Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP South region

ENI SEIS South Support Mechanism (2016-2019)

Context and state of play

ENI SEIS II South Support Mechanism

Country visit Israel, 7-8 March 2018

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The European Environment Agency (EEA)

- The European Environment Agency (EEA) is an EU Agency providing timely, targeted, relevant, and reliable information on Europe's environment.

- Coordinate the **European environment information and observation network (Eionet)**

Network of around:

- ➤ **1 500 experts** from
- ➤ **39 countries** in up to
- ➤ **350 national bodies** dealing with environmental information

33 Member countries (EU28+5) +
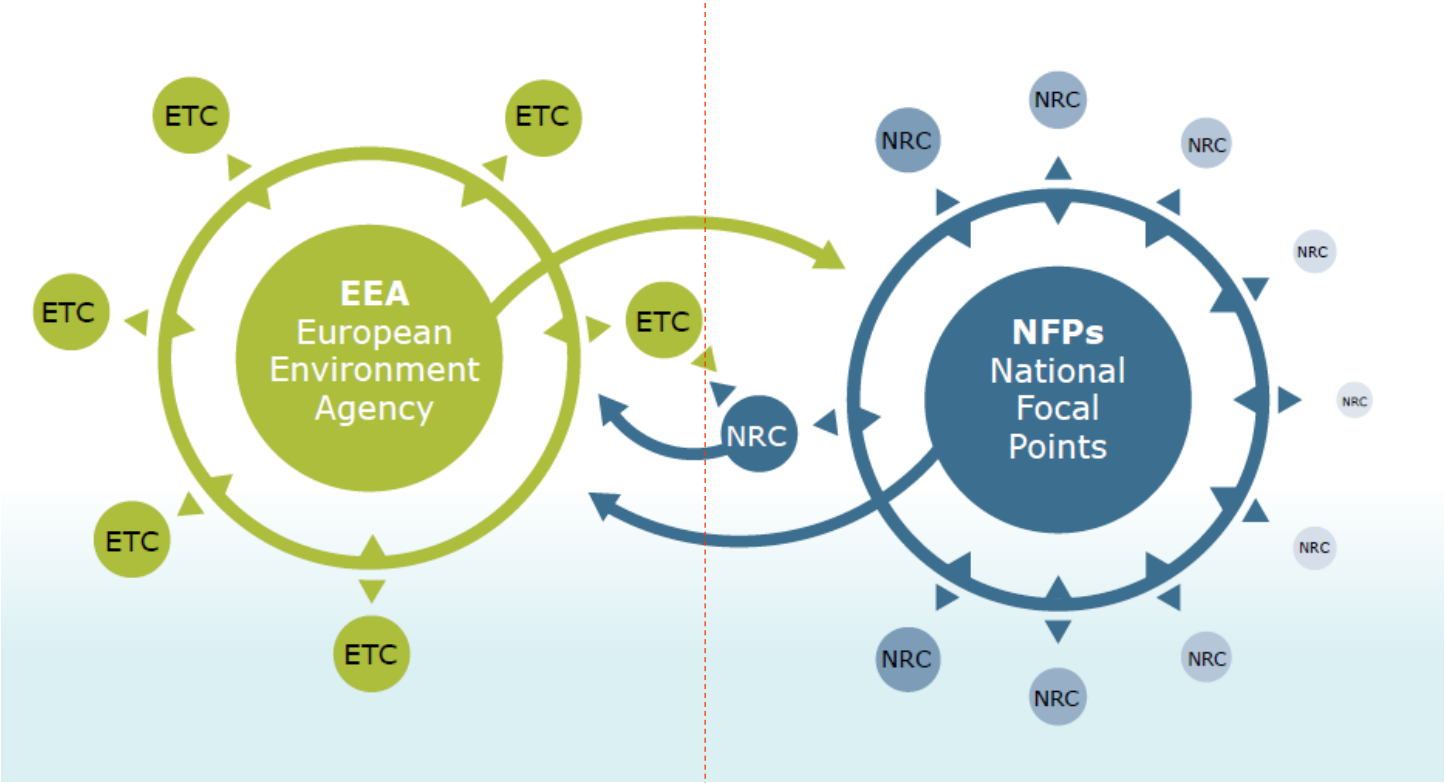6 Cooperating countries (West Balkan)

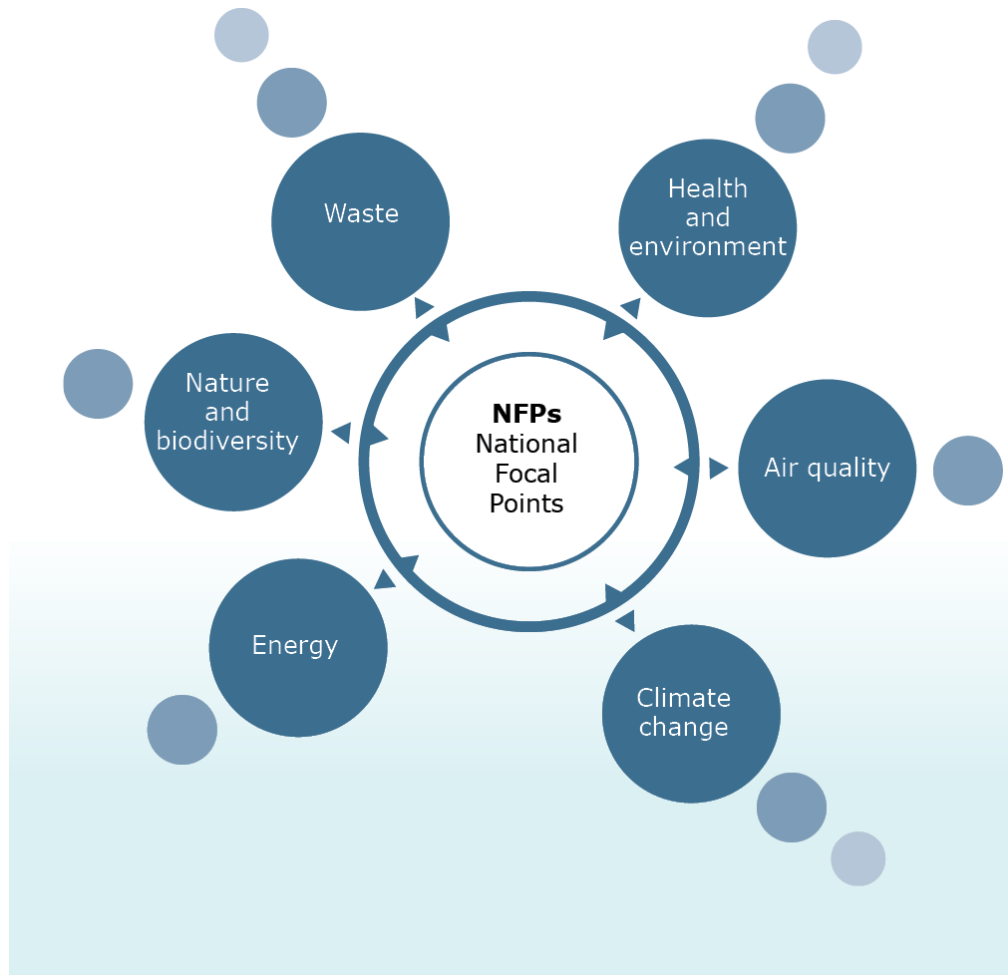# Eionet structure *(European vs. national)*

European Topic Centres (ETC)

National Reference Centres (NRC)

National Reference Centres (NRC) – *24 expert networks*

Agriculture
Air Quality
Biodiversity data and information
Biodiversity and ecosystems indicators and assessment
Climate Change Impacts, Vulnerability and Adaptation
Communication
Energy
Environmental Information Systems
Forward looking information and services
Health
Industrial pollution
Land Cover
Land Use and Spatial Planning
Marine, coastal and maritime
Mitigation of air pollution and climate change
Noise
Resource-efficient economy
State of the Environment (SoE)
Soil
Transport
Waste
Water Emissions
Water quality and ecolog
Water quantity

