Implementation of the Shared Environmental Information System (SEIS) principle and practices in the ENP South region – SEIS Support Mechanism (ENI-SEIS II South)

Inception Report

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European Environment Agency (EEA)

UNEP

European Environment Agency

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1 Project description

1.1 Name of Coordinator of the grant contract

The European Environment Agency (EEA) has been awarded the current contract, funded by EC DG NEAR following the previous EEA project activities in the European Neighbourhood South region in the period 2010-2015. The proposed action will be implemented jointly by EEA and UNEP/MAP as envisaged initially at the project design phase. This is aimed at a better integration with MAP network and work activities to the benefit of effective mainstreaming and streamlining of the Mediterranean knowledge and environmental decision-making.

1.2 Name and title of the contact person

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1.3 Target countries and partners

The action is covering the following nine ENP South partner countries: Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia. Cooperation with Syria remains suspended until further notice from the EC.

1.4 Name of beneficiaries and affiliated entities in the Action

The main project partners are the national environmental and statistical organisations leading in the field of environmental information within the ENPI area: ministries, agencies and statistical offices responsible for collecting, producing, storing and disseminating environmental data and information. Each country has nominated two National Focal Points for this process — high level officials, representing the environmental and statistical organisations respectively and responsible for managing and developing the environmental information system in the countries. By the end of July 2016, the majority of the project National Focal Points (NFPs) have been nominated by the partner countries, but some delays still exist; the list of NFPs is enclosed in Annex 1.

1.5 Title of the Action

"Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP South region" – SEIS Support Mechanism.

1.6 Contract number

No. ENI/2015/347-199

1.7 Start date and end date of the reporting period

The inception phase of the project is following the initially envisaged 6-month period: from 1 February 2016 to 31 July 2016.

2 Assessment of Implementation of Action activities

2.1 Executive summary of the Action

The current project on further implementation of SEIS principles and practices in the European Neighbourhood South region, is building on the outcome of the previous EEA cooperation with the region (under ENPI-SEIS and InSEIS projects) and is fully in line with the Barcelona Convention efforts on reducing marine pollution. This is a 4-year project (February 2016 – January 2020) funded by the EU European Neighbourhood Initiative (ENI) to be jointly implemented by the European Environment Agency (EEA) and the UNEP Mediterranean Action Plan (UNEP/MAP). Activities under the project are aimed to contribute to the implementation of the Horizon 2020 Initiative to de-pollute the Mediterranean Sea by 2020, in conjunction with other EU-funded projects and initiatives. The overarching objective is to ensure coherence and harmonisation of environmental reporting at regional level in support of more efficient policy-making, while the specific objective of the project is to improve the availability and access to relevant environmental information to the benefit of effective and knowledge-based policy-making in the ENP South region.

While ensuring proper linkages with the work programmes of the two implementing organisations (EEA and UNEP/MAP) and aligning to the agreed work programme of Horizon 2020 Initiative for the period 2015-2020, the expected results of the ENP SEIS II South project are the following:

- *Result 1*: The H2020 indicator set is stabilised, refined and complemented in order to be able to serve multiple purposes, as well as to ensure that the progress of achieving H2020 objectives is properly measured, while also contributing to assessing compliance with commitments under the Barcelona Convention.

- *Result 2*: The in-country processes for organising sharing of data sets underlying the H2020 indicators are stabilised.

- *Result 3*: The infrastructure for reporting offered by the EEA ('Reportnet') and UNEP (UNEP/MAP Reporting Network) is more widely used.

- *Result 4*: Indicator-based H2020 report(s) and assessments are produced in line with good practices from the EU region. This will be complemented by similar reports developed for the EU and West Balkan countries under the upcoming MSFD reporting cycle (2018) in order to come up with a comprehensive picture of the whole Mediterranean region and align the various reporting processes.

The project is structured around six Work Packages covering four thematic clusters that are visualised through the below diagram, illustrating the conceptual framework of the project:

Conceptual framework for SEIS Support Mechanism - South
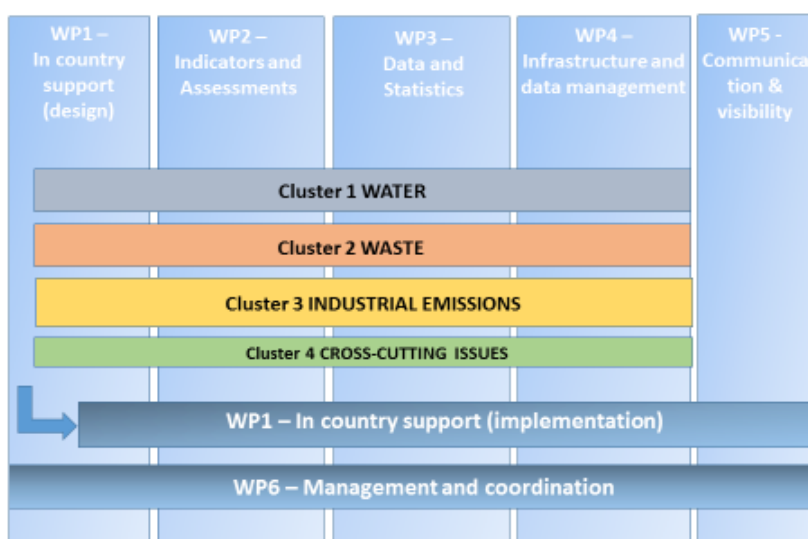
The project results are aimed to be achieved through a number of specific activities going beyond the initial inception phase of the current project and building on the previous efforts under ENPI-SEIS and InSEIS cooperation.

The current report reflects the activities carried out primarily by the EEA in the initial 6-month phase, as the agreement with UNEP/MAP has yet not been put in place. The project inception phase was focused on the necessary administrative, financial and organisational measures needed to be set up for the effective implementation of the project. Therefore, the performed activities are mainly falling under the WP1 – In-country support (design phase), WP5 – Communication and visibility, and WP6 – Management and coordination.

The project activities and interactions with the partners during the inception phase period confirmed that the logical framework for the project (Logframe – see in Annex 2) is valid and relevant to the actions planned, therefore no changes are recommended.

2.2 Project activities undertaken during the inception period

The key activities undertaken during the reporting period are as follows:

- Initiation of the discussions with the countries on the national needs linked to the SEIS pillars (content, infrastructure and inter-institutional cooperation) and discussions around the preparation of national work plan, building on the outcome of activities implemented during the previous cooperation in 2010-2015 period. connection will need to be ensured with the work of the H2020 Review and Monitoring group, also led jointly by EEA and UNEP/MAP (see more in section 2.4)

- Outcome of the inception phase discussions with countries can be found in Annex 3, prepared with the support of UBA-Vienna, with identification of the country needs and potential activities to be included in the national work plan. During this period, NFPs have worked on setting-up national team and prepared the ground for working on the design and development of the SEIS national work plans. The presentation of the initial SEIS national work plans is planned to take place at the first project Steering Committee, scheduled to be held tentatively in early December 2016 in Athens.

- Identification of synergies and potential common areas of work with relevant projects and regional partners during various meetings and events. As presented at the H2020 Steering Group meeting in February 2016 in Brussels, the project activities should be seen as part of the picture alongside different activities supported by EU, UfM and other donor initiatives. SEIS as an overarching concept is seen as cutting across many of them. While this is an advantage in terms of visibility, it might also create the difficulty of spreading too thin in the identified thematic areas of work.

- Training workshop on Water statistics and water accounts, targeting applicants from officials and employees of National Statistical Institutes, was organised by UBA-Vienna and Eurostat with involvement of experts from the following three ENP South countries: Jordan, Israel and Palestine (participation was covered through the project). The training took place on 18-20 April 2016 in Vienna. This training was in continuation of and building on the activities under InSEIS as a bridge to the current project. It gave the opportunity to the experts from ENI countries to interact with EU Member States and exchange information and experiences in producing water statistics and water accounts. The training was used to identify the needs of the countries in terms of data information and trainings to be provided during the ENI SEIS II implementation phase in order to build up their water information systems and water accounts.

2.3 Administrative and financial activities

2.3.1 Recruitment of project staff

The activities performed during the first months of project duration were performed by the core staff of EEA, supported by experts from the European Topic Centre on Inland, Coastal and Marine Water (ETC/ICM) and the existing framework contractors for the South region (UBA-Vienna).

The status of experts foreseen to be recruited under the project by the end of the inception phase is presented in the table below:

Post, organisation	Name of expert	Status of employment
Project manager/ coordinator at EEA	Cécile Roddier-Quefelec	Started as of 16 June 2016
Project officer at EEA on data management and infrastructure development	Expert selected, recruitment process ongoing	Possible start in September 2016
Project manager at UNEP/MAP	Recruitment process launched	Possible start in early 2017

2.3.2 Agreement between EEA and UNEP/MAP

The work on the project "Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP South region" will build on the activities undertaken during the preceding cooperation and is designed to be implemented in close partnership by EEA and UNEP/MAP. Close synergies will be ensured with relevant parallel activities, such as the EEA cooperation with its member and cooperating countries on MSFD implementation, NAPs

update, implementation of the Ecosystem Approach (EcAp), implementation of other regional strategies/Action Plans, among which the MSSD, IMAP and SCP Action Plan under UNEP/MAP.

