Share of producers, manufacturer brand owners and first importers responsible for the entire life-cycle of the product with measures prioritizing the eco-design of the product and the hierarchy of waste management.

d) Urban AIR POLLUTION (NAP/LBS Protocol Annex III)

Is air quality in coastal Mediterranean cities being improved in the Mediterranean?

Indicators already agreed under other relevant multilateral international agreements and EEA as appropriate and relevant assessment described in a concise manner

II. INDUSTRIAL DEVELOPMENT (Barcelona Convention Article 8, LBS Articles 1 and 5, Annex III, Regional Plans (Mercury, POPs, BOD from food sector, NAPs, Dumping Protocol and Hazardous Waste Protocol)

a) INDUSTRIAL POLLUTION

Are the emissions/pollution inputs from industrial land based sources and activities being eliminated, or phased out in the hydrological basin of the Mediterranean?

- **ECAP Common Indicator 11/[IND01]** Concentration of key harmful contaminants measured in the relevant matrix (biota, sediment, seawater) ().
- **ECAP Common Indicator 12/[IND02]** Level of pollution effects of key contaminants where a cause and effect relationship has been established.
- **ECAP Common Indicator 14/[IND03]** Actual levels of contaminants that have been detected and number of contaminants which have exceeded maximum regulatory levels in commonly consumed seafood.
- **ECAP Common Indicator 15/[IND04]**. Percentage of intestinal enterococci concentration measurements within established standards.

- IND05. National loads of atmospheric pollutants (SO₂, NO_x, NH₃, VOC, hydrocarbons, CO, CH₄, TPS, PM10, PM2.5, POPs, heavy metals) from point sources.
- IND06. Total loads of toxic substances: PAH, VOC, PCDD/PCDF, Hexachlorobenzene, Cadmium, Chromium, Lead and Mercury which are directly or indirectly discharges to the Mediterranean sea.
- IND07. Total loads of BOD₅, Total nitrogen, Total phosphorus discharged to the Mediterranean Sea.
- IND08. Number of substances covered by national standards (ELV) for point source discharges into water or air.
- IND09. Number of substances covered by the national pollution monitoring programme and reported
- IND10. Share of contaminated sites with toxic substances in the coastal area which have been closed/remediated.

b) HOT SPOTS

Is the state of the national hot spots in the Mediterranean periodically monitored and hot spots eliminated?

- HS01. Share of hot spots and sensitive areas covered by monitoring, projects/ investments and/or eliminated.

c) DUMPING

Are the quantities of the materials dumped in the sea and their impact monitored and reported to the Secretariat in accordance with Articles 10, 11 and 12 of the Dumping Protocol?

- D01. Annual quantities of materials dumped.
- D02. Share of number of permits issued by national competent authorities providing for strict monitoring programmes of marine environment from dumping activities.
- D03. Number of illegal dumping cases.

d) HAZARDOUS WASTE

Is the amount of HW generated being reduced and disposed in an environmental sound manner in the Mediterranean?

- HW01. Amount of hazardous waste generated by Y categories.
- HW02. Amount of hazardous waste environmentally soundly managed or exported by Y categories and by disposal/recovery operation (D - disposal, R- recovery).

- HW02. Share of the amount of hazardous waste generated belonging to categories Y8, Y10, Y26, Y29 and Y31 (lube oils, batteries, PCB, mercury waste) which is recovered.
- HW04. Number of illegal HW trafficking cases.

Note on the Regional Plans on the POPs

With regards to POPs Regional Plan and Stockholm Convention provisions, since the timeframe for the reporting period have already passed, related information and indicators will correspond to the reports periodically submitted by the Mediterranean countries to the Secretariat of the SC.

Annex I. Selection and prioritization methodology of indicators presented in NAP update draft Guidelines (Annex E)

The list of indicators included in Annex E of NAP update guidelines (Document UNEP (DEPI)MED WG.394/4) was built based on the relevant decisions or other documents:

- a) MAP effectiveness indicators adopted in COP 16
- b) MAP reporting system indicators adopted by COP 15
- c) MSSD indicators, 2005
- d) Indicators with regards to other relevant policy frameworks, mainly Horizon 2020 Initiative and IWRM (Integrated Water Resources Management)
- e) Indicators agreed in the framework of relevant MEA.

