

Status of Monitoring networks and programmes in the Mediterranean partner countries

Egypt (MWRI)

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1st section: Legal and institutional framework:

Q.1.1 Please complete the table by indicating the ministry (ies) having, among its(their) responsibilities, the following subject matters:

Classification according to the various kinds of water

Water kinds			Responsible Ministry(ies)	Administration(s) and institution(s) in charge of monitoring quality
1. Coastal water			Ministry of Environmental Affairs (EEAA)	EEAA on Regional basis
2. Inland waters				
	2.1 Surface waters			
		2.1.1 Rivers	Ministry of water resources and Irrigation (MWRI)	National Water Research Centre (NWRC)
		2.1.2 Dam-reservoirs	Ministry of water resources and Irrigation (MWRI)	National Water Research Centre (NWRC)
		2.1.3 Wetlands	Ministry of Environmental Affairs (EEAA)	EEAA on Regional basis
	2.2 Groundwater		Ministry of water resources and Irrigation (MWRI)	National Water Research Centre (NWRC)

Classification according to the uses

Uses	Responsible Ministry(ies)	Administrations and institutions concerned
Bathing	Ministry of Health and Population	Environmental Monitoring Centre
Consumption (drinking water)	Ministry of Housing and new communities	General Authority for drinking and sanitary projects & Holding Company
Transportation (navigation)	Ministry of Trade and Transport	
Agriculture (irrigation)	Ministry of water Resources and Irrigation	Irrigation Department
Energy (hydropower)	Ministry of Electricity and Power	
Nature conservation	Ministry of Environmental affairs (EEAA)	

Q.1.2 Are there entirely or partially privatized water sectors (water supply, waste water treatment,...)?

- No (✓)
- Yes

Which ones? :

Q.1.4 Is integrated water resources management (IWRM) effective at the national, regional or local level?

- No (✓)

Will it be effective soon, according to which deadlines and methodology?

There is a national water resources plan for integrated water resources management and it is under implementation.

Q.1.5 On what geographical entity basis (unit) is water managed?

- River basin (✓)
- Administrative unit (✓)
- Other (specify)

Specify their number, their average surface area and which Ministry or Agency is supervising these entities at the institutional level.

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Q.1.6 The WFD defines a water body as a section of a river, lake, coast which can be regarded as homogeneous, from the view point of natural characteristics and of the pressures exerted by human activities.

The WFD moreover specifies that all the rivers, whose catchment area is larger than 10 km², must be broken up in water bodies. Is the river network of your country subdivided or not in water bodies, within the WFD meaning?

- No (√)
- Yes

Specify the number of defined water bodies:

.....
.....

Q.1.7 Does the water legislation integrate commitments of results on the good qualitative status of rivers or water bodies?

- No
- Yes (√)

Q.1.8 Is there a legal regulatory framework which defines specific national standards for the discharge of pollutants and quality of the environment?

- Yes (√)
- No

What are the applied standards?

..... **WHO**

Q.1.9 What are the past, current and future national and international programmes for monitoring water quality in your country?

National water Quality Monitoring (NWQM)

.....

2nd section: mechanisms and networks for monitoring (or controlling) water quality

Q.2.1 Existing networks: please complete the following table (add columns for additional networks where necessary)