To underpin the division of responsibilities and effective execution of activities within SEIS-South Support Mechanism, after the project launch a meeting between EEA and UNEP/MAP experts were held (on 2 February 2016 in Athens) to initiate the process for preparation and signature of a specific contribution agreement between the two organisations under the FAFA[1] provisions. The envisaged overall duration is of 3 and a half years (39 months), subject to its signature in August-September 2016. The signature is subject to final clearance by the UNEP Headquarters and was slightly delayed due to the summer holiday period. It is expected to be in place in early autumn.

In order to have such an agreement in place, a joint EEA - UNEP/MAP Work Plan was drawn in parallel, covering the six year period of 2016-2021 (in line with an earlier JWP from 2006-2008). The Joint Work Plan is intended as an overarching collaborative framework between the two organisations within which the activities described under the specific agreement(s) would be implemented in the coming years. The joint work plan was agreed by the heads of the two organisations at the end of May 2016 on the occasion of the UNEA-2 meeting held in Nairobi, 24-27 May 2016. It has been translated into French and Arabic languages and published as a booklet for further dissemination: http://eni-seis.eionet.europa.eu/south/governance/eea-unep-map-partnership.

2.3.3 Procurement for Framework contract

In support of the effective project implementation and similarly to the previous cooperation, since late 2015 the EEA has been preparing the publication of a call for tender for a Framework contract to support the further implementation of the SEIS principles and practices in the ENP South region for the period 2016-2020. The call for tender was published on 24 April 2016, with a closing date of 31 May 2016. Link to the published tender on EEA website can be found at the following URL: http://www.eea.europa.eu/about-us/tenders/eea-pan-16-001-further

Similarly to the previous framework contract, the call for tender was planned in 2 lots covering two separate regions respectively:

- Lot 1 – Further implementation of the SEIS principles and practices in the Eastern Partnership countries;
- Lot 2 – Further implementation of the SEIS principles and practices in the ENP South region – (SEIS Support Mechanism) and West Balkan region.

The opening and evaluation committee has been initiated in June-July period but due to the summer holiday season was postponed into August.

2.4 Cooperation and synergies

The implementation of the second phase of Horizon 2020 Initiative[2] in the ENP South region (2015-2020) is supported by the further development of a Shared Environment Information Systems (SEIS) in the ENP South region, building on a number of activities and projects, where the 'SEIS Support Mechanism-South' takes a prominent place. A key achievement during the implementation of the ENPI-SEIS project (Q4 2009 – Q1 2015) was the preparation of the first H2020 reporting exercise on the core set of regional H2020 indicators and the production of the

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[1] Financial and Administrative Framework Agreement between EU and UN organisations: http://ec.europa.eu/echo/files/partners/humanitarian_aid/fafa/agreement_en.pdf
[2] http://ec.europa.eu/environment/enlarg/med/horizon_2020_en.htm

'*Horizon 2020 Mediterranean report – Toward shared environmental information systems*', produced jointly by EEA and UNEP/MAP. The report contributed to the Mid-term Review of the H2020 initiative and was launched during the UfM Ministerial meeting on Environment and Climate Change in Athens on 13 May 2014.

The Review and Monitoring (RM) sub-group under the H2020 Initiative is jointly chaired by the EEA and UNEP/MAP. Building on this and the previous efforts, there is apparent link with the activities envisaged under the project, particularly around regional environmental indicators and mapping of related data flows to be jointly undertaken by EEA and UNEP/MAP. It is foreseen that the annual H2020 RM meetings are to be supported by the EU-funded SWIM H2020 Support Mechanism project led by LDK, Greece.

The discussion around the synergies with other activities and projects have been initiated during the H2020 Steering Group meeting help on 23-24 February 2016 in Brussels. Complementarities would have to be ensured on regular basis in the coming years along the implementation of the different activities (such as, for example, maintaining the annual meetings of the core group/lead organisations of the different H2020 components).

Additionally, discussion on the framing and synergies in preparation of the second H2020 assessment (scheduled for 2019) vis-a-vis other planned reports/assessments in the coming years, both in EU and wider regional context, was initiated. In this context, the development of a specific Mediterranean task under the 2016 work programme of the European Topic Centre on Inland, Coastal and Marine waters (ETC/ICM) and outline of specific ETC support to the indicators and assessment work under the project was initiated and is envisaged to be continued throughout the project implementation in the coming years.

With respect to the expected 7th RM meeting in 2016, it is suggested to hold it back-to-back with the first SEIS Support Mechanism-South Steering Committee in December 2016 (tentative dates 12-14 December) in Athens, Greece.

2.5 Action plan for the upcoming period

The presented below updated action plan for the future activities of the project is covering the period until summer 2017.

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June			
Work plan (August 2016 - June 2017)	1	2	3	4	5	6	8	9	10	11	12	Y2	Y3	Y4
Inception phase														
Recruitment of project coordinator/experts (EEA and UNEP/MAP)	■	■	■	■	■									
EEA-UNEP/MAP contribution agreement	■	■												
Mapping of relevant actions	■	■	■	■	■									
WP1 - In country support														
Preparation of in-country support	■	■	■	■										
Set-up SEIS national team	■	■												
Identification of needs, SEIS scope and vision	■	■												
Elaborate initial national work plan		■	■	■	■									
Country visits - Stakeholder engagement (WS1)			■	■	■									
Country visits - Stakeholder engagement (WS2) - Final National Work Plan					■	■	■	■	■	■				
Agreement/signature of SSFA; recruitement of national assisstant						■	■	■	■	■	■			
Implementation of National Work Plans								■	■	■	■	■	■	■
WP2 - Indicators and assessments														
Review of H2020 Indicators (desk study + 1 WS)			■	■	■									
Initiate refinement of the assessment framework (outline of country fiches, indicators assessment)			■	■										
Biannual review / National H2020 assessment						■	■	■	■	■	■	X		X
2nd H2020 indicator-based assessment														X
WP3 - Data and statistics														
Mapping of relevant actions - links with WP4			■	■	■									
Undertake capacity building on data production						■	■	■	■	■	■	■	■	■
WP4 - Infrastructure & data management														
Support H2020 IND 1-4 data flows - MEDPOL dataflows			■	■	■	■	■	■	■	■	■	■	■	■
Agreeing on regional infrastructure		■	■	■	■									
Support PRTR developemnt						■	■	■	■	■	■	■	■	■
Expand indicator management and data services						■	■	■	■	■	■	■	■	■
WP5 - Communication & visibility														
Initial communication project activities/leaflet	■	■	■			■	■	■	■	■	■	■	■	■
Project website population/maintenance	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Newsletters (biannual)					X						X	XX	XX	XX
WP6 - Management and coordination														
Project Management Group meeting	X				X						X	XX	XX	XX
Annual steering committee meetings					X							X	X	X
H2020 coordination group / Review and Monitoring group eetings					X							X	X	X
Establishement annual Eionet Mediterranean coordination group			X									X	X	X

The first progress report, covering the period of the 1st year of the project implementation (1 February 2016 to 31 January 2017) is expected to be submitted to the Contracting Authority in February 2017.

3 Visibility

3.1 Project website

During the inception phase the project website has been developed and put in place. It is integrated in the Eionet platform hosted by EEA and follows the functionalities of the platform used.

The website is covering the essential project components, namely:

- Objectives and results
- Governance
- Work plan
- Partners
- Calendar with upcoming events

There is also a possibility to subscribe to the project newsletter, the first issue of which will be published later in 2016.

The website can be accessed at the following link: http://eni-seis.eionet.europa.eu/south and it will be further populated and refined during the project implementation.

The website is aimed to be one of the key project communication tools, as well as repository of the project documents, outputs and events.

The link with the H2020 coordination page and the H2020 sub-groups activities will have to be explored jointly with DG NEAR, DG ENV, the chairs of the H2020 sub-groups and other relevant partners. A link to other related projects and regional initiatives is available thought the above project website.

3.2 Presentation of project objectives/leaflet

The formal launch of the project has taken place during the H2020 Steering Group meeting help on 23-24 February 2016 in Brussels.

Presentation of the new ENI South activities has also taken place during the regular NFP/Eionet meeting on 3 March 2016. The presentation outlined to the Eionet partners the possibilities for cooperation and transferring best EEA/Eionet practices to the ENP region.

Project leaflet was prepared for wider dissemination raising awareness about the project's partners and objectives. The leaflet is available on the project website under the above link.

