



- EMWIS-

EURO-MEDITERRANEAN INFORMATION SYSTEM ON KNOW-HOW IN THE WATER SECTOR

INFORMATION AND TRAINING SEMINAR ON THE COMMUNICATION NETWORK

CONCLUSIONS

The first seminar for the Information and Communication Technology (ICT) experts of the EMWIS National Focal Points (NFP) was held in Rome from 22nd to 26th May.

This one-week seminar aimed to:

- Present technical options chosen for the communication network;
- Validate the hardware and software recommendations;
- Standardize technical means of communication (Extranet, E-Mail, Videoconference);
- Present and validate the NFP website architecture and design;
- Provide additional technical training according to needs identified during the study;
- Discuss possible implementation difficulties in each country;
- Organize the following phase: the setting-up of connections and equipment of each NFP.

15 countries of the Euro-Mediterranean partnership delegated ICT experts from their National Focal Points (Algeria, Cyprus, Egypt, France, Greece, Israel, Italy, Jordan, Lebanon, Malta, Morocco, Palestinian T.O., Spain, Tunisia and Turkey).

The seminar was open by a welcome message of the EMWIS Steering Committee's President, Mr. Mazzitti. The first part of the seminar provided background information to ensure that all participants have enough knowledge to benefit from the various sessions:

- A review of EMWIS history and progress;
- A presentation of the seminar and its objectives;
- A review of Internet basic concepts.

This introductory session was followed by a presentation of the results of the survey on NFP's computer, software and network environment. Out of 20 questionnaires sent, 15 replies have been received corresponding to the 15 countries represented at the seminar. The results and conclusions of this survey will be presented in a report that will be available on the EMWIS website.

The following session was dedicated to the presentation by the Technical Unit (TU) of a technical architecture. This architecture is based on the following principles :

- ability to implement the EMWIS thematic services (Institutions, Documentation, Training, Research programmes, Data administration) but also the horizontal services (Mailing lists, Thematic forums, News and events, Information pushing, National water web portal) ;
- interoperability of each NFP information system ;
- open architecture based on recognised standards allowing each NFP to choose specific products.

The seminar also included a presentation of Oracle Internet platform, a Relational Data Base Management System (R-DBMS) that could be used by EMWIS NFP.

During the session dedicated to existing information systems within NFP, two countries briefly presented their systems:

- The content and the technical architecture of the Spanish NFP website;
- The websites managed by the French NFP.

Based on these presentations and following an in depth discussion, it was agreed that:

- NFP servers will only give access to national information;
- Access to NFP servers will be possible in at least 2 languages: the national language and English or French. Of course the content of the NFP web site will remain in the National language, parts to be translated will be identified by the data managers.
- The TU server will enable searches in all the NFP's servers in French and in English;
- Collaborative work among NFP will be done using the following tools:
 - o Microsoft Word and Excel version 97 or newer (format 97 used to exchange files)
 - o Microsoft Front Page 2000
 - o WinZip (for file compression)
 - o Microsoft NetMeeting version 2 or newer for technical assistance and online meetings.
- NFP servers will be based on the open architecture presented figure 1.

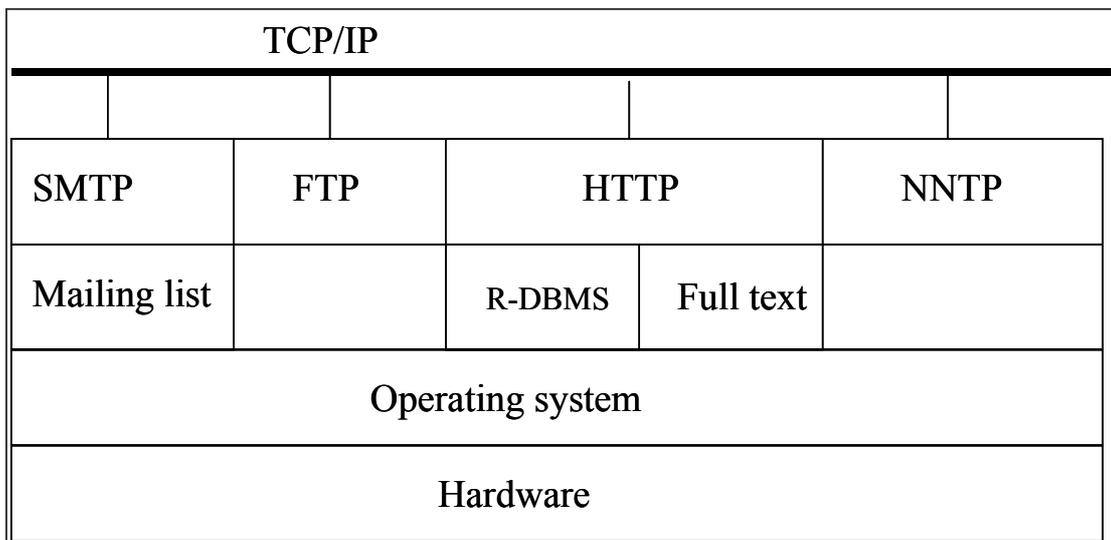


Figure 1: Technical architecture of an EMWIS server

When share-ware products will be used, the TU will try to negotiate a specific licence agreement for the use of these products by EMWIS NFP.