Shared Environmental Information System – SEIS

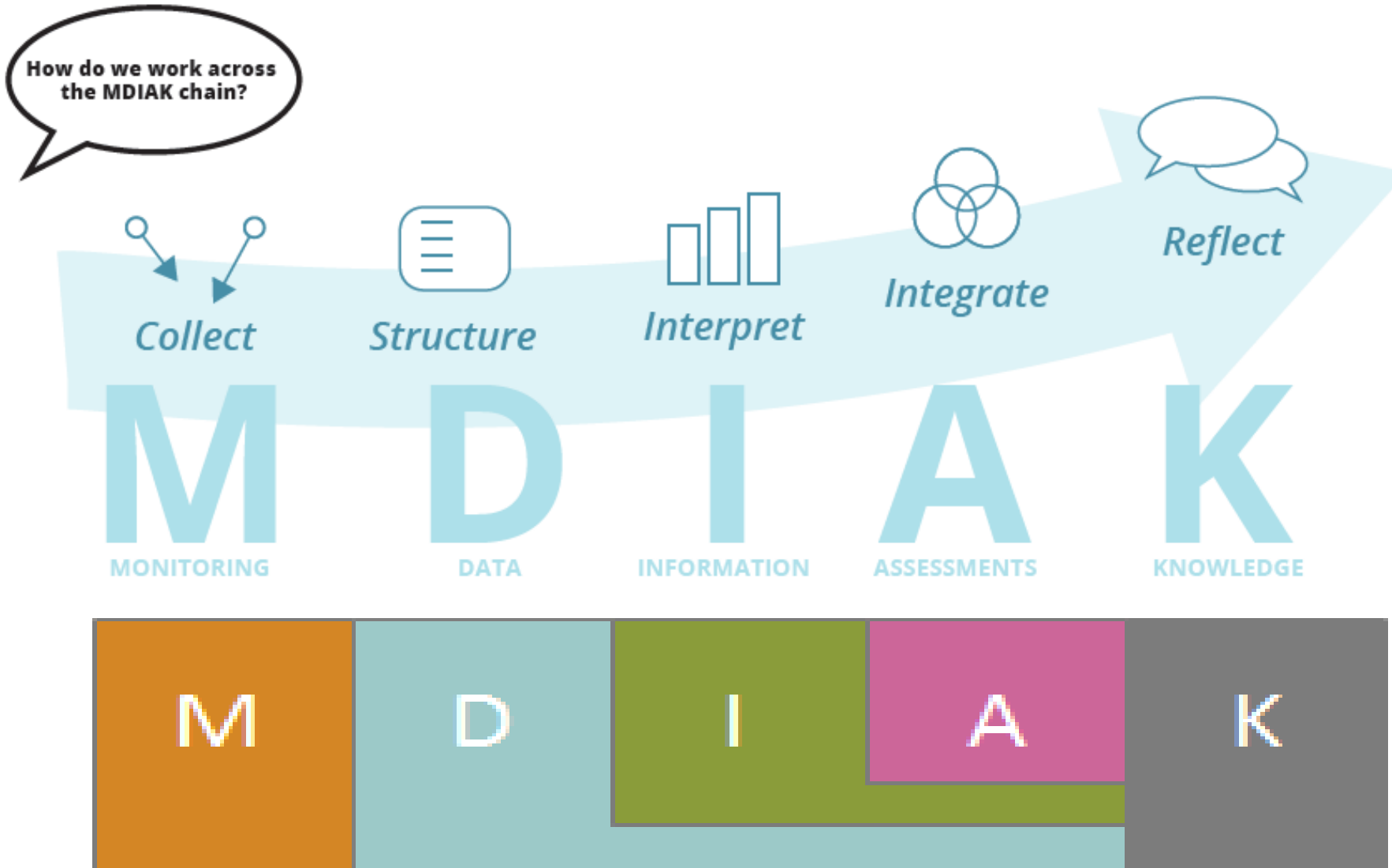
Content

Infrastructure

Cooperation
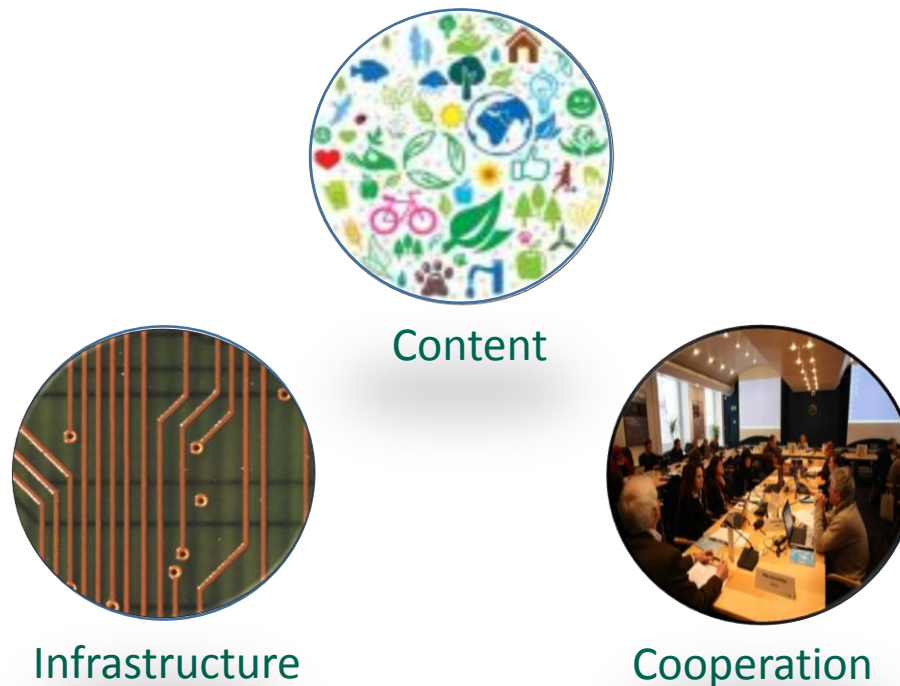
Principles:
1. Managed **as close as possible** to its source.
2. **Collected once** and shared with others for many purposes.
3. **Readily available** to easily fulfil reporting obligations.
4. Easily **accessible** to all users.
5. **Accessible** to enable comparisons at the appropriate geographical scale and the participation of citizens.
6. **Fully available to the general public** and at national level in the relevant national language(s).