Name of the contact person for the Action:

David Stanners, Head of Programme – Partnerships and Networks

<Signed>

Location: EEA, Copenhagen

Date report due: 30/09/2016

Date report sent: 30/08/2016

Annex 1 – List of nominated project NFPs **(Update - August 2016)**

Country	Name	Organisation	Position	Tel.	E-mail
Algeria	Ms Amina Benzekri	Ministère des Ressources en Eau et de l'Environnement (MREE)	Directrice générale Observatoire National de l'Environnement et du Développement Durable (ONEDD)	+ 213 (0) 21 96 21 81	Amina.benzekri@onedd.org
	Awaiting nomination	Office National des Statistiques (ONS)			
Egypt	Mr Mohmed Nabil Abdelfattah	Egypt Central Agency for Public Mobilization and Statistics (CAPMAS)	Statistician Environmental Statistics Department	+201277338896	Mohamed_nabil614@hotmail.com pres_capmas@capmas.gov.eg
	Awaiting nomination - Letter to H.E. Minister of Environment, Dr. Khaled Mohamed Fahmy Abdel Aal, addressed in August	Egyptian Environmental Affairs Agency			
Israel	Dr (Ms) Orna Matzner	Israeli Ministry of Environmental Protection	Head of Science Unit / Chief Scientist Office	+972 26 49 58 46	orna@sviva.gov.il
	Dr (Mr) Moshe Yanai	Israeli Central Bureau of Statistics (ICBS)	Head of agriculture, environment and energy statistics sector	+972 26 59 27 08	yanaim@cbs.gov.il
Jordan	Mrs Esraa Al-Harasis	Ministry of Environment	Head of Environmental Information and Decision Support Section		Esraa.harasis@moenv.gov.jo
	Ms Enas Mohammad Alarabyat	Department of Statistics - DOS	Statistician	Tel: +962 6 5300700 ext:1310	enasjo@dos.gov.jo anossema@yahoo.com

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				Mob: +962 795115 433	
Lebanon	Mrs Nadia Al Ahmar Jabbour	Lebanese Ministry of Environment	Acting Head of Service Planning and Programming		nadia@moe.gov.lb
	Awaiting nomination – strong support from the MoE in the process	**Central Administration of Statistics**			
Lybia	Dr (Mr) Mohamed Hamouda	Libyan Environment General Authority	Senior Advisor		mshamouda@yahoo.com
Morocco	**Awaiting nomination – regular interaction with the EU Delegation**	**Secrétariat d'Etat chargée de l'Eau et de l'Environnement**			
		Haut Commissariat au Plan/ Direction de la Statistique			
Palestine	Mr Khaled Salem	Palestinian Environment Quality Authority (EQA) / Directorate General of Environmental Resources	Director Information Systems, GIS &RS Department	Mob:+972 59 96 74 793	khaledsal@hotmail.com ksalem@mena.gov.ps
	Mr Aisar Tumeh	Palestinian Central Bureau of Statistics (PCBS)	Statistician	Tel:+972 22 98 27 00 Mob:+972 59 92 53 774	atumeh@pcbs.gov.ps Aisar2000@yahoo.com
Tunisia	Ms Samira Nefzi	Observatoire Tunisien de l'environnement et du développement durable (OTEDD) / Agence Nationale de Protection de l'Environnement (ANPE)	Chef de service		samira.benjrad@gmail.com
	Mr Karim Salah	Institut National de la Statistique (INS) / Direction des comptes dérivés Direction centrale de la comptabilité nationale	Chef du service des statistiques et comptes de l'environnement	Tel : (+216) 71 281 123 Mobil: (+216) 55 264 882	Salah.karim.06@gmail.com

Annex 2 – Project logframe

<table>
<tr>
<td colspan="5">LOGICAL FRAMEWORK FOR THE PROJECT - SEIS Support Mechanism South</td>
</tr>
<tr>
<td></td>
<td>Intervention logic</td>
<td>Objectively verifiable indicators of achievement</td>
<td>Sources and means of verification</td>
<td>Assumptions</td>
</tr>
<tr>
<td>Overall objective</td>
<td>To achieve reduced marine pollution in the Mediterranean Sea basin, together with other synergy actions</td>
<td>Increased amount of openly shared data and statistics on the addressed priority areas.
Increased number of regularly shared data sets, also made available online.
Improved environmental indicators related to the state of the Mediterranean Sea basin and its coastal areas.</td>
<td>Regional reports on the state of the environment for the Mediterranean Sea and its surrounding coastal areas.
Methodological documents, such as indicators specifications and factsheets.
Regular (biannual) reviews of H2020 priorities as envisaged in the Horizon2020 phase II work programme.</td>
<td rowspan="2">Assumptions:
Environmental cooperation is high on the political agenda of partner countries and in the Mediterranean region as a whole.
The political situation in the ENP South region remains stable during the project life cycle.
Partner countries are willing to further develop Shared Environmental Information System (SEIS) at national level and have capacity to do so.
National work plans are agreed and endorsed by key stakeholders, depending on</td>
</tr>
<tr>
<td>Specific objective</td>
<td>To improve availability of and access to relevant environmental information in order to improve effective and knowledge-based policy-making in the ENP South region.</td>
<td>Increased frequency of online publishing and comparability of the reported information across the partner countries, documented in regional assessment.
Frequency in the use of data and information reported under the project in national products/reports.</td>
<td>Updated indicator specification factsheets and assessments for the H2020 set of indicators, integrating relevant developments in EEA and MEDPOL.
Regional indicator-based assessment(s) produced in the framework of the project.</td>
</tr>
</table>

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		Increased number of datasets published online and environmental information publicly available, compared to state-of-play at the end of ENPI-SEIS project (March 2015).	External project evaluation reports.	delivery of good quality NAPs.
				Obligations under UNEP/MAP Protocols by the countries are met.
		Increased number of datasets published online and environmental information publicly available. This will be documented in meeting reports held jointly with other partner projects/activities and will be reflected in the annual progress reporting.		**Risks**:
				Potentially limited access and use of available and/or provided data due to confidentially or security reasons.
		Number of datasets published online and updated throughout the project duration		Potential duplication of efforts at national level due to involvement of different focal points/coordinators.
		Number of regional workshops and expert visits held		Continuity and availability of human and financial resources to support this process not guaranteed.
Expected results	R1: The H2020 indicator set is stabilised, refined and complemented in order to: a) serve multiple purposes (be used in different products/reports), b) ensure proper measurement of progress in achieving H2020 objectives, c) assess compliance with the countries' commitments under the Barcelona Convention.	1.1 Production and regular update of methodological documents, i.e. indicators specification factsheets and assessments (R1) 1.2 Number of expert missions, capacity building and technical assistance activities on indicator management and integrated assessments in line with best EU practices (R1) 2.1 Number of inter-institutional agreements between key partners, as	National SEIS work plans 2nd Regional indicator-based H2020 assessment report (scheduled for 2019) Reports from country visits, meetings and workshops organised under the project made available on the web Annual project progress report Reports of country visits to partner countries, regional and national	See above. Good working relations/inter-institutional agreement in place between key partners at national level for implementing the project activities (primarily between the environmental authorities and statistical offices as well as with H2020 and UNEP/MAP coordinators)

	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. R4: Indicator-based H2020 report(s) and assessments are produced in line with good practices from the EU region.	well as national work plans agreed in the partner countries (R2) 2.2 Progress on sharing relevant information and statistics and revision of national work plans achieved (R2) 3.1 Number of countries data sets shared/uploaded online through the agreed reporting tools and methodology (R3) 4.1 Degree of response to the biannual updates/review of the H2020 priorities in line with the agreed H2020 phase II work programme (R4) 4.2 Timely delivery of the 2nd Regional indicator-based H2020 assessment report scheduled for 2019 (R1, R4) 5.2 Quality and number of progress reports on the implementation of the national work plan(s) presented to the project Steering committee annually (R1-4). Number of visits to the project website.	workshops organised within the project Publication of project activities and outputs on the EEA and UNEP/MAP websites External project evaluation reports	
Activities Activities are grouped in 6 work packages (WPs) and centred around 4 thematic	WP1. In-Country support: enhance the national capacities by addressing particular national needs and contribute to regional coherence.	WP1. National work plans between key national stakeholders on sharing and use of environmental data and indicators agreed. WP1. Monitoring reports on implementation of the work plans presented to the project Steering committee annually.	Progress on activities implementation reported at annual Steering Committee meetings and progress made documented in the annual progress reports, prepared jointly by EEA and UNEP/MAP and submitted to the Contracting Authority.	In addition to the above-said, also: Better streamlining and complementarities between different existing networks and partner initiatives, supported by EU/EEA, UfM and UNEP/MAP is essential.

