Shared Environmental Information System (SEIS): Regional data on water statistics (EEA)

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Overview

- Review of H2020 Water Indicators,
- Mapping of Water Indicators: Links with other global and regional policy processes,
- Methodology, specifications sheets,
- Discuss issues on data availability,



SEIS II: The objectives

The ETC/ICM is supporting the 9 **ENI South** countries in developing an information system and indicators following the SEIS principles:

ENI SEIS II South: This projects **aims to contribute to the reduction of the marine pollution** in the Mediterranean by **developing a Shared Environmental Information System** (SEIS) supporting the **regular** production and **sharing of quality assessed** environmental data, indicators and information. The ETC partners UFZ and Deltares support this project which is running from September 2017 to December 2018.





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Review Process – criteria for selection

- \succ In line with extension of H2020,
- > Allow for in-depth analysis in relation to previous assessments





IND 3. Share of population with access to an improved sanitation system SEIS South IND 4. Volume of wastewater collected, of which volume of wastewater treated Phase I H2020 IND 5. Nutrient concentrations in transitional, coastal and marine waters Mediterranean



Support an integrated assessment



		DRIVER	PRESSURE	STATE	IMPACT	RESPONSE
Ind 3	Share of total, urban and rural population with access to an improved sanitation system					
Ind 3.2	Proportion of population using safely managed sanitation services					
Ind 4	Volume of wastewater collected and volume of wastewater treated					
Ind 4.2	Volume of (treated) wastewater re-used					
Ind 4.3	Release of nutrients from municipal effluents					
Ind 5	Nutrient concentrations in transitional, coastal and marine waters					
Ind 5.2	Bathing water quality					



Review Process – criteria for selection



Water Indicators Webinar - with country representatives (September, 2017)

OUTCOMES:

- Agreement with list of indicators proposed
- Some limitation of data availability identified (e.g. coastal hydrological basin)
- Use of *enterococci* as main indicator to monitor bathing water quality (Israel)
- Include water resource indicators, as water scarcity is an important issue for the region (Tunisia)
- Additional information under IND4 on WWT infrastructure is a very important addition (Jordan)
- Alignment with SDGs (Palestine, Plan Bleu)

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In-depth consultation with countries (January-March 2018)

→ New indicator 4.2 on reuse of wastewater treated

water resources

IND 4 - Address water resources with focus

on water scarcity issues + non-conventional

Link to other regional processes



Review Process – criteria for selection

> Able to reflect effectiveness/impact of new investments

Most indicators relate to pressures and responses





> Answer the **key H2020 Question**

"What is the progress in depolluting the Mediterranean Sea?"







Review Process – final list of indicators

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3. Access to sanitation

- **3.1** Share of total, urban and rural population with access to an improved sanitation system
- **3.2** Proportion of population using safely managed sanitation services





5. Coastal and marine water quality

- **5.1** Nutrient concentrations in transitional, coastal and marine waters
- **5.2** Bathing water quality (Enterococci)



4. Municipal wastewater management

- **4.1** Municipal wastewater collected and wastewater treated
- 4.2 Direct use of treated municipal wastewater
- **4.3** Nutrients from municipal effluents



From Indicators to Assessment...



European Environment Agency European Topic Centre on Inland, Coastal and Marine Waters

- 1. National Action Plans (NAPs)
- 2. Integrated Monitoring and Assessment Programme (IMAP)
- 3. Mediterranean Strategy for Sustainable Development (MSSD)
- 4. Sustainable Consumption and Production (SCP) Action Plan
- 5. Sustainable Development Goals (SDGs)
- 6. European Directives (Water Framework and Marine Strategy Framework Directives (WFD, MSFD)
- 7. League Arab States (LAS)



Mapping of Indicator processes in the Mediterranean – commonalities between H2020 Indicators and SDG, MSSD, IMPA, SCP, NAPs, League Arab States and EU

	Policy theme	H2020 Indicator	SDG	EU	LAS	MSSD	IMAP	SCP	NAPs	
IND3	Access to sanitation	3.1: Share of total, urban and rural population with access to an improved sanitation system (ISS)	X			<u>X</u>			X	
		3.2: Proportion of population using safely managed sanitation services (SMSS)	X			Х			x	
IND4		4.1: Municipal wastewater collected and wastewater treated	х	<u>X</u>	Х	<u>X</u>		Х	X	
	Municipal wastewater management	Additional Information: - Type of Treatment -Annual design capacity and number of functional MWWTPs		<u>X</u>	Х				<u>X</u>	
		4.2: Direct use of treated municipal wastewater				X				
		4.3. Nutrients from Municipal effluents		Х					X	
IND5	Coastal and	5.1: Nutrient concentrations in transitional, coastal and marine waters		<u>X</u>			<u>X</u>		X	
	marine water quality	5.2: Bathing water quality		<u>X</u>			<u>X</u>		<u>X</u>	