The above mentioned indicator list consisted of a spreadsheet with all the potential indicators with fields for Indicator code, Indicator title, Units, SAP/NBB sector, Link to ECAP/Regional plans targets, Link to other policy frameworks, Type of indicator (D = Driving force, P = Pressure, S = State, I = Impact, R = Response), Description, Data source, Criteria and Total.

The selection criteria used for the Sustainable Development Indicators of the United Nations Commission on Sustainable Development (UN-CSD) are:

- Conceptually well founded.
- Understandable (clear, simple and unambiguous).
- Based on data that is readily available or available at a reasonable cost, adequately documented, of good quality and updated at regular intervals.
- Within the capacities of the governments to implement, given logistics, time, technical and other constraints.

The Secretariat used the methodology developed by UNEP/MAP Plan Bleu-RAC consisting of the following criteria:

- a. Mandatory nature of the indicator within MAP framework.
- b. Relevance
- c. Measurability
- d. Cost effectiveness
- e. Understandable

The scoring used for each criteria is described below:

1. Mandatory nature: Non Mandatory=0; Overall objective (Mandatory but not legally binding)=1; Legally binding=2

- Legally binding indicators can be those related to requirements or measures established by the Barcelona Convention, Protocols, Regional plans adopted in the framework of Article 15 of the LBS Protocol.
- Overall objective: those indicators that track the achievement of a related objective/target, e.g. from non legally binding regional plans or SAP MED, ECAP indicators or MAP effectiveness indicators that have been adopted or approved by COP but are not strictly legally binding by themselves.
- Non mandatory indicators but smart and useful for assessment purposes.

2. Relevance: It is disaggregated into the following five single criterions:

a) Meaningful: it measures the degree to which the indicators meet its intended purpose in coverage, content and detail.

Not meaningful=0; More or less meaningful=1; Highly meaningful=2

- Highly meaningful: the indicator seems intuitively reasonable and it adequately reflects the objectives/targets or phenomenon which are intended to measure and is appropriate to the needs of the user or purpose.
- Partially meaningful: the indicator is related with objectives/targets or phenomenon which is intended to measure but it does not fully reflect them.
- Not meaningful: the indicators not related with the objectives/targets or it is not appropriate to the needs of the user or purpose.

b) Applicable to different scales: it measures the ability to be disaggregated/broken down into areas of particular interest, such as regional areas.

Applicable to a single scale=0; Applicable only to some scales=1; Applicable to different scales.

- Applicable to different scales: primarily national in scope but able to be disaggregated/broken down into areas of interest, e.g. regional areas. Allow international comparison as it is consistent with those used in international indicators programmes.
- Applicable only to some scales: limited ability to be disaggregated/broken down into areas of interest, e.g. regional areas.
- Applicable to a single scale: only able to be expressed in a single scale.

c) Conceptually sound: it measures the degree to which the information precisely describes the objective/target or phenomena it was designed to measure. The indicator should be specific, aligned with the objectives/targets or phenomenon of interest and not with other non-related objective/target or phenomenon.

Not conceptually sound=0; More or less conceptually sound=1; Highly conceptually sound=2

- Highly conceptually sound: the indicator measurement is methodologically sound and fits conceptually for the purpose to which it is being applied. It is specific and fully aligned with the objectives/targets and not with other non-related objective/target or phenomenon.
- More or less conceptually sound: the indicator measurement is more or less methodologically sound and partially fits for the purpose to which it is being applied. It is moderately specific and partially aligned with the objectives/targets, it can be aligned with other non-related objective/target or phenomenon.
- Not conceptually sound: the indicator measurement is not methodologically sound and does not fit conceptually for the purpose to which it is being applied. It is unspecific and not aligned with the objectives/targets.

d) Responsive to change/sensitivity: it relates to how significantly an indicator varies according to changes in the objectives/targets or phenomenon.

Not responsive to change=0; More or less responsive to change=1; Highly responsive to change=2

- Highly responsive to change: the indicators respond relatively quickly and noticeably to changes, but not show false movements.

- More or less responsive to change: the indicators respond moderately slowly and noticeably to changes, and can show false movements sometimes.
- Not responsive to change: the indicators respond slowly to changes and show false movements frequently.

e) Useful to decision makers: the usefulness of indicators to decision makers is related directly to the ability to track trends over time with regards the objectives/targets or phenomenon which is intended to measure.