clusters covering water, waste, industrial pollution and cross-cutting issues respectively	WP2. Indicators and Assessments: ensure regular production of indicators, agreed at regional level under ENPI-SEIS project, and indicator-based assessments relevant to inform and monitor progress of the Horizon 2020 Initiative and contribute to achieving the objectives of the other work packages.	WP2. Methodological documents and national assessments/outlooks on the H2020 priority areas regularly produced.		Continuity and availability of human and financial resources to support the process of SEIS implementation at national level.
	WP3. Data and statistics: ensure timely production and sharing of harmonised, quality assessed statistics and data related to Horizon 2020 thematic priorities.	WP2. Countries' contribution to the 2nd regional indicator-based H2020 report (scheduled for 2019). WP2. National assessments/country briefings included in the 2019 regional report. WP3. Produced data and statistics documented in reports from workshops and technical assistance visits. WP.3 Number of datasets published and/or available online. WP3. Guidance/methodological documents produced on the priority areas addressed.		Identification of the right profile/expertise in the provision of the capacity building and technical assistance support envisaged, as well as the envisaged national assistants to support the coordination, interaction and implementation of the country-specific and communication activities, as per the endorsed national work plan.
	WP4. Infrastructure and data management: establish and maintain national and regional environmental information systems and data sharing in line with SEIS establishment.	WP4. Environmental indicators and data made available online and regularly/annually updated by EEA and UNEP/MAP, including also information on national websites. WP4. Meeting reports documenting the countries' progress in data sharing and exchange, reporting tools and formats used, as well as QA/QC aspects. WP4. National PRTR pilots extended to more industries; PRTR guidelines validated at dedicated regional event(s);		Timely recruitment of experts in EEA and UNEP/MAP to support the execution and coordination of project activities.

		catalogue of PRTR good practices in the region created.		
	WP5. Visibility and communication: ensure high visibility of the EU support in the actions implemented and active communication with the key project partners and beyond.	WP5. Project outputs and communication materials produced, made available online and shared at relevant regional and national events (reported also in the progress reports annually).		
		WP5. Contribution to newsletters/info materials of other key regional partners provided on regular basis.		
		WP5. Organisation of SEIS-awareness raising and side events linked to relevant regional and/national meetings.		
	WP6. Coordination and management: ensure effective and smooth implementation of the project activities, including project management and administration, as well as regular coordination with relevant partners and initiatives.	WP6. Regular meetings/teleconferences with the Contracting Authority on the project implementation.		
		WP6. Regular (annual) Project Steering Committee meetings held.		
		WP6. Regular dialogue/contact with the H2020 coordination group and among the H2020 groups and their chairs.		
		WP6. Number of joint meeting with other regional projects/initiatives.		

Annex 3 – Identification of the country needs

Identification and sorting of the country needs Identification of activities to be included in the national work plan

European Environment Agency

1   Introduction

The ENPI-SEIS project was a good step towards building capacities in the partner countries towards further SEIS development, but it has also shown way for improving the countries' commitments in this process. The commitment and engagement of the key stakeholders is of high importance to ensure the success of second phase of the ENI SEIS II South project implementation. The commitment will be ensured through the development of realistic national work plans capturing country priorities, which were also advocated for by the countries.

This document gives an overview of the different needs as identified by the countries and documented in the various reports produced during the first implementation phase of the ENP-SEIS (2011-2015) as well as the findings derived from the cooperation under InSEIS.

This overview is an attempt to identify ways to support the implementation of UNEP/MAP national action plans by taking into consideration NAP submitted by the countries with focus on monitoring, data and information sharing issues.

In order to avoid overlaps and to ensure optimal synergies, the inception mission reports produced by SWIM-H2020 are taken into consideration in this review.

In addition to activities undertaken in the first phase of SEIS some details describing the situation and the needs are derived from the bilateral cooperation between the Umwelbundesamt and individual countries such as Algeria, Morocco, Israel and Lebanon.

1.1 Identification and sorting of country needs

The following chapter is dedicated to the country needs linked to the SEIS pillars (content, infrastructure and inter institutional cooperation) through desk work. This review takes into account the latest developments and outcomes of activities implemented during the SEIS phase one and InSEIS (Jordan, Israel, Palestine and Morocco).

All the priorities identified in this document were approved and confirmed by the countries except for Morocco and Egypt.

1.2 Algeria

Generally, departments and agencies have their own indicators and information systems that meet their particular needs. However, inter-institutional cooperation, including data exchange, is subject to a protocol in the form of a formal application form or a formal letter, for exchange between institutions and organizations in the same department. This approach guarantees the reliability of the data as well as the responsibility of the supplier. However, it is also a cumbersome process due to the lack of a common platform for the sharing and exchange of information between different producers and / or data users.

Several sectors e.g. AND (Agence national des déchets), AGIRE (Agence de gestion intégrée des resources en eau) have their own information system. In 2010, ONEDD launched a project to develop an overall environmental information system (Système d'Information Environmental; SIE) based on GIS technology for data produced by the observatory and / or collected from data producing agencies. Despite all the efforts, none of the institutions have shown any interest in signing a data exchange protocol or MoU. ONEDD has now a database

on receiving environment (milieu recepteurs) and a database on industries comprising only data produced by the laboratory. By using the web application system the observatory can gather data and information from its different laboratories directly instead of sending them per EMAIL or Fax. The web application foresees the dissemination of data (technically it is possible to publish data and make it available to the public) but for the time being ONEDD makes data available only for internal uses (co-workers of ONEDD who depending on their responsibilities get a password to access the data).

Besides the data produced by ONEDD,and in order to fulfill different reporting requests a set of indicators was selected and suggested by ONEED but hasn't been validated. There are two sets of indicators one set to monitor the National action plan for environment and sustainable development (PNAEDD) which was suggested by the Ministry of Environment and a set of indicators to be used for the future states of environment reports which includes the Horizon 2020 indicators. Since the government reshuffle a year ago and the fusion of the two ministries (Water and Environment) it has been very difficult to start any participatory process. Within the twinning project, several attempts to have a consultation with different stakeholders to validate indicators, discuss the sharing of information among different institutions failed. The list of indicators selected by ONEDD are based on desk research (indicators used in different reports for e.g Plan bleu Analyse de durabilité dans le cadre du PAC « Zone côtière algéroise") and experts meetings. It is not sure that data is available/collected since the compilation of the mentioned report and if it exist how to access it knowing that data sharing is big issue. A consultation process gathering high representatives from different institutions was suggested but never took place due to the never-ending restructuring and reshuffling of the Ministry. The indicators are not populated, ONEDD need data from other agencies and institutions reason why a MoU'S are of high importance..

The previous state of environment reports, were produced by university professors. The request for production is requested by the Ministry and ONEDD signs a contract with university who does the work. No law or decree specifically provides for the completion of the report on the state of the environment or the periodicity of this publication. Executive Decree No. 02-115 establishing the ONEDD gives the following tasks: *collect from national institutions and specialized agencies, the data and information related to the environment and sustainable development addressing environmental data and information for develop information tools; initiate, conduct or assist in conducting studies to improve environmental knowledge and pressures on these environments; publish and disseminate environmental information*.

SoER as a specific report is mentioned once in Article 2 of Executive Decree No. 15-207 (2015) fixing the procedure for initiation and development of the National Action Plan for environment and Sustainable Development (PNAEDD). SoER is described as the "National environmental report (RNE) as" *document from a broad intersectoral consultation that identifies the physical vulnerabilities of the territory, malfunctions and institutional and legal deficiencies in environmental actions conducted*". Since 2011 no state of Environment report was produced.

All the representatives involved in first phase of SEIS have left. ONEDD experts started working on SEIS country level assessments (pushed by the Twinning team) but were not able to finalize them (lack of knowledge and resources).

A global environmental information system is foreseen by law n°3-10 19 July 2003- Relative à la protection de l'environnement et du développement durable but until today a system based on sharing and accessibility doesn't exist.

During the twinning project creation of an intersectorial committee/network to enhance cooperation between ONEDD and different institutions unfortunately it was reported that such committee can't be sustainable. For example, for the preparation of the national communication on climate change, an intersectoral committee must be formed before each reporting exercise and it is never the same persons that are nominated.

A Country needs

The following needs have been identified in the update country report. As mentioned above a national environmental information system is mentioned by the law but difficulties in implementation due to internal relations in the Ministry of water resources and environment.

