18th Global Meeting of the Regional Seas Conventions and Action Plans

30 September – 1 October 2016, Incheon, the Republic of Korea

Regional Seas Indicators Working Group

Black Sea Commission

Irina Makarenko

UNEP Regional SEAS

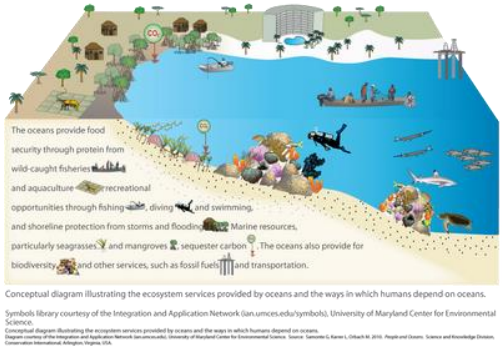
Outline

Background document:
UNEP/WBRS.18/3, INF7, INF9

1. Background
2. Regional Seas Indicators Working Group
3. Regional Seas Indicators
4. Compilation results
5. Mapping exercise between regional targets and SDGs
6. Discussion

Background

- Regional Seas programme aims to integrate the **Ecosystem Approach** (UNEP/WBRS18./INF5)
- Involves setting **regional ecological objectives** and **monitoring** on progress towards the objectives
- UNEP proposed to establish **a set of indicators** to track chronological change in environmental status
- Report "**Measuring Success Indicators for Regional Seas Conventions and Action Plans**" was launched
- Regional Seas Indicators Working Group was initiated in 2015



Conceptual diagram illustrating the ecosystem services provided by oceans and the ways in which humans depend on oceans.

Symbols library courtesy of the Integration and Application Network (ian.umces.edu/symbols). University of Maryland Center for Environmental Science.

UNEP Regional Seas

Regional Seas Indicators Working Group

Date	Event	Output
30 June to 2 July 2014	The Technical Workshop on Selecting Indicators for the State of Regional Seas was organized	Regional Seas Working Group established
23 October 2015	First Meeting of the Regional Seas Indicators Working Group	The core set of the Regional Seas indicators was adopted
14 March 2016	Second Meeting of Regional Seas Indicators Working Group	Reviewed different indicators used regarding 14.1
6 July 2016	Third Meeting of Regional Seas Indicators Working Group	Reviewed different indicators used regarding 14.2 Decided to conduct mapping exercise between SDGs, Aichi targets and regional targets

UNEP Regional Seas

Regional Seas Indicators

No	Category of Indicator	Possible regional Seas Coordinated Indicator	SDG 14 (plus SDG 1 SDG 2 others)	TWAP indicators
1	Total inputs of nitrogen and phosphorus from agriculture, sewage and atmospheric nitrogen	**Chlorophyll a concentration as an indicator of phytoplankton biomass**	14.1	Chlorophyll time series; DIN, DIP (modelled data) (both concentration and flux
2	Inputs of marine chemical pollution Trends for selected priority chemicals	**Trends for selected priority chemicals including POPs and heavy metals**	14.1	POPS (Persistent Organic Pollutants) status
3	Overall levels of marine litter Quantification of beach litter items	**Quantification and classification of beach litter items**	14.1	Marine Plastic Litter
4	Ocean warming	**Annual mean sea surface temperature (25m below the surface)**	14.3	Sea Surface Temperature (SST)
5	Fish landings	**Fish catches within EEZs (tonnes) – total capture production**	14.4	Fish landings and Landed Value, Fishing effort, Fish stock status, Primary Production required, Marine Trophic Index, Fishing in Balance Index
6	Aquaculture	**Application of risk assessment to account for pollution and biodiversity impacts**	14.4	
7	Aquaculture	**Destruction of habitat due to aquaculture**		
8	Population pressure / urbanization	**Length of coastal modification and km² of coastal reclamation**	14.2	Rural/ Urban population, %poor,
9	Eutrophication status	**Locations and frequency of algal blooms reported**	14.1	Index of coastal eutrophication

UNEP Regional Seas

No	Category of Indicator	Possible regional Seas Coordinated Indicator	SDG 14 (plus SDG 1 SDG 2 others)	TWAP indicators
10	Pollution hot spots	**1) Concentration of Status of selected pollutant contamination in biota and sediments and temporal trends** **2) Number of hotspots**	14.1	Floating plastic debris
11	Ocean acidification	**1) Aragonite saturation** **2) pH** **3) Alkalinity**	14.3	Pteropods at risk
12	Level of exploitation of commercial fisheries	**FAO stock status: % stocks overfished compared to MSY**	14.4	Catch Stock Status, Marine Trophic Index, Fishing in Balance Index
13	Species replacement as a consequence of capture fisheries	**Marine trophic index**	14.5	Marine Trophic Index
14	Endangered species	**Distribution of Red List Index species**	14.5	
15	Loss of critical habitat	**Trends in critical habitat extent and condition**	14.5	Mangrove status; Reefs at Risk Index; seagrass; salt marshes
16	National Action Plans to reduce input from LBS	**% National action plans ratified / operational**	14.1	Transboundary Legal Instruments
17	Waste water treatment facilities	**1) % coastal urban population connected to sewage facilities** **2) % of waste water facilities complying with adequate standards** **3) % of untreated waste water**	14.1	NA