- Highly useful to decision makers: the indicator is related directly to the ability to track trends over time with regards the objectives/targets or phenomenon which are intended to measure.
- More or less useful to decision makers: the indicator is more or less related to the ability to track trends over time with regards the objectives/targets or phenomenon which are intended to measure.
- Not useful to decision makers: the indicator is not able to track trends over time with regards the objectives/targets or phenomenon which is intended to measure.

c) Measurable. It is disaggregated into the following two criterions:

- a) Based on data readily available: it relates to the degree to which data produced are up to date, published frequently and delivered to schedule.
- b) Data needs to be collected and reported regularly and frequently. There should also be minimal time lag between the collection and reporting of data, to ensure that indicators are reporting current rather than historical information.

Not available=0; Potentially available=1; Fully available=2

- Fully available: data is directly collected and reported regularly and frequently. There is a minimal time lag between the collection and reporting of data.
- Potentially available: data is not directly collected or reported regularly and frequently. Changes in regular surveys; arrangements with data 'owner'; improved handling of raw data; or shorter release time are needed.
- Not available: data is not available.

d) Cost-effective: it measures whether data are routinely collected either by national statistical services or through international processes.

Not available=0; Potentially available=1; Fully available=2

- Fully cost-effective: data are already collected routinely either by national statistical services or through international processes.
- Potentially cost-effective: data are not routinely collected but minor efforts need to be made for data collection and reporting.
- Not cost-effective: data are not routinely collected and costly efforts need to be made for data collection and reporting.

d) **Understandable:** it measures whether the indicator is intelligible and easily interpreted. Indicators should be sufficiently simple to be interpreted in practice and be intuitive in the sense that it is obvious what the indicator is measuring.

Not understandable=0; More or less understandable=1; Fully understandable=2

- Fully understandable: the indicator is intelligible and easily interpreted.
- More or less understandable: the indicator is more or less intelligible and interpreted with difficulties.
- Not understandable: the indicator is unintelligible and hardly interpreted.

For each indicator, a total score was deducted from 0 to 18, with a score of 18 meaning that the indicator perfectly meets all the criteria.

Annex II. List of candidate indicators (ECAP not included)¹

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
Urban development / municipal waste water								
WW01	Share of population with access to an improved sanitation system (total, urban, rural)	%	<i>MSSD, H2020</i>	S	The percentage of the population (total, urban and rural) with access to facilities which hygienically separate human excreta from human, animal and insect contact.		LBS Protocol, Art 3, Annex III; IG 19/7/Art 3, Annex I	18 (17)
WW02	Volume of wastewater collected	million m ³ per year of municipal wastewater collected	<i>MSSD, H2020, EU legislation</i>	S	This indicator measures the volume of municipal wastewater collected	MED POL, H2020,	LBS Protocol, Art 3, Annex III; IG 19/7/Art 3, Annex I	15 (17)
WW03	Volume of wastewater treated	million m ³ per year of municipal wastewater treated in wastewater treatment plants	<i>MSSD, H2020, EU legislation</i>	S	This indicator measures the total volume of wastewater effectively treated in wastewater treatment plants. The treatment of wastewater can be defined as the deliberate collection and sufficient alteration to allow for its discharge to the environment without adverse impact on public health and the ecosystem.	MED POL, H2020,	LBS Protocol, Art 3, Annex III; IG 19/7/Art 3, Annex I	15 (17)
WW04	Share of the treated wastewater according to the type of treatment (primary, secondary, tertiary)	% wastewater treated by primary/secondary/tertiary treatment	<i>MSSD, H2020, EU</i>	R	Percentage of the treated wastewater according to the type of treatment (primary, secondary, tertiary)	MED POL, H2020,	LBS Protocol, Art 3, Annex III; IG 19/7/Art 3, Annex I	15
Urban development / Bathing water quality								