Identifying code	R1	R2	R3
<i>Name of the network</i>			
<i>Type of control⁽¹⁾</i>	<input type="checkbox"/> Survey (accidental pollution) <input type="checkbox"/> (√)Monitoring (overall water status) <input type="checkbox"/> Operational control (pollution follow-up)	<input checked="" type="checkbox"/> Survey (accidental pollution) <input type="checkbox"/> Monitoring (overall water status) <input type="checkbox"/> Operational control (pollution follow-up)	<input checked="" type="checkbox"/> Survey (accidental pollution) <input type="checkbox"/> Monitoring (overall water status) <input checked="" type="checkbox"/> Operational control (pollution follow-up)
<i>Type of water or discharge⁽²⁾</i>	<input type="checkbox"/> Sea water <input type="checkbox"/> Inland surface water <input type="checkbox"/> (√)Groundwater <input type="checkbox"/> Sediments <input type="checkbox"/> (√)Discharges from WWTP <input type="checkbox"/> (√)Industrial effluents	<input type="checkbox"/> Sea water <input type="checkbox"/> Inland surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Sediments <input type="checkbox"/> Discharges from WWTP <input type="checkbox"/> Industrial effluents <input checked="" type="checkbox"/> other: drinking water	<input checked="" type="checkbox"/> Sea water <input type="checkbox"/> Inland surface water <input type="checkbox"/> Groundwater <input type="checkbox"/> Sediments <input checked="" type="checkbox"/> Discharges from WWTP <input checked="" type="checkbox"/> Industrial effluents
<i>Type of management⁽³⁾</i>	<input type="checkbox"/> (√)Public <input type="checkbox"/> Private	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<input type="checkbox"/> √ Public <input type="checkbox"/> Private
<i>Operating organisation name</i>	<i>Ministry of Water Resources and Irrigation</i>	<i>Ministry of Health and Population</i>	<i>Ministry of Environmental Affairs</i>
<i>Year of commissioning</i>	1995		
<i>Cartography (GIS)⁽⁴⁾</i>	yes/no(√)/referenced	yes/no/referenced	Yes/no/referenced
<i>No. of measurement stations/method⁽⁵⁾</i>	434 (Surface + Groundwater)		
<i>List of the monitored water bodies</i>	River Nile , Irrigation canals and drains		
<i>No. of measured parameters</i>	33		
<i>List of the biological parameters⁽⁶⁾</i>	5: BOD, TOC, TDS, COD, TSS Total and fecal coliforms		
<i>List of the chemical and physico-chemical parameters</i>	26: PH, temperature Nutrients Cations		
<i>List of the hydro-morphological parameters⁽⁷⁾</i>	2		
<i>Standard procedures for measurement and processing⁽⁸⁾</i>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Specific to the organisation <input type="checkbox"/> National	<input type="checkbox"/> No <input type="checkbox"/> Specific to the organisation <input type="checkbox"/> National	<input type="checkbox"/> No <input type="checkbox"/> Specific to the organisation <input type="checkbox"/> National

	<input type="checkbox"/> International	<input type="checkbox"/> International	<input type="checkbox"/> International
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- (1) While referring to the definitions of the WFD, please specify if it is rather an investigative monitoring network (accidental pollution), or a surveillance monitoring network (overall water status), or an operational monitoring network (pollution follow-up).
- (2) Specify whether it concerns groundwater, inland surface water, marine water, discharges, Waste Water Treatment Plant –WWTP- or other.
- (3) Specify whether it is a public or private operator.
- (4) Cross out the useless mention(s). International reporting requires the geographical referencing of stations (referencing = availability of the geographical co-ordinates of the stations) and their integration into a GIS (yes or not).
- (5) A station means a measurement point precisely located and identified as such in a network. The measurement method can either be automatic (fixed measurement stations), or by hand (manual samplings and analyses).
- (6) Biological parameters: bacteriology, composition, abundance and biomass of the phytoplankton, aquatic flora, benthic invertebrate fauna, fish fauna ...
- (7) Hydro-morphological parameters: hydrological regime (water flow quantity and dynamics, residence time,...), morphological conditions (variations in depth and width, structure and substrate,...)...
- (8) Please indicate if data collection (measurements, selection and transport of the samples, analyses) is made using standard procedures or not and at which level they are defined.

Q2.2 Monitored environments: please complete the table hereafter

Type of environment	Monitoring ⁽¹⁾	Coverage ⁽²⁾ in %	Network ⁽³⁾	Use ⁽⁴⁾
Groundwater	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> (√)	-	MWRI Monitoring (Overall Status)	Drinking and Irrigation
River	<input type="checkbox"/> Yes √ <input type="checkbox"/> No	100% (Nile +	MWRI Monitoring (Overall Status)	Irrigation , Drinking, Industrials and navigation,
Wetlands	<input type="checkbox"/> Yes √ <input type="checkbox"/> No		EEAA	Aquaculture
Lakes (natural and dam- reservoirs)	<input type="checkbox"/> Yes √ <input type="checkbox"/> No		EEAA	Fish , aquaculture
Coastal water	<input type="checkbox"/> Yes √ <input type="checkbox"/> No		EEAA	Fish

(1) Specify whether this type of environment is monitored or not.

(2) Specify the percentage of the resource which is being monitored as compared to the total national resource considered.

(3) Use the identifying code (R1, R2...) mentioned in the Q.2.1 table.