SEIS pillars	Identified needs	Institutions involved
Content	✓ Support in identification and development of environmental and sustainable indicators. More specifically the support is needed for the identification of the relevant indicators and , Calculation methodology. Expert mission and workshop involving different ministries and agencies. The outcome of this support is the mechanisme of identification analysis and calculation in accordance to international standards. ✓ Support in the assessment of environmental and sustainable development programs. ✓ Design and implementation of an Environmental Management Plan, Social and economic (sustainable development) ✓ Support through workshops and expert support in the	Ministère des ressources en eau et de l'environnement (MREE) and DGEDD Observatoire national de l'environnement et développement durable (ONEDD) ONEDD (MREE), CNES, ONS,

	methodology and compilation of state of environment report	
	The Ministry of Environment with support of GIZ has developed the second action plan for environment and sustainable development(2015-). Until today this action plan as well as the indicators identified hasn't been validated.	
	✓ Data quality check and plausibility checks (air quality data)	
	Air monitoring stations are defect and non-functional since 2011. Before Mai 2015 the Minister shuffle air quality was on the Ministers Agenda (Dalila Boudjemaa) but since the change in the administration and the fusion of the two ministries this topic seems no longer to be an issue. Nevertheless, ONEDD has the historic data and want support in order to quality check it.	
Infrastructure	*Further development of the environmental information system of ONEDD.* *During the twinning project (2014-2015) a database was developed for bathing waters which are monitored on regular basis by ONEDD laboratories. The twinning experts have worked on a series of code list for cities, communes, beaches and parameters. In 2016 a web load system was developed to enable the laboratories to upload directly the data in ONEDD database and avoid the use of email and paper. A database was also developed for the industries and emissions data.* *Despite the achievements during the twinning project, ONEDD still needs support for accessing data from other institutions in order to regularly compile the SoER (in case they get further request from the Ministry). A platform for exchanging information and data at national level is needed.*	*Observatoire national de l'environnement et développement durable (ONEDD)*

| | Set of indicators identified and shared among different stakeholders.

✓ (page 9 SWIM_H2020) Improve water quality monitoring /surveys of water quality and sources of pollution-and develop cost effective monitoring this area of intervention could be done jointly with UNEP/MAP to review the standards and list of pollutants analyzed which are currently limited to BOD, and COD | |
| Inter institutional cooperation | *During the Twinning project data exchange protocols (MoU) were drafted but were not signed. It was reported by various institutions that despite the signature of different MoUS' data and information are not exchanged.* This issue can only be solved at the Ministry level and needs commitment and decisions of higher level.

-Establishment of clear inter-sectorial coordination mechanism (SWIM-Horizon 2020 page 9) | *Ministère des ressources en eau et de l'environnement (MREE)* |

Suggestion:

Due to the situation described above, it is recommended to organise a 2 days meeting in Algeria.

Day 1 inform the high representatives and involved institutions about the SEIS project purpose and achievements of the first phase as well as regular reporting expected from the cooperating institutions. It could be an opportunity to clarify the expectations.

Day 2 discuss the work plan and synergies

For the country level assessments reports it would be necessary to provide support, an expert to help them to draft the document and train them on how to compile similar reports

1.3 Egypt

Environmental data are shared among many institutions in Egypt. The Central Agency for Public Mobilization and Statistics (CAPMAS) receives data from the Ministry of Health, Ministry of Water Resources, Ministry of Local Development and the Egyptian Environmental

Affair Agency (EEAA). The EEAA collects data from Governorates and Ministries of health, Water Resources, Housing and Local Development for developing environmental indicators and state of the environment reports.

However, there is an urgent need for full cooperation among participating parties (ministries, authorities, organizations, and stakeholders) and protocols of cooperation for better coordination and integration. CAPMAS addresses an official request (letter) yearly to EEAA and other institutions to collect data.

The Egyptian Environmental Information System (EEIS) encompasses the collection, processing, production and distribution of environmental information. A number of information systems are available under EEIS, including Environmental Common Information System (ECIS), Executive Environmental Information System (Exec EIS), Industrial Pollution Information System (IPIS), Egyptian Hazardous Substances Information and Management System (EHSIMS) and others.

A national environmental database network has to be developed and roles have to be identified to comply with International standards. A database to receive data from different agencies/institution and ensure interoperability is needed. It is necessary besides the database to have a network with representatives from different institutions to discuss different issues related to reporting issues and the processes of sharing data.

The quality of data provided varies a lot and EEAA considers important a national inter-institutional joint effort to improve environmental data quality.

The communication with Egypt was very difficult end of 2015, several attempts to contact Dr. El berri directly and through others (Mrs Ghada Abdelmoniam-Meeting Medpol in Malta and Mona kamel) failed. No reason for this silence were mentioned but probably the political instability was one of the reasons.
Despite several requests no answer from EEAA.

A Country needs

The following needs have been identified in the updated country reports.

SEIS pillars	Identified needs	Institutions involved
Content	✓ Assistance in developing indicators, collection methods and validation of the data, measuring the quality levels of indicators and establishing a set of quality assurance mechanisms ✓ Further development of water accounts by establishing a platform for data exchange among the different stakeholders	EEAA ; CAPMAS, MWRI Egyptian Environmental Affairs Agency (EEAA) Central Agency for public Mobilisation and statistics (CAPMAS) Ministry of Water resources and irrigation (MWRI)
Infrastructure	✓ Support in establishing institutional arrangement and IT tools for sharing data	Egyptian Environmental Affairs Agency (EEAA)

	among different stakeholders to feed the SEIS indicators ✓ Building a national geographic industrial data base for pollution control (mentioned SWIM_H2020-page 35) this request is to be linked with PRTR (see below)	
Inter-institutional cooperation	✓ Exchange protocols in order to enhance cooperation among different institutions. More specifically data on water is available with the Ministry of water resources and irrigation but is not shared with others. Data exchange protocol could help improve the situation. The SWIM_h2020 report mentions the improvement of monitoring: ✓ The review of all the standards and Improve the technical and financial monitoring and enforcement to test for all listed standards (page 27). *while reviewing the standards parameters to be analysed will be reviewed this could be an opportunity to establish the data needs of relevant stakeholders and discuss the exchange protocols (possibly jointly SEIS-SWIM).*	Egyptian Environmental Affairs Agency (EEAA) Central Agency for public Mobilisation and statistics (CAPMS) Ministry of Water resources and irrigation (MWRI)

Another important aspect SWIM_H2020 plans the review of water and wastewater reuse policies, standards and regulations. For the accomplishment of this task it is important to involve European public officials (EIONET) and environmental lawyers (with strong experience in implementation of EU directives), some countries have strong legislations but no guidelines on how to apply them are provided. It is important to take into consideration the reporting obligation when reviewing the legislations.

B Pollutant release and transfer register

As mentioned above the establishment of national geographic industrial data base for pollution control is to be linked to the PRTR which allows enterprises and authorities to

handle registration and notification obligations online. Therefore, its user groups are enterprises, operators and owners of plants as well as national and local authorities.

The Geographic Information System (GIS) shall capture, manage, analyse, and display all forms/data of geographically referenced information. One of the main benefits of GIS relevant to mention is a possibility to link data sets together by common locational data (such as addresses) . By creating a shared database, one EEAA department can benefit from the work of another; also data can be collected once and used many times. EEAA staff will be allowed to view, understand, question, interpret and visualize all information in the central database in ways that reveal relationships, patterns, and trends in the form of maps, globes reports and charts. Thus, EEAA staff will be enabled to answer questions and solve problems by looking at data in a way that is quickly understood and easily shared - on a map. Similar system exist in Austria.

The geographical information system was mentioned in the agenda see workshop report of Prof. M. Fermeglia (2013) without any details. Another aspect that is worth mentioning the issues related to data quality checks and data quality insurance were not tackled during the workshop. it is very important to involve EIONETmembers- experts for to work on this aspects as they have years of experience in this field and are dealing with this quality issues yearly (each reporting exercise).

The software promoted by UNEP/MAP is not used in any country.

Besides UNEP/MAP uses always turkey as example of good practice which is not true Turkey has made 2 calls for proposals one related to the transposition of the EU Regulation (EC) No 166/2006 of the European Parliament and of the Council on theEuropean Pollutant Release and Transfer Register (E-PRTR) and strengthen the institutional and technical capacity on the implementation of E-PRTR. The objective of the project, establishes national E-PRTR system, increase institutional, individual and technical capacities for competent authorities and priority groups, raise the awareness of priority groups and decision-makers.

Not only the legislation and data, Turkey has also launched a call for proposal for the building of a PRTR reporting Tool!

The same goes for Israel. The tool was developed by the Ministry. The Ministry received support within the twining project to work on quality data and quality assurance.

Taking examples from France, Germany and Austria (the one that I know) the data quality checks involve more than 10 experts from different departments (air, waste, water, agriculture)

The cycle starts with the reporting of the data by the operators of the facilities to the electronic reporting system by end of May (as example, PRTR-data for the year 2014 (x) is reported in 2015 (x+1)). By 31st of March (year x+2) the national data is submitted to the European Commission. One month after the official submission to the EC the data is published on the European Website and after that on the national Website.

Involvement of EU experts is crucial if PRTR to be implemented in the south countries. The workshops carried out so far under the SEIS_UNEP project are maybe a good basis but don't cover the processes that a public administration needs to carry out every year as well as all the pratical aspects that comes from years of experience.