7. Supported **through common, free, open software standards**.

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Building knowledge

Source: EEA

Examples of European knowledge platforms

WATER

CLIMATE CHANGE

AIR QUALITY

BIODIVERSITY

LAND

A long standing Mediterranean cooperation
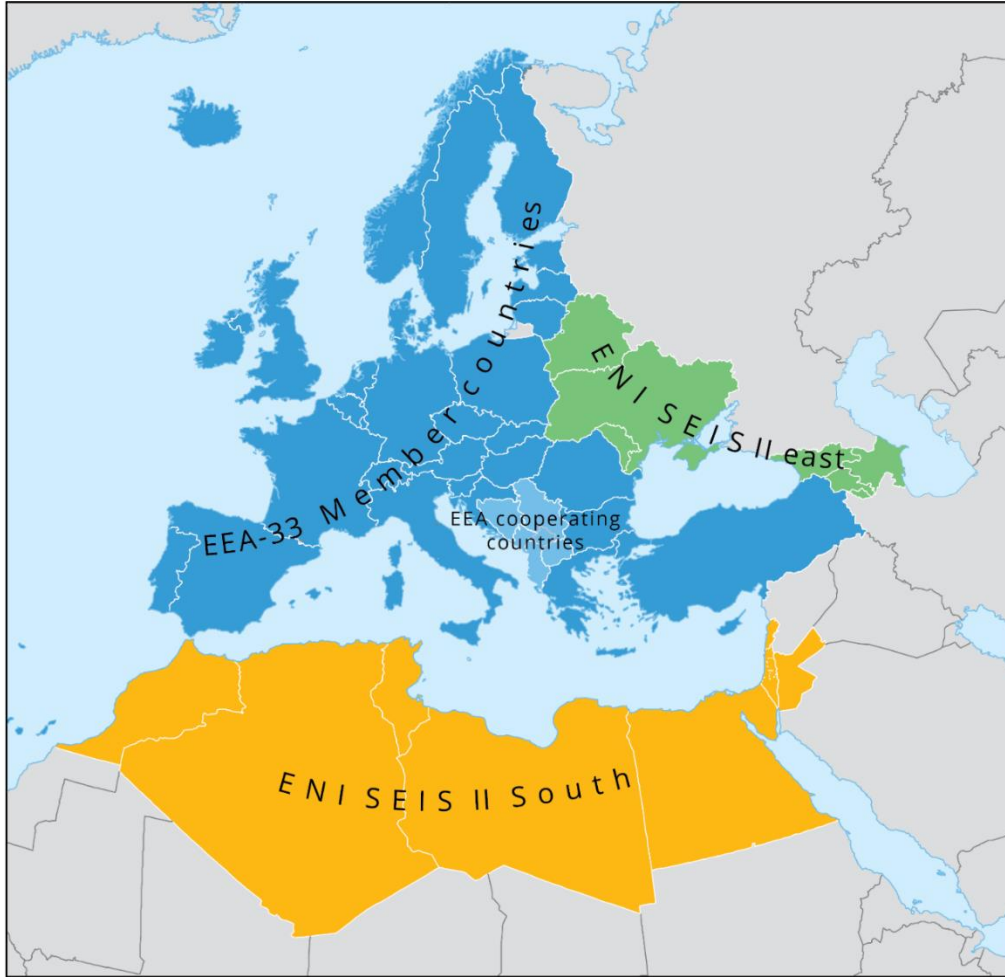
Regional project – supporting a long-term engagement to EU policies and external policy framework aligning to the Union for the Mediterranean and Barcelona Convention efforts on reducing marine pollution

