

Final report: Regional consultancy to support SEIS Project implementation with regards to the IT technical support actions to the ENP south countries

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Prepared by Alessandro Candeloro

Task 1: Coordinate with staff of UNEP/MAP and its relevant RACs and organize the implementation of training workshops and related activities according to the specific workplan:

Coordinated with SEIS infrastructure and statistics focal points of seven ENPI South Partner Countries (Jordan, Egypt, Algeria, Morocco, Tunisia, Israel, Palestine) discussed and defined subjects for TA missions on the basis of the preliminary workplan, prepared detailed Terms of Reference, discussed and defined modalities and dates for the missions.

Planned the implementation of seven ENPI-SEIS technical assistance missions in Mediterranean countries

Participated to the meeting of the IT Infrastructure and Statistics working groups of the ENPI-SEIS project in Copenhagen, August 2014. Conducted a survey, through bilateral meetings, on possible technical assistance missions to promote SEIS principles and support the development of national environmental information management capacities. [Drafted a report.](#)

Participated to two coordination meetings with INFO/RAC. Discussed in detail the contribution by INFO/RAC to the ENPI-SEIS technical support mission and agreed related modalities. Coordinated the contribution by INFO/RAC to the TA missions to Jordan, Morocco, Israel, and Palestine

Coordinated with Blue Plan for the establishment of expert' contracts and the organization of missions, prepared ToRs for the required experts including estimated effort.

Coordinated with the Austrian Environmental Agency (UBA) for planning and implementing the ENPI-SEIS mission to Tunisia and with the EU-funded twinning project on environmental information management for planning and implementing the mission to Algeria.

Identified qualified external experts for participating to missions with the support of ENPI-SEIS partner institutions, negotiated terms of collaboration with ENPI-SEIS project, defined ToRs, coordinated respective contributions, provided logistics support to experts.

Presented the [INFO/RAC GeoPortal](#) and [Nitrates Project](#) during the TA mission to Jordan.

Presented the "[Integrated Pollution Release and Transfer Registers in Italy](#)" during the TA mission to Algeria

Presentation on "[Quality assurance and quality control in the framework of H2020 reporting](#)" during the TA mission to Egypt

Prepared and delivered introductory presentation/speech to all missions.

Informed the local EU Delegation on the rationale and the outcomes of the mission in Algeria and Tunisia

Summary table on the organization/implementation of TA missions

Country	TA subject	Dates	Experts	Done?	Status
Algeria	Introductory training on env. Database design with focus on media pollution	11-13 November	Andreas Vollrath, suggested by INFO/RAC	Yes	<ul style="list-style-type: none"> • Reporting finalised • Follow up finalised
Egypt	Introductory training on env. Database design including QA/QC mechanisms with focus on application for data analysis	4-6 November	QA/QC expert Dimitris Poursanidis, IT expert Alessio Siniscalchi	Yes	<ul style="list-style-type: none"> • Reporting finalised • Follow up finalised
Israel	Design and development of government to business information systems on the basis of the European experiences	Remote tutoring 22 December 2014 – 28 January 2015	INFO/RAC: Dimitri Dello Buono, Pal Bozò	Yes	<ul style="list-style-type: none"> • Three Sessions completed • Report finalised
Jordan	H2020 reporting through ReportNet, GIS for environmental data analysis and communication	23-25 September	Pal Bozo, Alberto Telletxea	Yes	<ul style="list-style-type: none"> • Reporting finalised
Morocco	general advice and support on regional environmental information systems	17-19 November	Dimitris Poursanidis, INFO/RAC: Nico Bonora, Fabio Baiocco and Alessandro Amici	Yes	<ul style="list-style-type: none"> • Reporting finalised
Palestine	Installation and running a web GIS system	Initially postponed to December then	INFO/RAC (IMAA), Dimitri Dello Buono	No	<ul style="list-style-type: none"> • ToRs finalised • The mission was postponed to a further project phase due to the unavailability of a web server capable of

		canceled			supporting a web GIS server software platform and to the limited interest by the country to use a cloud web GIS application
Tunisia	Tools and methods for communication on air quality	1-3 December	2 UBA experts Johannes Mayer, Pia Thielen, 1 ONEDD expert Abdellah Sbargout	Yes	<ul style="list-style-type: none"> • Reporting finalised

Task 2: Prepare generic ToRs and specific workplan for each training workshop as well as their final report

Prepared detailed ToRs including workplan for TA mission to [Jordan](#), [Egypt](#), [Algeria](#), [Morocco](#), [Tunisia](#), [Palestine](#) and TA support to [Israel](#)

Prepared the reports of the TA missions to [Jordan](#), [Egypt](#), [Algeria](#), [Morocco](#), [Tunisia](#) and TA support to [Israel](#)

Task 3: Coordinate and support the delivery of the technical documentation requested in the technical assistance

Coordinated and supported the delivery of technical documentation to the Jordanian National Department of Statistics, the Egyptian Environmental Affairs Agency, the Algerian National Observatory of the Environment and Sustainable Development, the Moroccan National Observatory on the Environment, the Tunisian National Agency for Environmental Protection, the Israeli Ministry of the Environment, the Palestinian Environmental Quality Authority.