1.4 Israel

The institutions dealing with environmental data protection, including the Ministry of Environmental Protection (MoEP), Central Bureau of Statistics (CBS) and others work together in the elaboration of environmental information. The institutions disseminate data and information and various publications on their websites. Current inter-institutional cooperation is mainly based on ad-hoc or routine requests coming from the ministry or an institution, without a common information system. The MoEP is planning to establish a shared environmental information system in order to improve data sharing and availability, both for the institutions and the public. In the relevant agencies, some databases do exist and some are under construction. Although there is no central water information system in Israel, many extensive water quality datasets exist in the Israel Water Authority and the Ministry of Health; some available online. Data/Information is kept in scattered uncoordinated systems and there is no systematic unified environmental system that combines all the data and indicators from the different sources. The environmental data and indicators are routinely presented to the stakeholders and to the public via the Internet as well as a series of professional publications.

A piece of legislation on Integrated Environmental Licensing law, dubbed "the green licensing law" was submitted by the Ministry of Environmental Protection (MoEP) to the Knesset for adoption. The law, to be based on the European Union's Integrated Pollution Prevention and Control (IPPC) Directive, will affect sectors with a significant environmental impact. The law hasn't been adopted yet. From internal discussion with Shuli Nezer (whithin the ongoing twinning project) there are problems with this law and might not pass. The Minister Avi Gabbay resigned from office on May 31 and no Minister has been appointed since and all discussion related the law are on hold. Both NAP and SWIM-H2020 (page 47-Agan chemicals) mention the adoption of IPPC . A new Minister Mr Elkin Zeen was nominated recently.

The midterm baseline fact sheet refers to promotion through the Green Licensing Law (IPPC) of *Support, promotion and facilitation of capacities to apply, develop and manage access of cleaner production technologies as well as Best Available Techniques (BAT) and Best Environmental Practices (BEP) [SAP Requiremen*t. If the green licensing law is not adopted other means for implementation need to be found.

The best available techniques are however prescribed by the clean air law 2008 which sets requirements for emission permits from major industrial polluters, which include, among others, large-scale energy, metal, mineral, chemical, and waste management industries. Besides the LBS and dumping (Barcelona convention) protocols. An agreement between Germany and Israel to work on the Brefs has been recently signed.

The national action plan mentions different non compliances (deadline passed) with different treaties and protocols.

The phasing out of the Poly-cyclic –aromatic Hydrocarbons as part of the SAP requirements seem to lack a proper regular monitoring data is missing (to be checked if there is a possibility of support from UNEP/MAP.

Establish a data base for marine litter (maybe UNEP to provide support through SEIS project).

A Country needs

The following needs have been identified in the update country report and confirmed by the country in August 2016. The part highlighted in yellow is additional area of interest.

SEIS pillars	Identified needs	Institutions involved
Content	✓ Support to improve estimation of, electronic and construction waste (including information system that supports the process)	Central Bureau of Statistics (CBS) Ministry of Environment Protection
	✓ National consultant to support the compilation of H2020 country level assessment	Ministry of Environment Protection
	✓ Mitigation of pollution originating in urban runoff collection infrastructure and discharged directly into the Mediterranean (part of NAP). Data concerning these sources of pollutants is lacking since urban runoff is not monitored for either quantity or quality	MoEP
	✓ Compilation of environmental accounts more specifically waste accounts and land use accounts as well as water accounts	CBS
	SWIM-H2020 (page 44) report mentions a sub-regional workshop to discuss political issues related to water involving (Egypt, Palestine and Israel) check if this could be organised jointly. Very often while discussing water accounts political issues are unavoidable. Such occasion can be used to promote water accounts (indicators)	Israeli Water Authority
	✓ Nutrient statistics (for example a workshop on marine pollution statistics will provide the required knowledge to CBS as it is a new topic)	CBS and water Authority
	✓ Provide support in assessing consumption of raw materials	

	in the manufacturing industry. This support will help compliment data received within ICBS survey and form the basis for environmental productivity indices. ✓ Water quality index (learn from member states) Climate change adaptation	
Infrastructure	✓ MSW data base/management systems (national waste transfer systems) ✓ Building an integrated waste water information system Support to the Israeli Water Authority in building a wastewater information system in collaboration with the Ministry of Health and Ministry of Environment and ICBS. All the three authorities are collecting data on waste water following their own requirements. Support is specifically needed in integrating all datasets in one system	Ministry of Environment Protection Ministry of Health Israeli water Authority ICBS
Inter institutional cooperation	✓ Workshops to enhance cooperation among stakeholders and improve data quality (waste, waste water)	All relevant stakeholders

B Pollutant release and transfer register

Israel is the only country in the ENI south operating a PRTR. Israels PRTR was established under 2012 environmental protection law. The guidelines for the system were set in the Kiev protocol on pollutant release and transfer register acceded in 2013. Large installation with significant impact on the environment have the obligation to report under the PRTR.

A support to CBS was provided to Israel within the InSeis project to prepare methodology to estimate the contribution of the industrial sector to wastewater pollution in order to compile emissions account table of the SEEA-W.

The survey sample is targeting small and big plants (PRTR is focusing only on big sites exceeding the threshold). Data from manufacturing industries (on GHG emissions and effluents emissions) was received and is now being processed by CBS. For the sites that

haven't submitted their data, emissions factors might be used to close the gap. (Emissions factors used in France were provided as example during the InSEIS workshop. The survey can complete the PRTR data as it is targeting small and big sites.

1.5 Jordan

Coordination committees have been established for each sector to coordinate efforts and establish an information sub-network that links key institutions dealing with similar types of information. Environmental information is collected, processed and handled by different institutions. As for data sharing, the system of cooperation is an ad-hoc system, based on individual requests from one minister to another. Despite the efforts of the Ministry of Environment (MoEnv) to coordinate better the activities between the different institutions, there is still room for improvements

The MoEnv is currently developing its own environmental information system - JEIS - based on open-source and trial data, of which one objective is to build an environmental database to track the state of the environment in Jordan.

The Ministry of Water and Irrigation (MWI) is managing an integrated Water Information System –WIS - interfaced with all the existing information systems in the other "water sector" entities.

Despite some progress in the past years, the different monitoring networks and information systems are still poorly coordinated and a common e-government platform would greatly facilitate the exchange of information between the relevant institutions and organizations. Currently there is no validated list of indicators. The Ministry of Environment has prepared an inventory of all indicators used by different international organizations for Jordan.

Currently it is not yet known if data is available to populate those indicators. There is no agreed list so far. A set of nationally agreed key indicators must be the minimum set which, if properly monitored, will provide rigorous data describing the major trends, and impacts on the environment in Jordan. There are no criteria applied for indicators selection. Besides the data quality issues, training on selection and calculation of indicators will be needed.

The work done recently on the state of Environment report showed the difficulty of accessing data from other institutions. Even if a large network (committee) meets regularly to compile the different parts of the SoER there is no data to validate and show the trend.

A Country needs

The following needs have been identified by Jordan and aim to further develop the **national information system JEIS** (Jordan environmental information system).

SEIS pillars	Identified needs	Institutions involved
Content	✓ Exchange of experience, learned lessons, and success stories with member states on emission inventories, development of surveys, data collection. ✓ Further training workshops and study tours in the field of	Ministry of Environment Department of statistics (DOS) Ministry of Water Resources

	environmental information systems	
	✓ Further development of water accounts once the survey (to fill data gaps) is finalized.	
	✓ Develop and agree on list of indicators (MoU'S with different stakeholders to guarantee a regular data flow). Benefit from SDG'S in supporting the state of environment report and other reports related to sustainability.	
	✓ On job mission/study visit to help identify data gaps and the best solution to overcome these gaps according to limited resources.	
Infrastructure	✓ Further development of waste information system. (the Ministry of Environment has filed a request to the EC Delegation for a twinning project and are waiting for an answer) H2020/SWIM (page 67) Develop electronic waste management system according to best environmental practice and best available techniques. ✓ Support to DOS GIS department in implementing a spatial data infrastructure The GIS directorate is presently preparing a census, in which all Jordan residential blocks will be mapped, environmental layers such as waste water treatment plants, dumping sites and industries. ✓ H2020/SWIM page 67 and NAP (page 37) develop a monitoring program and	Ministry of Environment Department of statistics

	Environmental management system and GIS In order to Reduce the discharges and emissions of organmercuric compounds within acceptable standards. *Recommend to combine the two* ✓ *Support DOS in expanding the existing surveys for the benefit of water accounts and SoER* ✓ *Support DOS in reviewing and improving the existing questionnaires in order to achieve a better outcome from this effort.*	
Inter institutional cooperation	✓ A platform for sharing data and information and signed data exchange protocols are necessary to improve cooperation among different institutions and data accessibility.	Ministry of Environment Department of statistics Ministry of Water Resources And all relevant stakeholders

1.6 Lebanon

Institutional cooperation is often based on ad-hoc requests. Environmental information is reported to be poorly consolidated, as research institutions and/or government agencies collect data for specific use, if at all. Yet, on some priority issues such as water monitoring, inter-institutional cooperation is more active than on other priorities.