EEA and UN environment / MAP
Co-chairs of the Review and Monitoring group of the H2020 Initiative for a cleaner Mediterranean
Joint implementation of ENI SEIS II South SM

Building on outcomes of 2010-2015 activities (ENPI-SEIS, InSEIS)

Commitment to sustain the cooperation with the European Neighbourhood partners in the South, drawing on **Eionet support and identified good practice examples**

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Union for the Mediterranean (UfM) – Horizon 2020 Initiative for a cleaner Mediterranean

Main commitments related to the second phase of Horizon 2020 Initiative (2015-2020)

- Broadening the **scope**: more focus on pollution prevention and attention to emerging issues including hazardous waste and marine litter

- Increased **synergies** with the UNEP/MAP-Barcelona Convention (IMAP, Regional Plans, SCP Action Plan, MSSD, NAP update including hotspots and project prioritisation, MoU, mainstreaming of focal points as appropriate)

- Commitment to **apply SEIS principles** in line with UNEP/MAP-EcAp Decisions and other regional initiatives

- Commitment to initiate **reforms** at national level to create an attractive investment environment

- Commitment regarding **implementation and enforcement** of legislation

Horizon 2020 Mediterranean report – Toward shared environmental information systems

EEA-UNEP/MAP joint report, May 2014

EEA Technical report | No 6/2014

Horizon 2020 Mediterranean report

EEA-UNEP/MAP joint report

ISSN 1725-2237

European Environment Agency
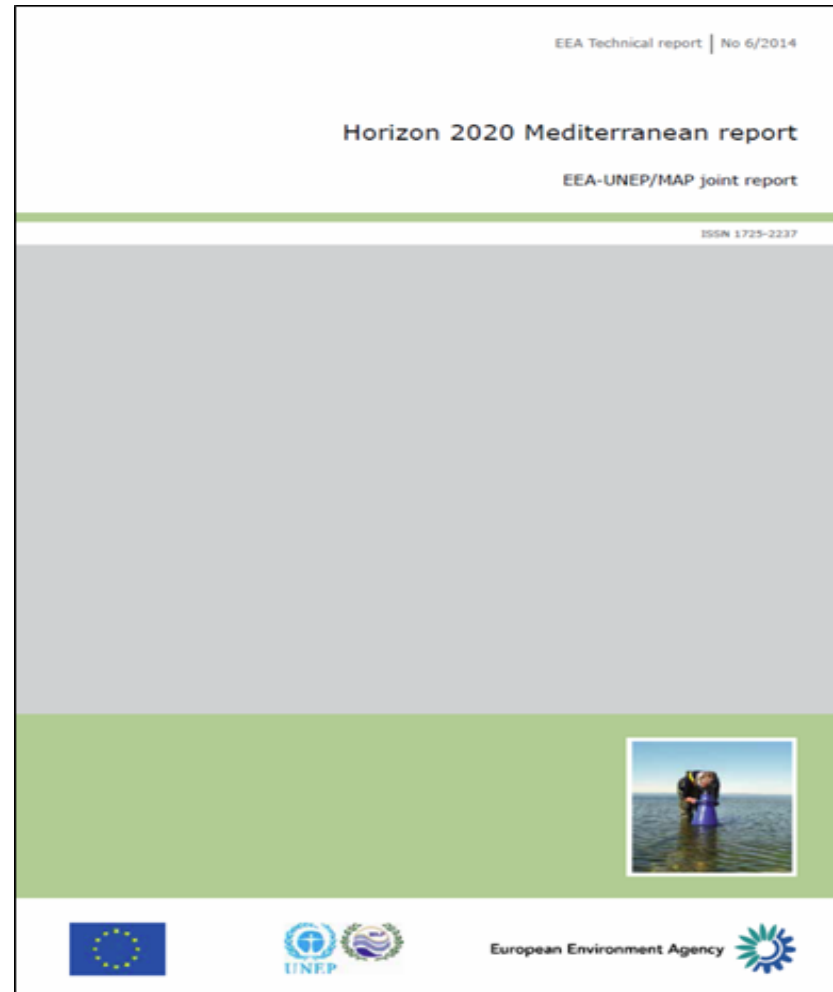
UNEP

- Indicator-based assessment coordinated by **EEA/ETC and UNEP/MAP** under ENPI-SEIS project (2010-2015)

- Focus on **waste water and sanitation, solid municipal waste and industrial emissions**

- Recognising efforts put by all partner countries, report concludes that **the region needs to work even harder together in order to meet its target to depollute the sea by 2020**

Country-level assessments
for 5 countries:
Israel
Jordan
Morocco
Palestine
Tunisia

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H2020 initiative for a cleaner Mediterranean – towards post-2020

2017 – assessing progress of Ministerial Declaration implementation, creation of a dedicated Task Force on Environment to prepare next UfM ministerial and post-2020 agenda

2018 – H2020 SG meeting, 1st meeting of the UfM Task Force

- *State of sea still degrading*

- *Confirmed need for a **renewed review process** – embracing complex interactions, integration of the actions taken, taking into account the global and regional context/trends*

- *Support the operationalisation of an **effective regional information system based on solid national information system** and promote **integrated environmental approaches***

2nd H2020 indicator-based assessment, MAP/Plan Bleu SoED, EEA SoER 2020
UfM evaluation of Ministerial Declaration

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ENI SEIS South Support Mechanism - Key project elements

Objective: To improve the availability and access to environmental information to the benefit of effective and knowledge-based policy-making.