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
BW01	Share of bathing water categories: A (Excellent quality), B (Good quality), C (Sufficient) and D (Poor quality) with respect to total number of assessed bathing waters	%	<i>WHO, EU</i>	<i>S</i>	Share of bathing water categories A, B, C and D based on Intestinal enterococci (cfu/100 mL) categorized as: A = Excellent quality, <100 (95th percentile); B = Good quality, 101-200 (95th percentile); C = Sufficient, 185 (90th percentile) and D = Poor quality, >185 (90th percentile)	MED POL	LBS Protocol, Article 7, Decision IG 20/9, Annex	18
Urban development / Municipal solid waste and MARINE LITTER								
MW04	Municipal waste generation per capita	kg per capita per year	<i>MSSD, H2020</i>	<i>P</i>	The indicator presents municipal waste generation, expressed in kg per capita per year. "Municipal waste" refers to waste collected by or on behalf of municipalities; the main part originates from households, but similar wastes from commerce and trade, office buildings, institutions and small businesses is also included.	MED POL, H2020,	LBS Protocol, Annex II, Decision IG 21/7; Article 9	17
MW05	Share of recycled, composted, incinerated or landfilled municipal waste with respect to collected amount.	%	<i>H2020</i>	<i>R</i>	Recycling is defined as any reprocessing of material in a production process that diverts it from the waste stream, except reuse as fuel. Composting is considered as part of recycling. Incineration means thermal treatment of waste in an incineration plant. Landfilling refers to the final placement of waste into or onto the land in a controlled or uncontrolled way. The definition covers both landfilling in internal sites and in external sites.	MED POL, H2020,	LBS Protocol, Annex II, Decision IG 21/7; Article 10	18

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
MW06	Share of generated municipal waste per waste composition category:	%	<i>H2020</i>	P	It measures the amount of collected municipal waste per composition category.	MED POL, H2020,	LBS Protocol, Annex II, Decision IG 21/7; Article 9	17
	Paper/paperboard							
	Textiles							
	Plastics							
	Glass							
	Metals							
	Other inorganic material							
Organic material								
MW07	Number of illegal dumpsites at coastal area that have been closed/remediated.	Units		R	It presents the number of open dump sites/non-sanitary/uncontrolled landfill defined as uncontrolled deposit of waste into or onto land that have been closed.	MED POL H2020	RP on Marine litter Art 9	15
MW08	Share of supermarkets applying deposit, return and restoration system for plastic beverage bottles	%	<i>SCP Action Plan</i>	R	It measures the share of supermarkets establishing Deposits, Return and Restoration System for beverage packaging	SCP RAC	LBS Protocol Annex IV Decision IG 21/7; Article 9 (3) f	14
MW09	Annual amount of plastic bags consumption at national level	kg/year	<i>SCP Action Plan</i>	P	It measures the consumption of plastic bags put on the market at national level to measure the effectiveness of fiscal and economic instruments and the establishment of voluntary agreements with retailers and supermarkets with the objective of reduction of plastic bags consumption	SCP RAC	LBS Protocol Annex IV Decision IG 21/7; Article 9 (3) c and d	14

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
MW10	Share of producers, manufacturer brand owners and first importers responsible for the entire life-cycle of the product with measures prioritizing the ecodesign of the product and the hierarchy of waste management.	%	<i>SCP Action Plan</i>	R	It measures the share of producers, manufacturer brand owners and first importers which have implemented Extended Producer Responsibility in order to prioritizing the hierarchy of waste management and designing products with long durability for reuse, recycling and materials reduction in weight and toxicity;	SCP RAC	LBS Protocol Annex IV Decision IG 21/7; ML RP Article 9 (3) a	14
Industrial development / Industrial pollution								
IND05	National loads of atmospheric pollutants (SO ₂ , NO _x , NH ₃ , VOC, hydrocarbons, CO, CH ₄ , TPS, PM10, PM2,5, POPs, heavy metals) from point sources	kg per year	<i>EU</i>	P	This indicator presents information on atmospheric pollutants annual emissions reported from stationary sources and mobile sources in the Mediterranean Sea area (based on NBB, E-PRTR)	MED POL	LBS Protocol. Art. 1, 5. Annex III. Decision IG.20/8.1. Decision IG.20/8.3	15
IND06	Total loads of toxic substances: PAH, VOC, PCDD/PCDF, Hexachlorobenzene, Cadmium, Chromium, Lead and Mercury which are directly or indirectly discharged into the Mediterranean Sea	kg/year	<i>Stockholm Convention, H2020</i>	P	This indicator presents information on toxic substance annual releases reported from point sources in the Mediterranean Sea area (land based sources/coastal zone) per administrative region (based on NBB, E-PRTR)	MED POL,	LBS Protocol. Art. 1, 5. Annex III. Decision IG.20/8.1, Decision IG.20/8.3	16
IND07	Total loads of BOD ₅ , Total nitrogen, Total phosphorus discharged into the Mediterranean Sea	kg/year	<i>H2020</i>	P	This indicator presents information on nutrient annual releases reported from point sources in the Mediterranean Sea area (land based sources/coastal zone) per administrative region (based on NBB, E-PRTR)	MED POL,	LBS Protocol. Art. 1, 5. Annex III. Decision IG.20/8.2	16