Linkto other regional processes

 $\underline{\mathbf{X}}$ – identical indicators

x – indicator has common parameters

(shaded) – different indicators but still relevant



Methodology, specifications sheets,





Consultation with countries - data availability

		T . J'		Outcome initial assessment of data availability in from countries per indicator									
	Policy theme Indicator Geographic coverage		Geographic coverage	Algeria	Egypt	Israel	Jordan	Lebanon	Libya	Morocco	Palestine	Tunisia	
IND3	Access to Sanitation	3.1: Share of total, urban and rural population with access to an improved sanitation system	National	2006, 2012, up to 2017	2005-2015	1980-2016		UN database	UN database	Data acknowledged, not specified		Phase I 2004-2011. Data for 2017/18 might be available	
			Coastal hydrological basin				Data potentially there, need support on method+ geographical definition	?					
		3.2: Proportion of population using safely managed sanitation services		National	SDG calculation up to 2017	SDG database	Currently no. But data from ind 3.1 could possibly be used for calculation		?	They need support in specification/definition. Unsure		Partially? Specification needed	potentially, specification needed
			Coastal hydrological basin				Data potentially there, need support on method+ geographical definition	?				Unsure. Have administrative delineation and not at the coastal level. Curious to hear from other countries	
IND 4	Municipal Wastewater Management	4.1: Municipal wastewater collected and wastewater treated	National	up to 2017	2005-2015	1980-2016	available years need to be verified! (since 1990 all years? or 2003, 2010?	?	Data available on municipal level. Time series likely each 5 years. No data for past 7 years. Interpolation possible for these years	Data aknowledged, not specified. Need clarification.	Data is likely available. In SeisI 2000-2012 collected only.	1975-1980-1980-1985-1990-200- 2005-2010-2015-2016- then since 2000 become this indicator annually provided.	
			Coastal hydrological basin			Data linked to WWTP, can potentially be aggregated for the coastal hydrological basin	Data potentially there, need support on method+ geographical definition	?		Some data provided in Phase I		Data potentially there, need support on method+ geographical definition	
		4.2: Direct use of treated municipal wastewater	National			Since 1990	Data need specification	?	Data are there, but indicator is not calculated. Time series not clear.			Some data available (in Tunisia reuse ~ 30%)	
		4.3 Release of nutrients from municipal wastewater	National		They might have data needed for calculating the indicator	Potentially based on available data. Help required	They measure (real) loads of nutrients from all treated wastewater. Need support on method	?	Have data needed for calculating the indicator. Unsure of data series.		Maybe? Irregular. Need specification	They might have data needed for calculating the indicator	
IND5			Marine waters are the part of the ocean that extends further to the coastal waters to the open seas						? Sporadic data only from SEIS I. Are		IS I. Are there more Irregular. Need		
	Coastal and	5.1: Nutrient concentrations in transitional, coastal and marine waters	Coastal waters are the part of the ocean adjacent to the coast of a state that is considered to be part of the territory of that state and subject to its sovereignty.	who is the owner of the data?	only coastal	All requested data besides total P is available in yearly reports to Medpol	Only NO3?	?		Data for 2006, 2007 in SEIS I. Are there more data in MedPol?		Annual data since 1999	
	Marine Water Quality	y Tran betwee	Transitional waters are those waters between the land and the sea and include fjords, estuaries, lagoons, deltas and rias.		since 1998		Only NO3?	?					
		5.2: Bathing water quality	Mediterranean bathing waters (coastal and transitional)		since 1998. Data needs specification	Since 2000	No coast in Med	?	No monitoring survey, only studies. No consistent monitoring. Check if data from studies is useful?	Data publically available on microbiological parameters since 2000	Not for Enterococci	Monitoring each summer. Considered success story. Need clarification on parameters measured to be sure.	

Long and short term goals of SEIS II

Long term – improve information systems (regional and national levels)

Short term – Integrated Regional Assessment Report (COP 20, early 2020), make use of existing (or already reported) data and possibly other type of information (e.g. case-studies)





Thank you Merci شکر ا









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