Expected results:
- The H2020 **indicator set** is refined and complemented to serve multiple purposes.
- The in-country processes for organising **sharing of data sets** underlying the H2020 indicators are stabilised.
- **Indicator-based H2020 report** and assessments are produced in line with EEA/Eionet practices.
- The **infrastructure** for reporting offered by the EEA and UNEP/MAP is more widely used.

Duration:
48 months
(01 February 2016 – 31 January 2020)

Budget:
€4.2 M

EEA-UNEP/MAP project team:
3 fte project-funded

Resources:
EEA-UNEP/MAP experts
Framework contractors
Eionet partners

Half way through – starting 3rd year of implementation

Funding support (SSFA)

Regional and national work plans

Governance in the partner countries in place

Review of the H2020 indicator set

Full project team from EEA and UNEP/MAP side

Synergies with relevant regional initiatives

Survey on metadata catalogue

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Expected results – State of Play

- R1: H2020 indicator set is stabilised, refined and complemented

  - *a) serve multiple purposes*
  - *b) ensure proper measurement of progress in achieving H2020 objectives*
  - *c) assess compliance with the countries' commitments under the Barcelona Convention*

- R2: National processes for sharing data sets underlying the H2020 indicators are stabilised.

- R3: The infrastructure for reporting offered by the EEA ('Reportnet') and UNEP (UNEP/MAP Reporting Network) is more widely used.
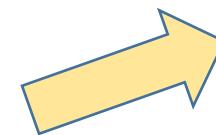
Conceptual framework for the SEIS Support Mechanism - South

- WP1 – In country support (design)
- WP2 – Indicators and Assessments
- WP3 – Data and Statistics
- WP4 – Infrastructure and data management
- WP5 - Communication & visibility

Cluster 1 WATER

Cluster 2 WASTE

Cluster 3 INDUSTRIAL EMISSIONS (incl. PRTR)

Cluster 4 CROSS-CUTTING ISSUES

WP1 – In country support (implementation)

WP6 – Management and coordination
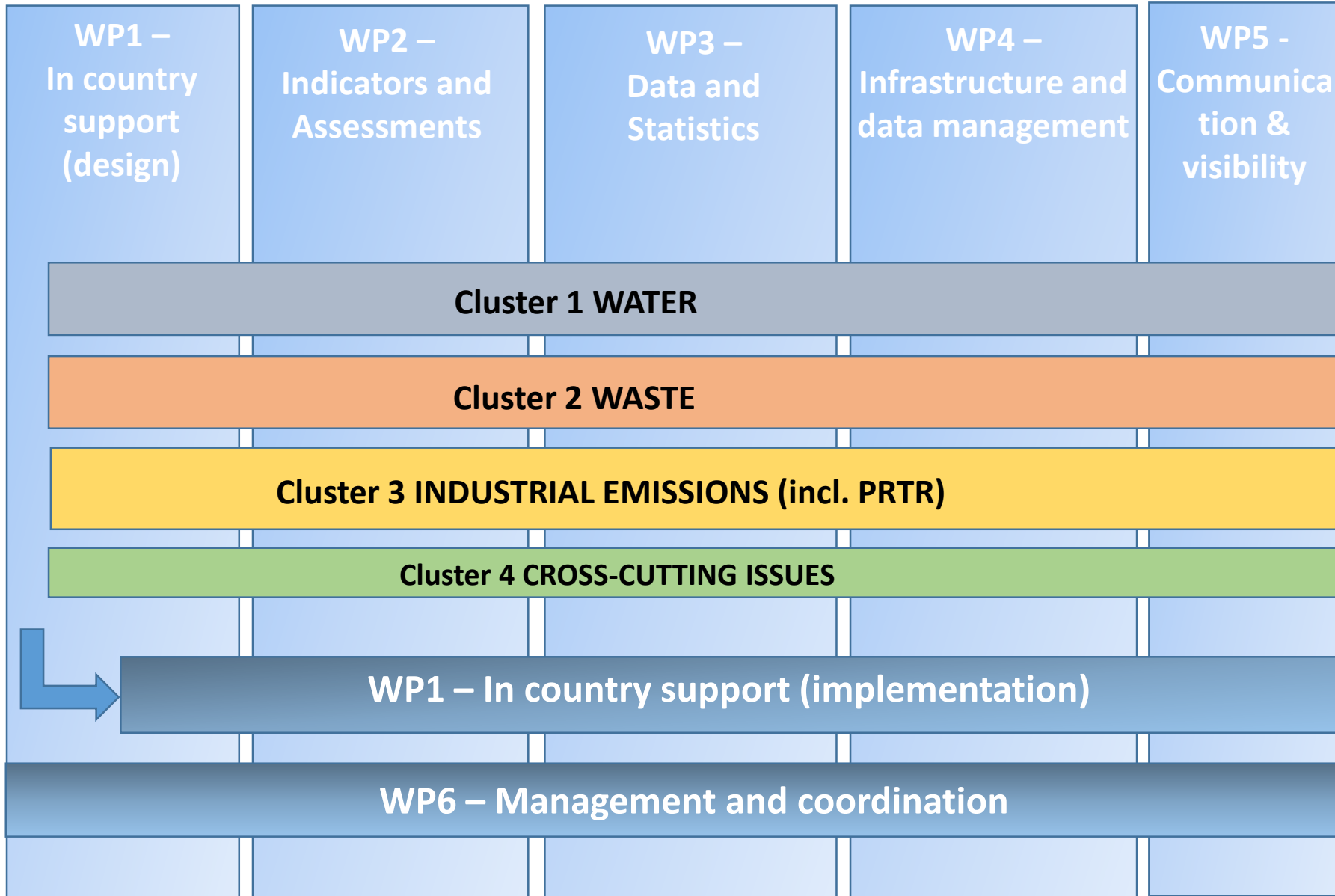
- EEA – overall coordination
  - Leads water cluster, cross-cutting
  - Leads design WP1
  - Leads WP 2&3
- UN environment MAP
  - Leads waste & industrial emissions clusters
  - Leads implementation WP1
  - Leads WP4