The management of solid waste in Lebanon testifies, perhaps, the best case of institutional cooperation related to data collection and data reporting. A number of institutions, namely MoE, CDR, MoIM, MoF, OMSAR, and MoPH, are involved in the planning and management of waste.

Most of the environmental data produced in Lebanon is designed to support investment donor-funded projects, research guided by the agendas of public and academic research institutions and private sector firm. Data collected is often unpublished and unshared, in the absence of appropriate sharing processes and dissemination activities. The coordination among stakeholders in the water sector, as in the case of other priority environmental issues, is very limited. Following up on water issues is done on an as-needed basis and information can only be accessed upon official requests to data holders. The current waste data collection infrastructure does not allow for automated centralization and/or sharing on a waste management database.Support is needed in designing a data and information sharing mechanism.

A Country needs

The following needs have been identified in the update country report

SEIS Pillars	Identified needs	Institutions involved
Content	✓ Data needs assessment: Need of national consultant to prepare a list of indicators in line with internal needs as well as with policy and planning development requirements. This information is needed to finalise the mapping started by the Ministry.	Ministry of Environment
Infrastructure	✓ *Study tour to member state country to exchange experience, development of information systems (waste, water etc.)*	*Ministry of Environment*
Inter-institutional cooperation	✓ *Data exchange formats and protocols for exchanging data among stakeholders* ✓ *Inform and engage executives on/in the SEIS process*	*Ministry of Environment*

B Pollutant release and transfer register

To ensure the effectiveness of self-environmental control, and to enable the Ministry of Environment to carry out this environmental audit and the decree No. 8471 of 2012 (Decree on Environmental Compliance of Establishments) was issued requiring all establishments currently operating or which will potentially operate, to report their emissions and other impacts on the environment on yearly basis, among other provisions (self-reporting and reporting by third party).

PRTR can apparently be implemented by applying the decree mentioned above. This needs to be further discussed with the country..

1.7 Morocco

L'Observatoire National de l'Environnement au Maroc (ONEM) and the Observatoires Régionaux de l'Environnement et du Développement Durable (OREDD) rely on quality data and an information system for their role in the management of environment. Eleven OREDD

observatories have already been set up and ten regional partner networks have been established. Network members are responsible for the collection of data and indicators and population of regional databases. The various national partners and stakeholders contribute actively in the production of environmental information, but there is currently no established system for the flow and exchange of information from the partners to the Department of Environment.

The information system of the Department of Water consists of several components such as: Badre management (water resources), GRE, MECEP (management of dams), GIS … One of the ambitions of the Environment Directorate is to establish a National Information System on the Environment (SINE) and its regional variations based on the principles of SEIS.

A Country needs

The following needs have been identified in the update country report and aim at further supporting Morocco in further developping their national information system.

SEIS Pillars	Identified needs	Institutions involved
Content	✓ Support in the review of lists of indicators used at national and regional level ✓ Support in establishing a quality assurance and quality control mechanism ✓ Capacity building in data analysis and aggregations and environmental assessments ✓ Further support in the implementation of the waste classification. ✓ Further development of waste accounts ✓ Further support in the Climate change adaptation indicators	Observatoire national de L'environnement du Maroc (ONEM) Haut-commissariat du plan (HCP)
Infrastructure		
Inter institutional cooperation	✓ Support in enhancing inter institutional cooperation by organising activities and awareness raising.-Elaboration of protocols and convention for exchange of data and information	ONEM, HCP and relevant stakeholders

National Action Plan

Morocco has undertaken different actions to combat pollution from land based sources by setting up different actions in the field of legislation by implementing environmental upgrade plans and programs and undertaking institutional measures legislatives and techniques to prevent and fight against various diffuse and accidental pollution.

Different investments in the field of Waste water treatment by building waste water treatment plants, waste management by closing some dumping sites (SEIS-Indicator) and building sanitary landfills (even of some granting of land to house the landfill sites are faced in some communes).Transposition of EU bathing water directive in the national standards.

According to the national action plan one of the main challenges, sludge and emission of mercury as well as stormwater (precipitation). Sludge being a residue of waste water treatment plants containing the hazardous substances. The hazardous substances may include organic substances persistent in terms of biological degradation, heavy metals such as Mercury, Cadmium, lead, pathogenic organisms-such as viruses and bacteria as well as endocrine substances; however sewage sludge also contains nutrients such as nitrogen and phosphor. The Industrial Emission Directive (replacing IPP) in Europe aims to achieve a high level of protection of human health and the environment by reducing harmful industrial emissions (by setting emission limit values) across the EU, in particular through better application of Best Available Techniques (BAT) . The directive sets a target of prevention, or where not possible - minimization - of emissions to the air, water, and land from industrial installations, in a manner that will bring about a high level of environmental protection as a whole.

For example in Austria 15% of sludge (from communal waste water treatment plant) is used directly in agriculture in some federal states or as compost but the biggest part is incinerated.

Mercury seems to be an issue as there are no measures to reduce mercury emissions from industries even if there is a goal to reduce the mercury emissions by 20% per year (the measures are not indicated). Emission limit values are mentioned but it is not clear if the industries referred to in the report have their own waste water treatment plant or if they are connected to the communal waste treatment plant, in which case the use of sludge in agriculture might be an issue.

Morocco intends to stop mercury emissions coming from chlor Alkali industries (NAP page 43). The published BAT conclusions under the IED imply that the mercury cell technology can no longer be used in chlor-alkali units beyond 11 December 2017 (possibility of derogations for extending the deadline).

Suggestion for further Monitoring

As mentioned above sludge is a major challenge therefore a development of indicators to monitor the trends could be useful to monitor the measures undertaken by the authorities. Indicator could be:

- ✓ *Sludge production (linked to Volume of waste water collected, of which volume of waste water treated by the public sanitation system)*

- ✓ *Indicators on amounts of sludge produced/ of which used in agriculture and different type of treatments (landfill, compost, and incineration and storage)*

✓ *Review the emission limit values by type of industry and type of recipient (water, air, land)*

✓ *Ensure application of the emission limit values by applying penalties in case of exceedances.*

A possibility to assess the industrial wastewater discharge is to rely on data obtained by the application of the tax on waste water discharge, indeed, as the principle of this tax is based on the concept of polluter pays, the amount of tax is directly proportional to the level and nature of pollutants in waste water.

A study with accompanying measures to reduce nutrients (N , P) from the breeding fish is mentioned on page 16 of the NAP. A support could be provided by the SEIS project to apply the measures and hence tackle the emissions at the source.

B Pollutant release and transfer register

For the implementation of PRTR system to collect and disseminate information on environmental releases and transfers of toxic chemicals from industrial and other facilities a legal basis is needed. The right to information is founded internationally in the Aarhus Convention. This Convention aims to facilitate information, public participation concerned and access to justice in environment. In Morocco, according to the new constitution, the right to information is now a constitutional right guaranteed by Article 27, which prescribes the " Citizens have the right to access information held by public administration, elected institutions and organizations with a public service mission". Morocco has laid the first the stone by preparing a law on access to information that it adoption will mark a new step. That is a good step forward, but a clear legislation for PRTR reporting implementation is crucial for the implementation of a PRTR system.

Public access to information is also laid in SDG 16 "**Target 16.10** - Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements.

Until the law is passed,and as there is a political will to implement PRTR UNEP/MAP can work with the industries that have benefited from the FODEP (fond de depollution) on developing the reporting tool and start gathering data from those industries.

1.8 Palestine

With respect to data sharing, cooperation needs to be improved. The current cooperation is based on ad-hoc requests from one Ministry to another. Inter-institutional communication is assured by regular committees meetings, e.g. "National Team for Environmental Information System".

Protocols for exchanging data and information between PCBS and different ministries and institutions exist. Between Environmental quality Authority and Palestinian water authority no agreement for data and information exchange was signed so far.

Water information and water-related data are fragmented among different departments inside Palestinian Water Authority (PWA) and other related water bodies. The development of a water information system is currently in progress. This system will include available

historical data and will assure continuity in data collection through the availability of a suitable monitoring network and defined sources of information.

There is no waste monitoring system in Palestine and data on waste are collected by the Palestinian Central Bureau of Statistics (PCBS) through administrative records and surveys, such as household, environmental, health care, economic.