(4) Specify the water use(s): drinking water, bathing water, irrigation, energy, nature conservation, transport,...

Q.2.3 What are the main constraints and stakes which led to the implementation of networks?

<i>Nature of the constraints and stakes</i>	<i>Network (identifying code)⁽¹⁾</i>
Resource scarcity	NAWQM (MWRI) – R1-
Nature conservation (protected habitats)	
Public health	Ministry of Health and population –R2-
Tourism	
Risk prevention (alarm)	
Transboundary conventions	Nile Basin network
International conventions	
Others (specify)	

(1) Specify the network(s) which prioritizes the mentioned constraint or stake. The same network may be used for several constraints or stakes, in which case, it may be mentioned several times in the table.

Q2.4 The WFD insists on the importance of establishing a link between the pressures exerted on the environment and the quality of the latter (pressure - impact relationship). This requires the availability of **inventories** (or land registers) for **urban and industrial discharges**, coming from **wastewater treatment plants**, and related to agriculture. Are there such inventories?

- Yes ✓
- No

If yes, for which types of discharges and are they regularly updated, and are they mapped (GIS)?

Domestic, industrial and agricultural discharge

...They have not been mapped yet.....

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3rd section: data processing and dissemination

Q3.1 Is there a centralised collection and information system?

- Yes
- No ✓

Q3.2 Are collected data validated?

- Yes ✓
- no

If yes, what are the methods used for validation?

.....
.....*Statistical*.....

Q3.3 Data storage/processing:

Under which (electronic, paper) formats are data stored?

- Paper
- Electronic ✓

If databases are computerised, what are the software programs used?

.....
.....*Microsoft Access*.....

Are data integrated into a GIS?

- Yes
- No ✓

What are the formats used for data storage (please provide the data structure separately, whenever possible)?

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Are data accessible on the Internet?

- Yes
- No ✓

If yes, provide the address:

Achievements from the protection of the water environment from pollution by the EEA are available at:

<http://www.eea.gov.eg/english/main/accomp3.asp>

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Q3.4 Data dissemination:

Are data disseminated?

- No
- Yes, specify:√

To whom?	Dissemination method?	How is the dissemination implemented?	What is the frequency used for dissemination?	Is data dissemination following a particular agreement protocol?
Public	<input type="checkbox"/> Upon request <input type="checkbox"/> Free <input type="checkbox"/> Other (specify):	<input type="checkbox"/> Web site <input type="checkbox"/> Through publications (bulletins), <input type="checkbox"/> Through the medias <input type="checkbox"/> By computer file	<input type="checkbox"/> Monthly <input type="checkbox"/> Half-yearly <input type="checkbox"/> Yearly <input type="checkbox"/> Other (specify)	<input type="checkbox"/> No <input type="checkbox"/> Yes, specify
Politicians √	<input checked="" type="checkbox"/> Upon request √ :	<input checked="" type="checkbox"/> Through √ <input checked="" type="checkbox"/> publications (bulletins),	<input checked="" type="checkbox"/> Yearly√	<input type="checkbox"/> No√
Universities	<input type="checkbox"/> Upon request <input type="checkbox"/> Free <input type="checkbox"/> Other (specify):	<input type="checkbox"/> Web site <input type="checkbox"/> Through publications (bulletins), <input type="checkbox"/> Through the medias <input type="checkbox"/> By computer file	<input type="checkbox"/> Monthly <input type="checkbox"/> Half-yearly <input type="checkbox"/> Yearly <input type="checkbox"/> Other (specify)	<input type="checkbox"/> No <input type="checkbox"/> Yes, specify
Others Ministry of Environmental affairs	<input checked="" type="checkbox"/> Upon request√	<input type="checkbox"/> Web site <input type="checkbox"/> Through publications (bulletins), <input type="checkbox"/> Through the medias <input type="checkbox"/> By computer file√	<input type="checkbox"/> Yearly √ <input type="checkbox"/> Other (specify)	<input checked="" type="checkbox"/> No √ <input type="checkbox"/> Yes, specify

Q3.5 Are data used for modelling or simulation?

- No ✓
- Yes, specify:

What are the objectives?

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What are the software programs used?

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What are the organisations in charge of this modelling?

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Q3.6 Are data used for reporting at the international level (conventions, agreements, etc.)?

- No ✓
- Yes, specify:

Who takes care of this reporting?

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