Work package 2 – Indicators and assessment

Support increased convergence of reporting process and related assessment work

Deepen, refine, complement H2020 assessment framework

Contribution to the 2nd regional indicator-based H2020 assessment

Review H2020 assessment framework, mapping of indicator processes

Regional workshop on indicators, 17-18 May 2017, Copenhagen

Review of indicators – conceptual approaches, selection of H2020 indicators (Webinars Industrial emissions (19/09), Waste (26/09), Water (26/09)), methodological guidance

Draft outline

Country level assessment

Organisation of thematic network – regional, national experts

Work package 3 – Data and statistics

Enlarge and consolidate production of environment statistics

Support availability of data and statistics, methodology, harmonisation

Development of methodological documents

Capacity building on data production, harmonisation, data quality (national, regional)

Provision of technical assistance, guidance, training sessions to experts in national authorities (links with WP1)

Exchange of experiences (study tour, regional workshops – to be started)

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Thematic Clusters

Water – inland, coastal and marine waters, fresh and waste water, quantity & quality

Refine H2020 indicators (3,4,5), exploring new (contaminants, non point source)

Waste – municipal and industrial, domestic and hazardous waste

Enhance knowledge base (waste Reference Centre), refine IND 1, 2 explore/develop marine litter, hazardous waste indicators

Industrial emissions – pollutants covered by BC/H2020, PRTR

Enhance production, data handling and interpretation, ensure production of indicators and assessment, refine IND 6

Cross-cutting – CC adaptation and vulnerability, SCP, SDGs, environment accounting

Ensure convergence of efforts with other thematic projects and initiatives

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WASTE INDICATORS

IND 1 - Municipal waste generation

IND 1.A Municipal waste composition

IND 1.B Plastic waste generation per capita

IND 1.C % of population living in Coastal Areas / Total Population

IND 1.D % of Tourists / population living in Coastal Areas

IND 2 – "Hardware" of waste management

IND 2.A Waste Collection

IND.2.A.1 Waste Collection Coverage: % households who have access to a reliable waste collection service.

IND.2.A.2 Waste Captured by the solid waste management and recycling system: % of waste generated that is collected and delivered to an official facility.

IND 2.B Environmental Control Controlled treatment or disposal: % of the total municipal solid waste destined for treatment or disposal which goes to either a waste treatment facility (MRF, thermal, mechanical-biological) or sanitary landfill.

IND 2.B.1 % of waste that goes to uncontrolled dumpsites

IND 2.B.2 Number of uncontrolled dumpsites in Coastal Areas

IND 2.B.3 Quantities of waste going to uncontrolled dumpsites in Coastal Areas

IND 2.C Resource Recovery % of total municipal solid waste generated that is recycled. Includes materials recycling and organics valorization (composting, animal feed, anaerobic digestion).

IND 2.C.1 % % of plastic solid waste generated that is recycled. Includes plastic recycled in formal and informal systems, both through source separation and MRFs

IND 3 – Software of waste management

This is a composite indicator that combines information regarding policies, governance, planning and regulations in waste management