The products used by the Technical Unit to implement this architecture are described figure 2. It has been reminded that the TU will only be able to provide support to the NFP who will be using the same products. In the other cases, the TU support will be limited to technical specifications (e.g. database structure and dictionaries, interfaces).

TCP/IP				
SMTP	FTP	HTTP		NNTP
Microsoft Internet Information Server 4				
Mailing list		R-DBMS Oracle 8i	Full text search	
Operating system MS-Windows NT4				
Hardware INTEL PIII XEON 500				
Scripting language: JAVA				

Figure 2: Products selected by the Technical Unit

All the NFP agreed to use MS-Windows NT and MS-IIS as technological platform to set up their web site. The choice of Oracle 8i was agreed by 12 out of the 15 NFP represented. These choices will allow direct transfer of know-how and applications from the TU to the NFP, allowing them to limit the resources necessary for the implementation of an EMWIS server. In addition most of the NFP are already using or are planning to use an Oracle database for other applications. So the competences gained in setting up the EMWIS web site will be beneficial for other purposes.

But for most of the Med partners represented, it will not be possible to implement an EMWIS server within the planned timeframe due the time necessary to be trained. Therefore, the NFP asked the TU to prepare a specific training course related to the implementation of Oracle8i in the framework of an EMWIS server. This will require a modification of the TU planning and therefore the approval of the Steering Committee.

The average costs (based on public prices in France included taxes) of the recommended products are:

- o operating system, MS-Windows NT (including IIS): 1 000 Euro
- o Relational Data Base System, Oracle 8i: 8 500 Euro
- o Optional tool for fast prototyping and web based administration, Web DB: 2 800 Euro
- o Search tool (not yet define), price ranging from 0 to 50 000 Euro

The participants were reminded that when the countries committed themselves to the creation of their NFP, they also committed themselves to their financing. The average costs (investment and running) is about 100 000 Euro for the 3 years. This does not include staff and data collection.

Most of the Med partners underlined the lack of budget to build and maintain their server. The NFP asked the EMWIS Steering Committee to help them to find more support nationally and internationally (contacts with National decision makers, international funds, sponsors, etc.). The organisation of regional seminars to raise awareness among decision makers is also seen a positive tool to obtain more support.

For the network architecture, it has been recommended to the NFP from the EU, Cyprus and Israel to connect their server to their National Research Network which are all interconnected through TEN155. Indeed, the study confirmed that this network is providing the quality of service necessary to implement EMWIS. For the other Med countries, the European Commission (EC), through the EUMEDIS programme, intends to support the interconnection of national networks with TEN155. But the implementation calendar and the partners are not yet defined. To try to speed up this process the TU will inform the EUMEDIS¹ focal points about EMWIS. A political support from the EMWIS Steering Committee is also recommended.

The following steps have been agreed for the implementation:

- Set up of NFP websites using existing resources (hardware and content) following a coherent EMWIS design (i.e. the style used on the TU website). This can be limited to an home page, a few descriptive pages and a link to the TU web site;
- Preparation of (static) content on the basis of the results of the Madrid seminar;
- Setting up of the "Yellow pages". For those who cannot yet implement their final database (e.g. Oracle), it has been recommended to work with MS-Access in a first stage. MS-Access development will be done in a collaborative way by the NFP and coordinated by the TU, using an electronic forum on EMWIS website. Thus the efforts necessary will be limited while giving a good example of sharing knowledge;
- Starting data collection and entry in the data base (final or provisional one);
- After the training seminar on Oracle/EMWIS server implementation (that should take place by the end of the year), the NFP will then be able to implement the products recommended above and transfer the data collected.

Finally, the NFP asked the TU to work with a professional designer to improve the design of EMWIS website while taking into consideration the specificities of the various national languages and the cultural diversity of member countries.

---====000O000====---

¹ EUMEDIS is a regional MEDA project for the development of the Euro-Mediterranean Information Society. This initiative is part of the Euro-Mediterranean Information Society Action Plan (<http://www.ispo.cec.be/eumedis/Welcome.htm>)