Assess to the existing information system and development of a suitable information system (local, regional, international) is part of the 2012-2014 Implementation Plan. Within the Industrial Pollution Inventories website was put in place;

To make data accessible to other partners and in an intermediate solution was found, the Palestine Environmental Information System (PEIS) was built on the DevInfo platform (UN, free of charge); pcbs.gov.ps. PCBS is currently working to fix some errors in the PEIS with the company who designed the platform (Dev. Info).

http://www.pcbs.gov.ps/PEIS/libraries/aspx/home.aspx

A Country needs

The following needs have been identified by the focal points. The following support will help in the **expansion of the Palestinian environmental information system PEIS**

SEIS Pillars	Identified needs	Institutions involved
Content	✓ Further support in developing water accounts/watershed balances more specifically need of support to assess the data quality. PCBS in coordination with PWA are currently working to publish the first current status report about the water accounts. This report will be published by the end of the year. ✓ Support in the development and selection of environmental indicators which will serve for the compilation of the state of environment report ✓ Provide support for the compilation of the state of environment report. This needs to be done in collaboration with different stakeholders because of the lack of Human resources and financial resources within EQA. ✓ Review and checks of air quality data- although this issue is very important but due	Palestinian water authority (PWA) Palestinian Environmental quality authority (EQA) Palestinian Bureau of Statistics (PCBS)

	to lack of human resources will not be possible to carry out currently and needs to be investigated later.	
Infrastructure	✓ Support in establishing an environmental information system similar to Reportnet system to enhance cooperation among different stakeholders (the future system should be used for the reporting under Horizon 2020.Implementation of environmental indicators and should help with the compilation with the SoER. After finishing the first stage of PEIS, it is intended to expand to a system similar to reportnet.	Palestinian Environmental quality authority (EQA)
	✓ Support in establishing waste water information system (as module of the national water information system). PWA has already started collecting data on waste water.	Palestinian water Authority
Inter institutional cooperation	✓ Exchange data protocols specifying the data and information to be exchanged. The current MoUs are more general. More specifficaly for the expansion of PEIS the MoU's will be needed.	Palestinian Environmental quality authority (EQA) and relevant stakeholders

1.9 Tunisia

There is cooperation between the different ministries and institutions, for instance OTEDD collects contributions from different departments and / or agencies for the preparation national state of the environment. In this context certain agreements related to the provision of data are established. However, there is no common platform for the sharing and exchange of information.

Different data management systems exist that are built to meet the specific needs and international reporting obligations of institutions. The systems are not connected and interconnection through a national network of environmental information is necessary.

A Country needs

The following needs have been identified in the update country report and confirmed by the country per Email in August 2016. The parts highlighted in yellow are additional areas of interest.

SEIS Pillars	Identified needs	Institutions involved
Content	✓ Capacity building for preparation of data in the required geographical level (hydrological basin Tunisia reported data at national level for H2020 and not the required level)	Agence Nationale pour la Protection de l'Environnement (ANPE)
	✓ Support in the development of a national action plan to implement the PRTR in line with the SDG'S 3,6 and 9 and in close coordination with the work done under - Capitalization of existing work and using the synergies. The expected deliverable is an assessment of the existing pollutants releases monitoring. As well as the establishment of a working methodology for production of the register and awareness of key players.(national support)	OTEDD-ANPE_MEDD,MI, MARHP (DGRE), MAL, INS
	✓ Support for the accomplishment of a Technical study for developing a set of indicators on sustainable consumption and production for the implementation of the SDG No. 12.First challenge of the Tunisian National Strategy for Sustainable Development (national support).	OTEDD-MEDD-CITET-UTICA-INS
	✓ International support/ study visit for Development of environmental protection expenditure accounts it is important to establish computation of the cost of degradation of the Environment. The Figures available are from the	OTEDD-INS-CITET, MARHP, MEDD, MPCI, MF, BCT

	year 2000s; Need classification and centralization of Information. The expected result from the support is the elaboration of a methodology to implement environmental protection expenditure accounts. ✓ International support for the establishment of hazardous waste registers. Currently there is a Lack of information on hazardous waste. Need for updating data on industrial waste (solid and liquid) generated by polluting industrial companies. Lack of hazardous waste characterization Proposed and approved by the National Waste Governance Committee for Industrial and hazardous waste (CNGD) This register will allow the general public to access the information and know the destination of these releases in a perspective of governance and transparency in accordance with the provisions of the new constitution of the Tunisian Republic. ✓ Strengthening ties' monitoring of environments and human – health. Currently the links between environment and health are weak due to a Lack of monitoring parameters illustrating the environment- health link. Need to value the data produced. Need of international support to establish the data needs and for the identification of key indicators showing the links between environment and human health.	ANGED, MEDD, INS, MI, OTEDD, AnPE, ONAS, MAL , MF, ANPE- DHMPE-CITET

	Support for the development and optimization of the National Air Quality Network in Tunisia Improving environmental governance through optimal use of data and infrastructure available-ANPE-OTEDD DHMPE … ANPE -Strengthening and optimization of monitoring system, collection and processing in terms of quality information from the air in Tunisia -Improved The communication system and information dissemination in the field of air quality -Improved Of the air quality monitoring system for assessing the impacts of air pollution on human health, in collaboration with the Ministry of Health. - International Expertise; - Twinning - Country Visit.	
Infrastructure	✓ Elaboration of convention and protocols to exchange data among different institutions ✓ International support for the improvement of the environmental statistical system at INS (collection, processing and dissemination).INS has launched its new website that includes a theme on the environment and wants to improve in the design and choice of variables. The Method of collection is weak and needs improvement. This support will improve the access to high quality statistics and ensure a regular publication of environmental statistics and improve coordination and cooperation among the stakeholders.	INS, OTEDD, MARHP, MEDD, MAL

	✓ A twinning project was submitted to the EC Delegation in Tunisia but hasn't been yet approved. The future project should provide support to the development and optimization of the National Air Quality Network in Tunisia. By Improving environmental governance through optimal use of available data and infrastructure. Strengthening and optimization of monitoring system, collection and processing air quality information and data Improved The communication system and information dissemination in the field of air quality Improve air quality monitoring system for assessing the impacts of air pollution on human health, in collaboration with the Ministry of health	ANPE-OTEDD - DHMPE
Interinstitutional cooperation	✓ Establishment of platform for exchange and sharing of environmental data (study visit to member state).	

Annex 4 – List of Abbreviations

BP/RAC	Blue Plan Regional Activity Centre (France)
CEDARE	Center for Environment and Development for the Arab Region and Europe
CP/RAC	Regional Activity Centre for Cleaner Production
DG ENV	European Commission - Directorate General Environment
DG NEAR	European Commission - Directorate General European Neighbourhood Policy and Enlargement Negotiations
DPSIR	Driving forces-Pressures-State-Impacts-Responses
EcAp	Ecosystem Approach
EEA	European Environment Agency
EEAS	European External Action Service
EIB	European Investment Bank
Eionet	European Environment Information and Observation Network
ENI	European Neighbourhood Instrument
ENP	European Neighbourhood Policy
ETC	European Topic Centre
EU	European Union
GEO	Global Earth Observation
GEOSS	Global Earth Observation System of Systems
GMES	Global Monitoring for Environment and Security
H2020	Horizon 2020 Initiative
IFIs	International Financial Institutions
IMS	Indicator Management Service (EEA)
INFO/RAC	Information and Communication Regional Activity Centre (Italy)
INSPIRE	Infrastructure for Spatial Information in Europe
JRC	European Joint Research Centre
LAS	League of Arab States
MAP	Mediterranean Action Plan
MDIAK	Reporting chain: Monitoring-Data-Indicators-Assessments-Knowledge
MED	Mediterranean region
MEDPOL	Programme for the Assessment and Control of Marine Pollution in the Mediterranean Region
MEHSIP-PPIF	Mediterranean Hot Spot Investment Programme - Project Preparation & Implementation Facility
MSFD	Marine Strategy Framework Directive

MSSD	Mediterranean Sustainable Strategy of Development
NAPs	National Action Plans
NBBs	National Baseline Budgets
NGOs	Non-governmental organisations
OECD	Organisation for Economic Co-operation and Development
PAP/RAC	Priority Actions Programme Regional Activity Centre (Croatia)
PRPI	Pollution Reduction and Prevention Investments component of H2020
QA/QC	Quality Assurance/Quality Control
RCCAF	Regional Climate Change Adaptation Framework
Reportnet	Eionet infrastructure for supporting and improving data and information flows
REMPEC	Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (Malta)
RM	H2020 Review and Monitoring sub-group
WP	Work package
SCP/RAC	Regional Activity Centre for Sustainable Consumption and Production (Spain)
SDGs	Sustainable Development Goals
SPA/RAC	Specially Protected Areas Regional Activity Centre (Tunisia)
SEIS	Shared Environment Information System
SOER	State of the Environment Report
SWEEP-Net	Regional Solid Waste Exchange of Information and Expertise Network (in Mashreq and Maghreb countries)
SWIM	Sustainable Water Integrated Management (SWIM – Support Mechanism)
SWITCH Med	Switching towards more sustainable consumption and production (SCP) patterns in the Mediterranean (SWITCH Med Programme)
TC	Thematic Cluster
ToR	Terms of Reference
UfM	Union for the Mediterranean
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNEP/MAP	United Nations Environment Programme / Mediterranean Action Plan
UNSD	United Nations Statistics Division
WB	World Bank
WFD	Water Framework Directive