WATER Indicators

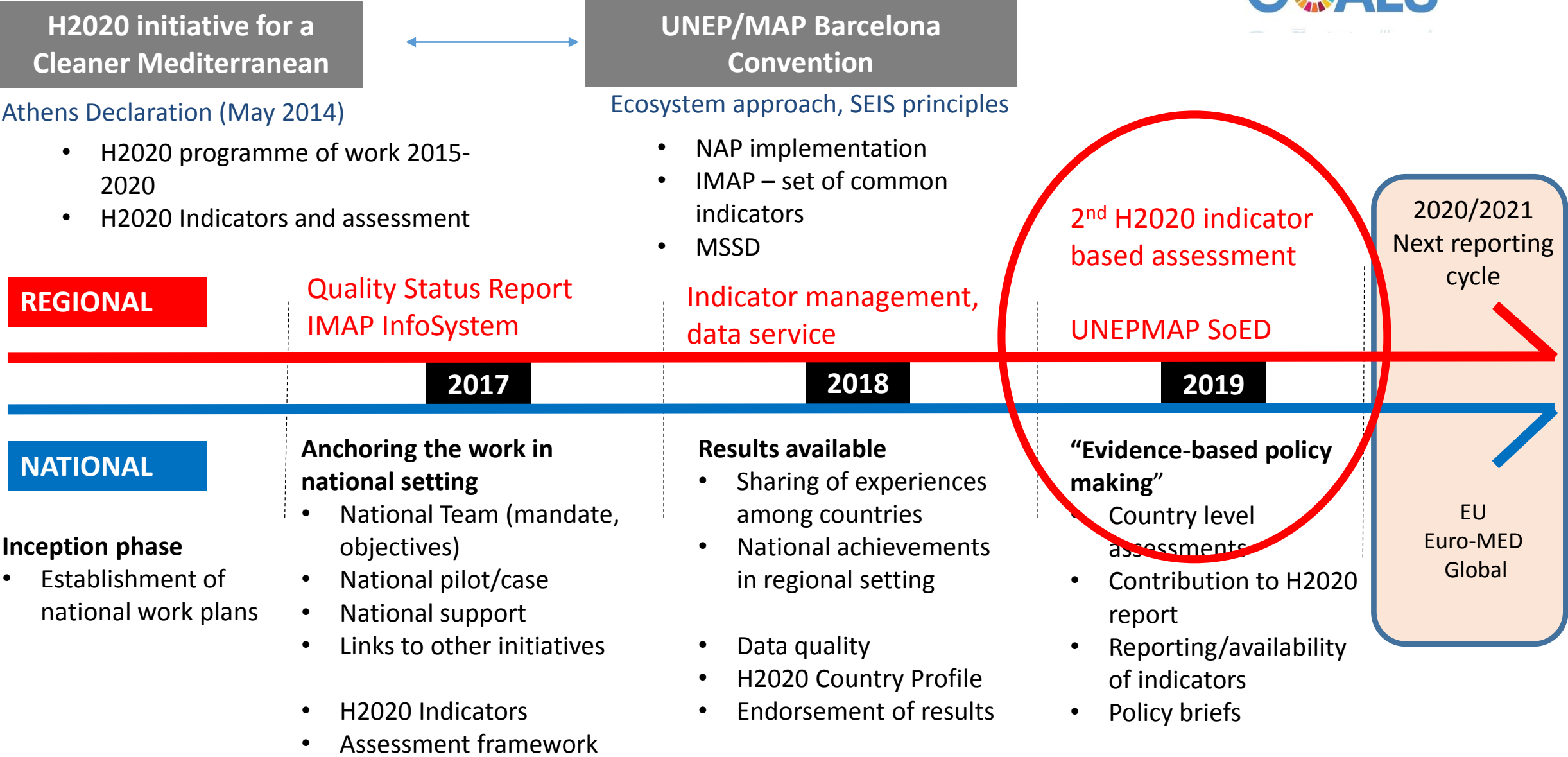| Policy theme	Indicator
Access to Sanitation	3.1a: Share of total, urban and rural population with access to an improved (ISS) sanitation system
	3.1b: Proportion of population using safely managed sanitation services (SMSS), including a hand-washing facility with water and soap.
Municipal Wastewater Management	4.1:Municipal wastewater collected and wastewater treated (in volume)
	4.2: Direct use of treated municipal wastewater (in volume)
	4.3 - Release of nutrients from municipal effluents (total loads of BOD, N and P)
Coastal and Marine Water Quality	5.1 - Nutrient concentrations in transitional, coastal and marine waters (Total N and Total P)
	5.2: Bathing water quality

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Industrial emissions Indicators

No.	Title of indicator	Sub-indicators
IND 6.1	Release of nutrients from industrial sectors	6.1.1) Total BOD load discharged from industrial installations to the Mediterranean marine environment in metric tons per year. 6.1.2) Total Nitrogen load discharged from industrial installations to the Mediterranean marine environment in metric tons per year. 6.1.3) Total Phosphorus load discharged from industrial installations to the Mediterranean marine environment in metric tons per year.
IND 6.2	Release of toxic substances from industrial sectors	6.2.1) Total heavy metals load discharged from industrial installations to the Mediterranean marine environment in kilograms per year. 6.2.2) Furans and dioxins load discharged from industrial installations to the Mediterranean marine environment in grams per year. 6.2.3) Polycyclic aromatic hydrocarbons (PAH) load discharged from industrial installations to the Mediterranean marine environment in kilograms per year. 6.2.4) Volatile organic compounds (VOC) load discharged from industrial installations to the Mediterranean marine environment in kilograms per year.
IND 6.3	Generation of hazardous wastes from industrial sectors	6.3.1) Total yearly amount of generated hazardous industrial wastes in metric tons. 6.3.2) Total yearly amount of hazardous industrial waste that is disposed in environmentally sound manner. 6.3.3) Total yearly amount of hazardous industrial waste that is stockpiled. 6.3.4) Total yearly amount of hazardous industrial waste subject to transboundary movement.
IND 6.4	Measures or initiatives taken for the reduction and/or elimination of the amount of hazardous wastes generated by industrial sectors	6.4.1) Number of implemented measures, including legal and administrative measures, aiming at reducing toxic releases and use of dangerous chemicals or encouraging the use of cleaner technology/ best available technology per year. 6.4.2) Number of implemented economic instruments/ initiatives aiming at reducing toxic releases and use of dangerous chemicals, or encouraging the use of cleaner technology/ best available technology per year. 6.4.3) Number of measures taken by industries/waste generators aiming at reducing toxic releases, managing stockpiles of chemicals or remediating contaminated sites per year. 6.4.4) Number of controls and inspections carried out by environmental authorities of industries generating hazardous wastes or discharging toxic chemicals per year.

Contribution to the Regional Information system InfoMAP based on H2020 indicators

- Indicators factsheets and definition (1st phase and extension)

- Online survey for indicators data availability (ENI SEIS II website)

- State of play of the national information systems for new indicators

- Initiate metadata catalogue (SDI)

- Development of the indicator catalogue with metadata of information sources in the partner countries

- Development of data exchange schemas (XML) and QA/QC processes

- Organise the next data call (H2020)

- Alignement with Reportnet : CDR repository, data dictionaries (data sets description, vocabularies, schemas)

- Products to be published: databases, maps (services)

- Regional Workshop on data management and infrastructure (July Rome)

Timeframe

SUSTAINABLE DEVELOPMENT GOALS

H2020 initiative for a Cleaner Mediterranean	←→	UNEP/MAP Barcelona Convention

Athens Declaration (May 2014)

- H2020 programme of work 2015-2020
- H2020 Indicators and assessment

Ecosystem approach, SEIS principles

- NAP implementation
- IMAP – set of common indicators
- MSSD

2nd H2020 indicator based assessment

UNEPMAP SoED

2020/2021 Next reporting cycle

REGIONAL

Quality Status Report IMAP InfoSystem

Indicator management, data service

2017 **2018** **2019**

NATIONAL

Inception phase
- Establishment of national work plans

Anchoring the work in national setting
- National Team (mandate, objectives)
- National pilot/case
- National support
- Links to other initiatives

