

**MEMORANDUM OF UNDERSTANDING
FOR
THE NATIONAL WATER INFORMATION SYSTEM OF LEBANON**

BETWEEN:

This Memorandum of Understanding (MOU) is entered into by the Ministry of Energy and Water

Hereafter the First Party

and the XXXXXX

<LRA / NLWE / BWE / SLWE / BMLWE / CDR / MoA / LARI / DGCA / MoE /

Hereafter the Second Party

This MOU provides the foundations for a cooperative relationship purpose between the two parties.

INTRODUCTION:

Lebanon's water sector faces several challenges including risk of water scarcity due to limited resources and an increasing water demand caused by population growth, urbanization, agricultural activities, water pollution, and the projected impact of climate change. Furthermore, pressure on water resources is aggravated by almost 1.1 million Syrians taking refuge in Lebanon. To meet these different challenges, effective and efficient management of water resources across all sectors, at all levels of administration, is imperative for future sustainable development, and to ensure that water resources are protected and safely used.

In response to this and other challenges facing Lebanon, a National Water Strategy was approved in 2012 as a vision guiding Lebanon's future developments in the water sector. Creating a National Water Information System is a core part of Lebanon water vision 2025/2035. It will improve the management of water information and empower government organizations to benefit from using national water data as an integral part of their day to day business.

Over the last decade, several studies covering the water sector were performed by Governmental Institution (Ministry of Energy and Water, Ministry of Agriculture, Ministry of Environment, the four Water establishments, Council for Development and Reconstruction, Litani River Authority, Institute of Meteorology, National Council for Scientific Research, Lebanese Agricultural Research Institute, Directorate of Geographical Affairs and National Statistical Institute), private consultancy firms, universities and research institutes and international donors through bilateral aids. Unfortunately, all the information generated remains scattered and eventually unavailable to support the decision making for all the water related issues.

The water law of Lebanon (Law 221) assigns to the Ministry of Energy and Water, the responsibility for the NWIS (Article 2: *"Collecting, controlling, monitoring, establishing, studying water resources statistics and evaluate water demands and water availability in all Lebanese regions"*)

Other Lebanese organisations are producing information relevant to Integrated Water Resources Management or have a legitimate interest in water information. In accordance with the Access Right

to Information Law 28 dated 10/02/2017, the government therefore has a responsibility to facilitate access to information in a timely manner.

The Presidency of Lebanon declared its interest on establishing the Information and Training Center for Water to support inter-ministerial cooperation (Press release dated 7 June 2017).

The national water information system involves a nationwide program of monitoring and data collection wherein data will be entered, updated, processed and made accessible to various users to support knowledge and decision making related to Lebanese water resources management.

The partners to this MOU are entering into an agreement in principle to support the National Water Information System through the cooperative sharing and management of data as prescribed by the Laws of Lebanon.

ARTICLE (1): REFERENCE TO THIS MOU

This MOU is called (Memorandum of Understanding between the First Party and Second Party) and shall be effective once signed between both parties

ARTICLE (2): REFERENCES

The introduction of this MOU and any other annexes and tables agreed upon between the two parties is considered part of the MOU and shall be read as one unit

ARTICLE (3): TERMS AND DEFINITIONS

The abbreviations and capitalized words and phrases used in this MOU shall have the following meanings:

- MOU: Memorandum of Understanding
- NWIS Framework: is a set of principles, standards, guidelines and procedures that will lead to a system (in the widest sense) which will, over time, cover all of the stakeholders needs for water-related information and decision making in Lebanon.
- NWIS: National Water Information System: It is not a single computer system or application, it is a number of computer systems or applications, each with their own users, data and functionalities, that should work together within a specific set of standards and agreements.
- Partner: Any of the organizations which sign and join this MOU
- Stakeholders: is any governmental organization, non-governmental organization, business or private person that will benefit from and/or has interest in NWIS.
- Strategic Management Committee (SMC): formed from top decision makers of all the Partners which are part of the NWIS.
- Technical Coordination Committee (TCC): formed from the nominated staff from all the Partners.
- Technical Secretariat: formed by a technical team of the MEW or a specialized entity working under its mandate

ARTICLE (4): THE PURPOSES AND GOALS OF THIS MOU

The overall purpose of this MOU is to establish and operate the NWIS so that all partners may benefit from access to and use of the NWIS data provided by all partners. The specific objectives include the following:

- 4.1 To develop the NWIS with the following characteristics:
- Efficient and economical to operate and maintain
 - Reduced duplication with other data management programs
 - Integrate water data available from each partner
 - Ensuring data access for mandatory reporting requirements of Lebanese government at national and international levels
 - Be secure and stable
 - Be available to authorized partners, other public agencies and legislators via secure access over the internet
 - Protect confidentiality of personal information to ensure the safety of each Partner's employees.
- 4.2 To satisfy the data needs of the Partners by employing modern technology/instruments and making them available at all parties in the best possible way.
- 4.3 To outline and provide training to NWIS partners on the NWIS operating procedures.
- 4.4 To define the roles and responsibilities of each Partner in data provision and system administration.
- 4.5 To create a comprehensive set of interoperable databases inclusive of all water related information in Lebanon.
- 4.6 To share water information amongst Partners that will assist each other in performing its mandates in a more efficient and effective way.
- 4.7 To provide water information indicators and maps for the decision makers and the public
- 4.8 To provide the needed information to prepare annual water reports, including calculation of the yearly water balance
- 4.9 To provide knowledge inside and outside the water sector organizations
- 4.10 To support activities for the continuous development of NWIS.
- 4.11 To work on improving the quality of water data to feed the NWIS