Coordinated follow-up support to the mission to ONEDD in Algeria and EEAA in Egypt

Task 4: Organise the specific missions to be held in the different countries

Organised the TA missions to Jordan, Egypt, Algeria, Morocco, Tunisia. Agreed work plan with ENPI-SEIS Partner Countries. Coordinated the contribution by experts.

Task 5: Manage the feedback on the specific activities by the respective countries

Collected feedback from the Jordanian National Department of Statistics, the Egyptian Environmental Affairs Agency, the Algerian National Observatory of the Environment and Sustainable Development, the Moroccan National Observatory on the Environment, the Tunisian National Agency for Environmental Protection, the Israeli Ministry of the Environment, the Palestinian Environmental Quality Authority

Proposed follow-up actions

Managed the provision of follow up services to Algeria and Egypt.

Task 6: Prepare reports on the implementation of the activities of IT component of the SEIS project

Prepared the report of the technical support actions to [Jordan](#), [Egypt](#), [Algeria](#), [Morocco](#), [Tunisia](#), [Israel](#)

Task 7: Prepare progress reports and the final report on the overall implementation of the SEIS project based on the template prepared by UNEP/MAP

Prepared and [updated summary table](#) illustrating progresses on the organization/implementation of TA missions

Prepared [mid-term summary report](#)

Prepared final activity report including a chapter on [lessons learned and recommendations](#) for future actions and contributed to the finalization of the [final project report](#)

Lessons learned and recommendations for future actions

The organization and implementation of these six technical support actions provided the opportunity to bring forward the dialogue initiated by UNEP/MAP and EEA with ENPI-SEIS Partner Countries on the development of SEIS Infrastructure during regional events and to better contextualize identified cooperation subjects. Elements of possible future SEIS national roadmaps were drafted. All actions allowed partner institutions to move steps forward in the respective domain of support, most of them would have required longer duration, some would have required the participation of additional experts, some would have required more detailed identification of requirements as well as stricter definition of participants, all of them required short term follow up activities so as to ensure their sustainability and continuity.

In principle the technical assistance component of a regional project aims to support the adoption of practices promoted during regional events according to the specific contexts, needs and requirements of participating institutions. The effective organization and implementation of a technical support component on IT infrastructure in the framework of the ENPI-SEIS project require a continuous dialogue with Partner Countries (for identification of priorities, definition of user requirements but also for monitoring developments and follow up with them), with ongoing similar international cooperation initiatives in these Countries (for identification of complementarities and synergies) and with the environmental agencies and other technical bodies of the EU Member States (as potential sources of expertise).

By definition technical support missions are intended to respond to a specific technical requirement of the beneficiary institution. They are intended to be short time provision of expertise aimed to contribute to solving specific and well delimited technical issues. Nevertheless the fact of working within a multi-year regional cooperation project and under the coordination of a regional environmental institution like UNEP/MAP allows for working on longer term objectives and on more structured work plans, which are more in line with countries expectations. Adopting a multi-year perspective requires working with partner institutions on a coordinated preparatory planning effort which shall produce a shared work plan in line with the objectives of the project and the priorities of the institution including well defined commitment of resources by the beneficiaries (e.g. the set up, wherever possible, of a dedicated working group).

Subjects identified for the technical support actions range from generic demonstrations or introductory training courses to more specific analysis of existing settings and provision of advice on possible developments/improvements. All actions opened the way to further provision of advice and support and required efforts by the Partner Institutions for analyzing preliminary results achieved and integrating them in action plans. This

integration is key for the sustainability of implemented actions and should be fostered and supported at the decision making level.

ToRs are a key element for preparing in a sound manner a technical support action. If possible it is suggested to dedicate time to make sure that all aspects of the document are understood and agreed by the counterparts (beneficiaries and experts). This would create a in-depth common understanding on activities, required efforts, skills of the participants and expected outcomes which contribute to ensure the success of the initiative.

Communication and outreach actions could improve the effectiveness of the ENPI-SEIS technical support component by promoting outcomes, inspiring and motivating Partner Countries

Effective provision of follow-up support can be facilitated by including it in a longer term shared work plan including formal commitment by the beneficiary and the set up of adequate monitoring mechanisms.

The technical assistance actions to ONEDD (Algeria) and EEAA (Egypt) and the respective follow up support actions allowed to prepare initial training modules on database design and development including of application layers for data analysis and geospatial functionalities. They may be reused for further technical support activities.

