

Agreement # 1
Terms of Reference
For the Monitoring and Exchange of Groundwater Information
of the Nubian Sandstone Aquifer System

Consolidated data throughout the implementation of the “Programme for the Development of a Regional Strategy for the Utilisation of the Nubian Sandstone Aquifer System” was achieved through a Regional Information System called the Nubian Aquifer Regional Information System (NARIS). This integrated Information System is conceived to fulfill the following tasks:

- Storing and documenting the different data, covering all fields relevant to the Nubian Sandstone Aquifer System.
- Processing, analysis and display of basic data.
- Preparing the input parameters which are needed for the modeling at different scales, and calibration of the groundwater model and comparison of the results of modeling with other data for planning and decision making.
- Provide an easy link between the participating countries through a system ensuring the exchange and flow of information.

Therefore it is herewith agreed that the four countries namely; Chad, Egypt, Libya and Sudan share the data that was consolidated throughout the implementation of the Programme mentioned above and included in the Nubian Aquifer Regional Information System (NARIS) in addition to information on developmental aspects including socio-economic data, management of harsh environment, drilling experiences, meteorological data, .. etc. and also agreed to update this system as specified in Agreement #2.

The sharing of this information will be accomplished according to the setup specified below;

Internet Environment – Server and access through the Internet.

In this protocol the data will be stored on a server and accessed through internet by the four countries through web-based Oracle. A level of security is maintained in this technique, so that access is enabled only to the four countries.

Requirements:

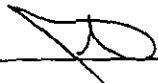
Unix Workstation (Server)
Oracle Engine, Developer Server and Oracle Web Server
Lease Line

Regional Data Exchange

Data is shared and accessed by the four countries only. Any update by one of the four institutions will be online viewed by the other parties.

Within this mechanism, CEDARE could be hosting the data on its server for one year as a testing and transition phase, at a certain annual cost which will include all the technical support for running the System on its workstation, Software and Hardware maintenance, and Internet leased line. After this first year, the same setup could be founded in the Joint Authority of the NSAS.

Dr. Omar Salem



Date: 5/10/2001

Director, General Water Authority,
Libya.

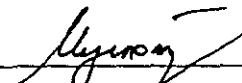
Dr. Taher Hassan



Date: 5/10/2000

Research Institute for
Groundwater,
Egypt

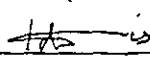
Mr. Moussa Terap



Date: 05 October 2000

Directeur de l'Hydraulique,
Chad

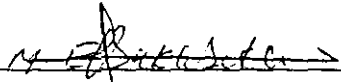
Dr. Idris Mohamed Idris



Date: 05 October 2000

Director, Groundwater and Wadis
Directorate,
Sudan

Dr. Mohamed Bakhbakhi



Date: 5/10/2000

Regional Coordinator,
NSAS Programme,
CEDARE.