ARTICLE (5): ROLES AND RESPONSIBILITIES

5.1. The Strategic Management Committee

5.1.1 The Strategic Management Committee (SMC) is chaired by the Ministry in charge of water or its deputy representative

5.1.2 The SMC oversees the needs of the NWIS development and operation. It undertakes the following tasks:

- Supervise the development of NWIS
- Strategic planning for the NWIS
- Development and maintenance of the project vision, mission, goals and policies
- Approval of the annual budget and report of the (TCC)

- Monitor effectiveness of NWIS
- Communication with all partners
- Request technical and financial support from relevant parties

5.1.3 The SC convenes upon the invitation of its chairperson or his deputy during his absence, at least once year.

5.2 The Technical Coordination Committee (TCC)

5.2 The TCC is chaired by the Water Director

5.2.2 The TCC undertakes the following tasks:

- Maintain, apply and continually improve the NWIS Framework; its architecture, principles, standards and procedures.
- Monitor the development and operation of new information systems, or alterations to existing systems, which are associated with the NWIS Framework.
- Prepare a yearly plan of activities for the continuous development of NWIS and submit it to the Steering Committee for approval. The plan shall identify new information needs, a plan for collecting missing data, a plan for improving quality of data collected; a plan for improving NWIS framework and related systems; plans and proposals for training of Partner staff; and a plan for procurement of new equipment and services
- Validate the launch of the thematic working groups formed by partners, and oversee their activities.

5.2.3 The TCC convenes upon the invitation of its chairperson or his deputy during his absence, at least twice a year.

5.3 The partners

- Cooperate in the definition of the working procedures of the NWIS framework, in particular through the participation in thematic working groups
- Apply the NWIS Framework, its architecture, principles, standards and procedures
- Declare all datasets produced, databases and tools managed with their characteristics (nature, geographic coverage, etc.) into the NWIS metadata catalogue
- Collect, validate and make accessible water related data into NWIS that is correct, accurate, complete, and entered on time and work on improving the related processes.
- Share procurement tender information that has a potential impact on the goals and purposes of the NWIS framework.
- Participate and cooperate in conducting studies and monitoring programs validated by the TCC.
- Participate in preparing the technical specifications for the instruments required for the monitoring of the water parameters.
- Designate a principal contact who shall support the implementation of this MOU between, and provide the name and contact information to SMC
- Comply with the rules of ethic (article 6).

5.4 The Technical Secretariat

5.4.1 Support the daily operation of the NWIS program including but not limited to the following:

- Manage and administrate the NWIS platform and associated databases to ensure interoperability.
- Manage and administrate the NWIS Metadata Catalogue and guard its content and metadata quality.
- Support the activities of thematic working groups to deliver guidelines and procedures of the NWIS framework to standardize and harmonize the data
- Provide secretariat services to the SMC and TCC
- Arrange support for other Partner database administrators and to help them fulfill their NWIS duties and obligations, including the continuity of the data flow from partner data resources to NWIS
- Define and ensure data quality, data validation, and data integrity and consistency with related systems.
- Maintain the security of data and ensure the copy rights and rules of access of stored information.

5.5 NWIS users

The NWIS stakeholders and the public can use the data under their own responsibility. The responsibility of the NWIS partners could be involved in the sole case of their gross negligence and will only include direct damage.

ARTICLE (6): ETHIC RULES

6.1 Each partner recognises the essential role of the data producers and commits itself:

- to indicate the status and/or the validation level of the data and their qualification,
- not to modify any data without the producer's agreement, as the latter is the only one empowered to do so,
- to quote the data producer in any transmission of data, except when the aggregation level makes this information irrelevant,
- to incite the users to contact the producers for any specific interpretation or doubt on the data value,
- to inform the producers of any discrepancy in their data which it could have any knowledge of,
- not to process the data of another Partner for which the latter is clearly responsible,
- to inform the Partners of any publication of their data, and to check with them that it does not make a reading, which could be conflicting with the one that is under their responsibility.

6.2 The elementary data of the WIS are intended to be made available to everyone, free of charge, except for:

- data, the confidentiality of which is protected by regulations,
- restrictions provided for in laws and international conventions,
- data for which the NWIS has only a restricted dissemination right.

6.3 Data re-use and re-dissemination are free, provided that the user mentions the data origin.

6.4 The commercial use of the data is only authorised when it brings significant added value.

ARTICLE (7): TERM, GENERAL PROVISIONS

7.1 Term: The term of this MOU is indefinite as the NWIS is expected to be an ongoing initiative.

7.2 Commencement: This MOU commences on the date of the endorsement by the respective partners and remains into force until amended or replaced.

7.3 Amendments: The revision and amendment of this MOU is done every two years or at any time when needed upon approval of the SMC

7.4 New Partners: New partners can participate in this MOU as it is anticipated that there is potential need for future agreements with other organizations to be part of this MOU to further improve the NWIS.

7.5 Dispute resolution clause: In the case of disputes, the parties to the agreement will share their respective positions in letters tabled at the SMC, and shall demonstrate consideration of alternative positions of the other parties. Each party shall retain full control over the data under its jurisdiction is used.

7.6 A partner can decide to terminate its commitment to this MOU by sending a written notice 6 months in advance. In this case, the partner has to abandon to the NWIS, without any time limit.

ARTICLE (8): SIGNATURES

This Memorandum of Understanding is made between the following Partners on the date of _____, and shall supersede any other Memorandums of Understanding or agreements between the Partners.

One of the following partners:

- The Ministry of Energy and Water
- xxxxxxx