- H2020 Indicators
- Assessment framework

Results available
- Sharing of experiences among countries
- National achievements in regional setting

- Data quality
- H2020 Country Profile
- Endorsement of results

"Evidence-based policy making"
- Country level assessments
- Contribution to H2020 report
- Reporting/availability of indicators
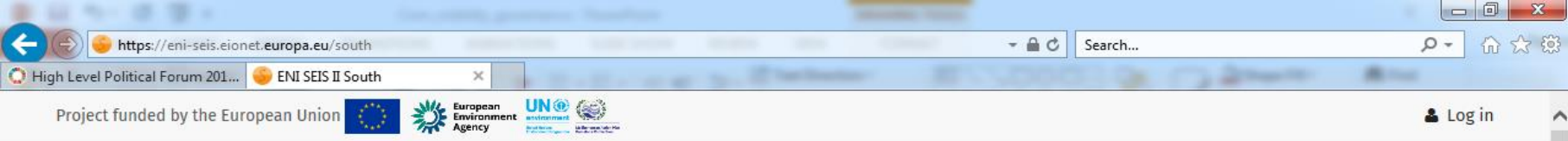- Policy briefs

EU
Euro-MED
Global

Communication and visibility products

- **Newsletter** – planned biannually, two issues published in 2017 (March, August) in English, French and Arabic

- **Leaflet**, **project banner** produced
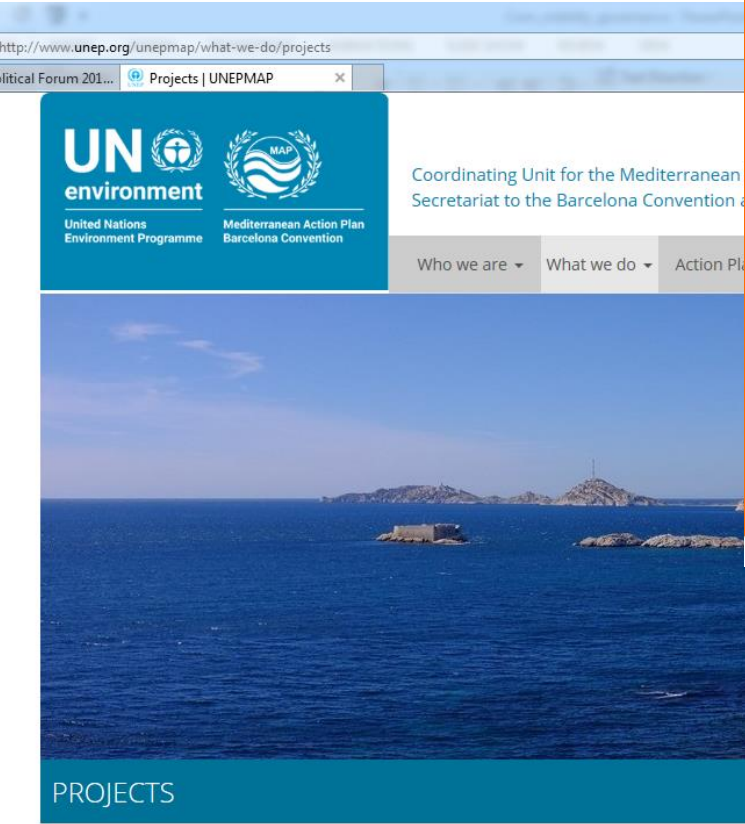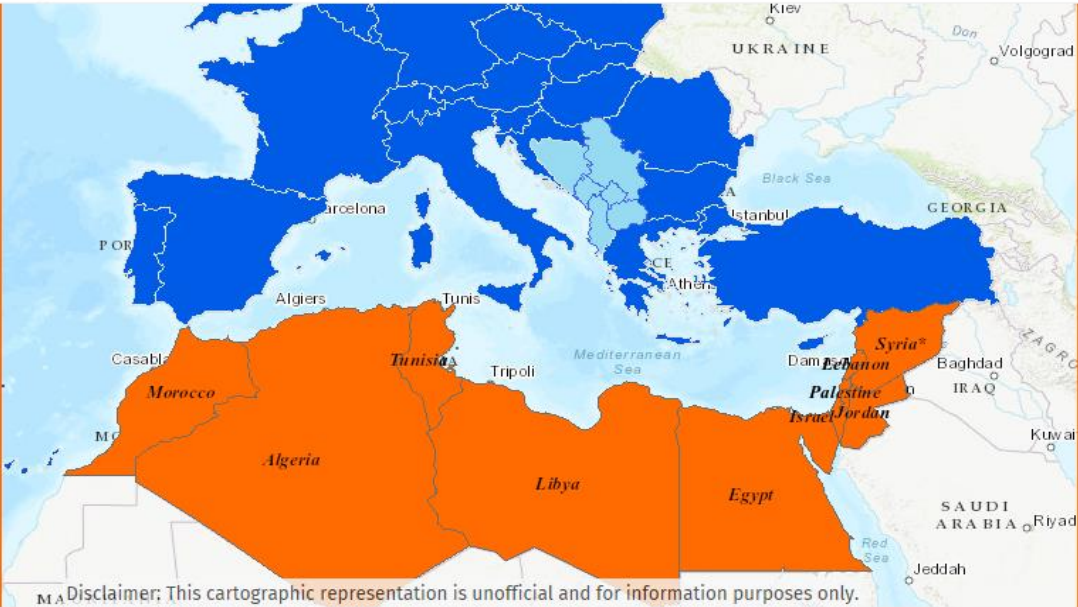
- **Contributions from the countries** welcome

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Project Website

Thank you for your attention!

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