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
IND08	Number of substances covered by national standards (ELV) for point source discharges into water or air.	Units	<i>MAP effectiveness indicator adopted by COP16</i>	R	It measures the number of substances covered by national standards (ELV) for point source discharges into water or air.	MEDPOL	RP on mercury, and BOD, Article 3	17
IND09	Number of substances covered by the national pollution monitoring programme and reported	Units	<i>MAP effectiveness indicator adopted by COP16</i>	R	It measures the number of substances covered by the national monitoring programme and reported.	MEDPOL	Article 12 of the Barcelona Convention; Article 8 of the LBS Protocol	16
IND10	Share of contaminated sites with toxic substances in the coastal area which have been closed/remediated.	%	-	R	It measures the share of contaminated sites with toxic substances in the coastal area which have been closed/remediated with respect to the total number.	MED POL,	LBS Protocol. Art. 1, 5. Annex III.	15
Industrial development /hot spots								
HS01	Share of hot spots and sensitive areas covered by monitoring, projects/ investments and/or eliminated.	%	-	R	It measures the share of hot spots and sensitive areas covered by projects or investment needs with respect to the total number.	H2020	LBS Protocol. Art. 1, 5. Annex III.	12
Industrial development / Dumping								
D01	Annual quantities of materials dumped	ton/year	London Dumping Protocol	P	It measures the Annual quantities of materials dumped	MEDPOL	Dumping protocol, Article 4	16

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
D02	Share of number of permits issued by national competent authorities providing for strict monitoring programmes of marine environment from dumping activities	%	London Dumping Protocol	S	It measures the share of number of permits issued by national competent authorities providing for strict monitoring programmes of marine environment from dumping activities	MEDPOL	Dumping protocol, Article 5	11
D03	Number of illegal dumping cases	Units	London Dumping Protocol	R	It presents the number of illegal dumping cases	MEDPOL	Dumping protocol, Article 10	15
Industrial development / Hazardous waste protocol								
HW01	Amount of hazardous waste generated by Y categories	ton/year	<i>MAP reporting system. H2020</i>	P	It presents the total hazardous waste generated and hazardous waste generated classified into Y categories.	Basel Convention MEDPOL	Hazardous Waste Protocol Art. 5 Annex I	15
HW02	Amount of hazardous waste environmentally sound managed or exported, by Y categories and by disposal/recovery operation (R, D)	ton/year	<i>MAP reporting system. H2020</i>	P	It presents the hazardous waste environmentally sound managed or exported per country, by Y categories and by disposal operation (D code, Annex IV A of BC) or recovery operation (R code, Annex IV B of BC) .	Basel Convention MEDPOL	Hazardous Waste Protocol Art. 5 Annex I	14
HW03	Share of the amount of hazardous waste generated belonging to categories Y8, Y10, Y26, Y29 and Y31 (lube oils, batteries, PCB, mercury waste) which is recovered.	%	<i>MAP reporting system. H2020</i>	P	It measures the share of the amount of hazardous waste generated belonging to categories Y8, Y10, Y26, Y29 and Y31 (lube oils, batteries, PCB, mercury waste) which is recovered with respect to the total generated amount.	Basel Convention MEDPOL	Hazardous Waste Protocol Art. 5 Annex I	14

Ind. code	Indicator title	Units	Link to other policy framework	Type	Description	Data source	Mandatory nature	Total scoring
HW04	Number of illegal HW trafficking cases	Units	<i>MAP reporting system</i>	R	It measures the number of illegal trafficking cases reported to the Secretariat.	Basel Convention MEDPOL	Hazardous Waste Protocol Art. 9 Annex I	16

ⁱ ECAP indicators are included in the spreadsheet because they are already agreed by the Contracting parties