Sectors identified for the provision of further technical support to Partner Countries include

1. Collection/production/storage of environmental information
 - Methods and tools for the design of environmental databases
 - Methodologies for data estimation and approximation
 - Data dictionary, excel templates for data transmission, data entry and data management modules
 - Methodologies and mechanisms for QA/QC
 - Making available at national level datasets developed at regional level, example: MedPOL
2. Data compilation and exchange
 - Design and development of environmental information systems
 - Use of ReportNet as national repository
 - Interoperability of information systems, of data and indicators
 - Methods and protocols for data exchange
 - Techniques and approaches for managing sensitive data

- System security
 - Replication/adaptation of information systems developed in EU Member States
 - mechanisms to facilitate integration/conversion/adaptation/compilation of data available at national level according to international requirements
3. Information analysis/interpretation/dissemination
- Tools and methods for data analysis (multicriteria, geoprocessing, coupling and decoupling)
 - Definition/prioritisation/aggregation of indicators
 - Synthetic indicators, cartography, dashboard
 - Catalogues of metadata
 - GIS, webGIS

This long list makes it difficult for a regional cooperation project working with 8 different countries to follow up with all of them. While it is suggested to further discuss those sectors with Partner Institutions in view of defining priorities, analyzing their feasibility and preparing a realistic shared work plan in the framework of the project, it is also suggested to bring the list of sectors to the attention of other donors, cooperation initiatives and EU Member States technical agencies for their review and consideration.

Overall 50% of the support delivered was on specific technical matters, the remaining 50 % involved more strategic IT infrastructure aspects. ENPI-SEIS should be prepared to cover both dimensions. In this respect, for future mission it is suggested the set up of mixed senior-junior expert teams. This could allow for opening with a plenary introductory session linking the two dimensions and continuing with separate more focused working sessions.

Both during formulation of requests for technical assistance support and during the expert missions, Partner countries demonstrated explicit interest in dealing, in an integrated manner, with all different aspects related to planning environmental information systems, namely data production and exchange issues, indicators and analysis issues and IT infrastructure aspects. While it is suggested to deal with complex issues by splitting them in smaller, more manageable parts, it is also suggested to deal with the mentioned aspects, as much as possible in a coordinated manner in future technical assistance support actions.

The integration of the national dimension of environmental monitoring and reporting with the regional dimension is high in the national agendas. Support on this matter is generally required by all ENPI-SEIS Partner Countries mostly on the development of proper

mechanisms to facilitate integration/conversion/adaptation/compilation of data available at national level according to international requirements.

Language remains a very important issue for technical assistance support actions and for proposed technical tools.

The identification of required expertise to provide support to Partner Countries on SEIS Infrastructure matters can be facilitated by a mapping exercise of available expertise in this domain in the Euro-Mediterranean region. This was initiated during the implementation of these six actions. Experts involved in the six technical support actions were of seven different nationalities (Algeria, Austria, Greece, Hungary, Italy, Luxembourg, Spain).

A mapping effort is also required to identify in advance the subjects which can be covered by possible future technical support actions. This would allow establishing more focused discussions and exchanges with Partner Countries.

Considering the negotiation with the experts, in particular on the financial aspects, it is suggested to establish internal standard which may harmonise the cost of the various actions. In particular it is suggested to establish three different levels of remuneration on the model of the EU guidelines for TAIEX missions. Example:

- Individual consultant: from 250 to 400 € per day (less than 3 years of expertise 250 €, 3-7 years 300 €, 7-12 years 350 €, over 12 years 400 €)
- Public bodies experts : standard treatment of 250 €
- Private companies: from 350 to 500 € per day.

It is suggested to finalise the organization and implement of the mission to Palestine under the INSEIS project or the next phase of the ENPI-SEIS project

The involvement of an Algerian Air Quality expert in the technical support action to Tunisia highlighted the importance of fostering south-south cooperation. Other cases showed that south-south cooperation can be sometimes complicate. It is suggested to further explore possibilities of involving ENPI South Partner Countries experts in future expert missions or of organizing sub-regional or multi-national technical support actions also through exchange of experts.

Annexes

Terms of Reference for the ENPI-SEIS technical support action to Jordan

Report of the ENPI-SEIS technical support action to Jordan

Presentations prepared and delivered for the ENPI-SEIS technical support action to Jordan

Terms of Reference for the ENPI-SEIS technical support action to Egypt

Report of the ENPI-SEIS technical support action to Egypt

Presentations prepared and delivered for the ENPI-SEIS technical support action to Egypt

Terms of Reference for the ENPI-SEIS technical support action to Algeria

Report of the ENPI-SEIS technical support action to Algeria

Presentations prepared and delivered for the ENPI-SEIS technical support action to Algeria

Terms of Reference for the ENPI-SEIS technical support action to Morocco

Report of the ENPI-SEIS technical support action to Morocco

Presentation Elements pour un plan de travail H2020 ENPI-SEIS II au Maroc

Presentations prepared and delivered for the ENPI-SEIS technical support action to Morocco

Terms of Reference for the ENPI-SEIS technical support action to Tunisia

Report of the ENPI-SEIS technical support action to Tunisia

Presentations prepared and delivered for the ENPI-SEIS technical support action to Tunisia

Terms of Reference for the ENPI-SEIS technical support action to Israel

Report of the ENPI-SEIS technical support action to Israel

Presentations prepared and delivered for the ENPI-SEIS technical support action to Israel

Terms of Reference for the ENPI-SEIS technical support action to Palestine