No	Category of Indicator	Possible regional Seas Coordinated Indicator	SDG 14 (plus SDG 1 SDG 2 others)	TWAP indicators
18	**Incentive to reduce marine litter at source**	**1) % port waste reception facilities available** **2) Incentives to reduce land based sources** **3) Amount of recycled waste on land (%)**	**14.1**	**NA**
19	Climate change adaptation	**1) % national adaptation plans in place** **2) Sector based national adaptation plans** **3) Number of existing national and local coastal and marine plans incorporating climate change adaptation**	14.2	Transboundary Legal Instruments
20	Fish harvested within safe ecological limits	**Fisheries measures in place (by-catch limits, area-based closures, recovery plans, capacity reduction measures) and multilateral/bilateral fisheries management arrangements**	14.4	Catch Stock Status, Marine Trophic Index, Fishing in Balance Index; Fishery Production Potential of LMEs
21	Critical marine habitat under protection	**% Marine protected areas designated**	14.5	Change in Protected Area Coverage
22	National ICZM in place	**National ICZM guidelines and enabling legislation adopted**	14.2	

UNEP Regional Seas

Compilation of background information

- Questionnaire was conducted in 2015 on 22 indicators
  - *scientific background*
  - *monitoring points and frequency*
  - *organisation(s) monitoring the indicator*
  - *the data source(s), spatial coverage, temporal coverage, frequency of updates*

- HELCOM, MAP, NOWPAP, ROPME, BSC, OSPAR, CEP, and SPREP submitted information

UNEP Regional Seas

Compilation results

- Information on 3 indicators were compiled and discussed by the WG (**UNEP/WBRS.18/3**)
  - Indicator 1 (chlorophyll –a)
  - Indicator 3 (beach litter)
  - Indicator 22 (ICZM)

- Various methods were identified
  - We do not intend to harmonize methodology

- Inter-calibration of different methods may be needed for inter-regional comparison

RS Indicators, Aichi and SDG Targets

- Existing practices and metadata as compiled by the Indicators Working Group have been submitted to the **IAEG-SDGs**

- Regional Seas programmes will be able to assist Member States in monitoring the progress towards ocean-related SDGs

Source: IASS

Preliminary results from the mapping

- Regional Seas secretariats analyze the synergies between the Regional Seas indicators, Aichi Targets and SDGs Targets

- Summary – **UNEP/WBRS.18/3 Annex 2**

SDG Target(s)	SDG Indicator(s)	Aichi Biodiversity Target	RSSD (2017-2020)	Your regional target / objectrive	Indicators
14.5. By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	**14.5.1.** Coverage of protected areas in relation to marine areas	**11.** By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.	**4.** Enhance effectiveness of Regional Seas Conventions and Action Plans as regional platforms for supporting integrated ocean policies and management.		

UNEP Regional Seas

RS indicators set VS SDGs

Under the Goal 14, the RS core indicators set does not well address the following targets (**Table 2 UNEP/WBRS.18/3**):

- **14.6.** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing…
- **14.7** By 2030, increase the economic benefits to small island developing States and least developed….
  countries from the sustainable use of marine resources…
- **14.a.** Increase scientific knowledge, develop research capacity and transfer marine technology…
- **14.b.** Provide access for small-scale artisanal fishers to marine resources and markets…
- **14.c** Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea…

UNEP Regional Seas

Next Steps for the RS indicators WG

- Regional Seas Secretariats may identify current gaps between their respective regional targets and the SDGs
- Discuss linkages between the regional targets and SDGs with the participating countries
- Develop the SDG implementation outlook
- Submit the Regional Seas core indicators set to the respective governing bodies for adoption

UNEP Regional Seas

Discussion points

- Do you agree to submit the Regional Seas core indicators set to the respective governing bodies for adoption?

- What are the steps to align the Regional Seas indicators set with the SDG indicators?

- What are the next steps of the Regional Seas indicators Working Group?
  - Continue compilation: how to continue?
    - Each WG member to compile information on 1 indicator?
  - Scientific validation?
  - Start working with the three indicators as pilots?

UNEP Regional Seas

Thank you!

Regional SEAS