



Fondation Partager le Savoir  
Sharing Knowledge Foundation

## e-Infrastructures in the Arab Countries

Knowledge Sharing Across the Mediterranean

*Dead Sea, Jordan 1-3 March 2009*

*Yousef Torman  
Executive Director  
Jordanian Universities Network*



## National Efforts (*Jordan*)

- **The Jordanian National Broadband Network NBN is a national program to use dark fiber to connect around 3200 schools, 10 Universities and around 110 Public Access Sites**
- **The Jordanian Universities Network (JUNet) is the official NREN of Jordan, currently connecting 11 Universities via optical fiber, with 1Gbps per University**
- **14 Private Universities and 6 research institutes will be connected to JUNet this year**
- **JUNet is the Jordanian partner for EUMEDCONNECT and EUMEDGRID and other regional cooperation projects**
- **JUNet is working on promoting the technology for research and collaborative research.**



# National Efforts (Arab Countries)

- **Morocco: MARWAN**
- **Algeria: ARN**
- **Tunisia: KCC**
- **Egypt: EUN**
- **Jordan: JUNet**
  
- **Saudi Arabia: KASCT & KAUST**
- **Palestine: PADI 2**
- **Syria: HIAST, SHREN**
- **UAE: ANKABUT**
- **Qatar: Qatar Foundation**



# Regional Effort: PAN Arab Research Network

- In 2005, and based on Jordan's Experience with JUNet, The Ministry of ICT of Jordan initiated a project to study the feasibility of using the optical fiber of the power distribution grid in the Arab Countries for the purpose of building the PAN Arab Research and Education Network
- The project was funded by the Government of Jordan, Canadian International Development Agency (CIDA) and Cisco Systems
- The first phase of the feasibility study covered Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Palestine Authority, Lebanon and Syria







# Regional Effort: NAP: Arab States Network Access Point

- In line with the Global Summit on Knowledge societies, one pillar of the General Arab Strategy for Communication and Information Technology “Building an Information society 2007-2012” was:  
*“Achieving universal access and improving quality of services for the Arab citizen, utilizing information and communication technology”*
- Based on this pillar, the ITU / Arab Regional office adopted the NAP in the Arab states initiative

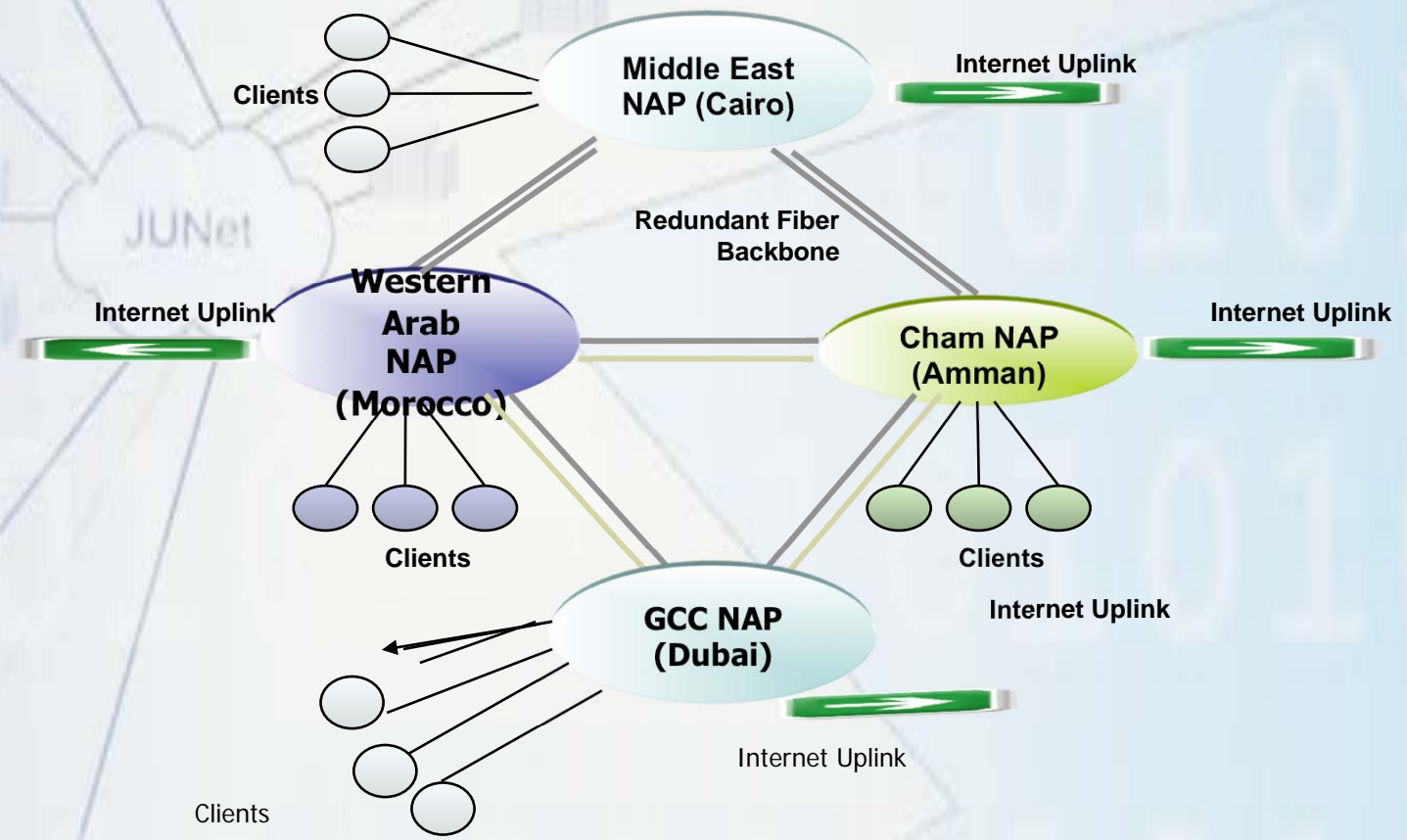


## NAP – Proposed Locations

- Western Arab NAP: located in Morocco to cover Algeria, Mauritania, Libya and Tunisia
- Middle East NAP: located in Egypt to connect Sudan, Somalia, Djibouti and Comoros.
- GCC NAP: located in Dubai to connect Kuwait , Saudi Arabia , Qatar, Oman, Bahrain, UAE and Yemen.
- Cham NAP: in located Jordan to connect Syria , Iraq, Palestine Authority and Lebanon .



# NAP: Layout





# EUMEDCONNECT

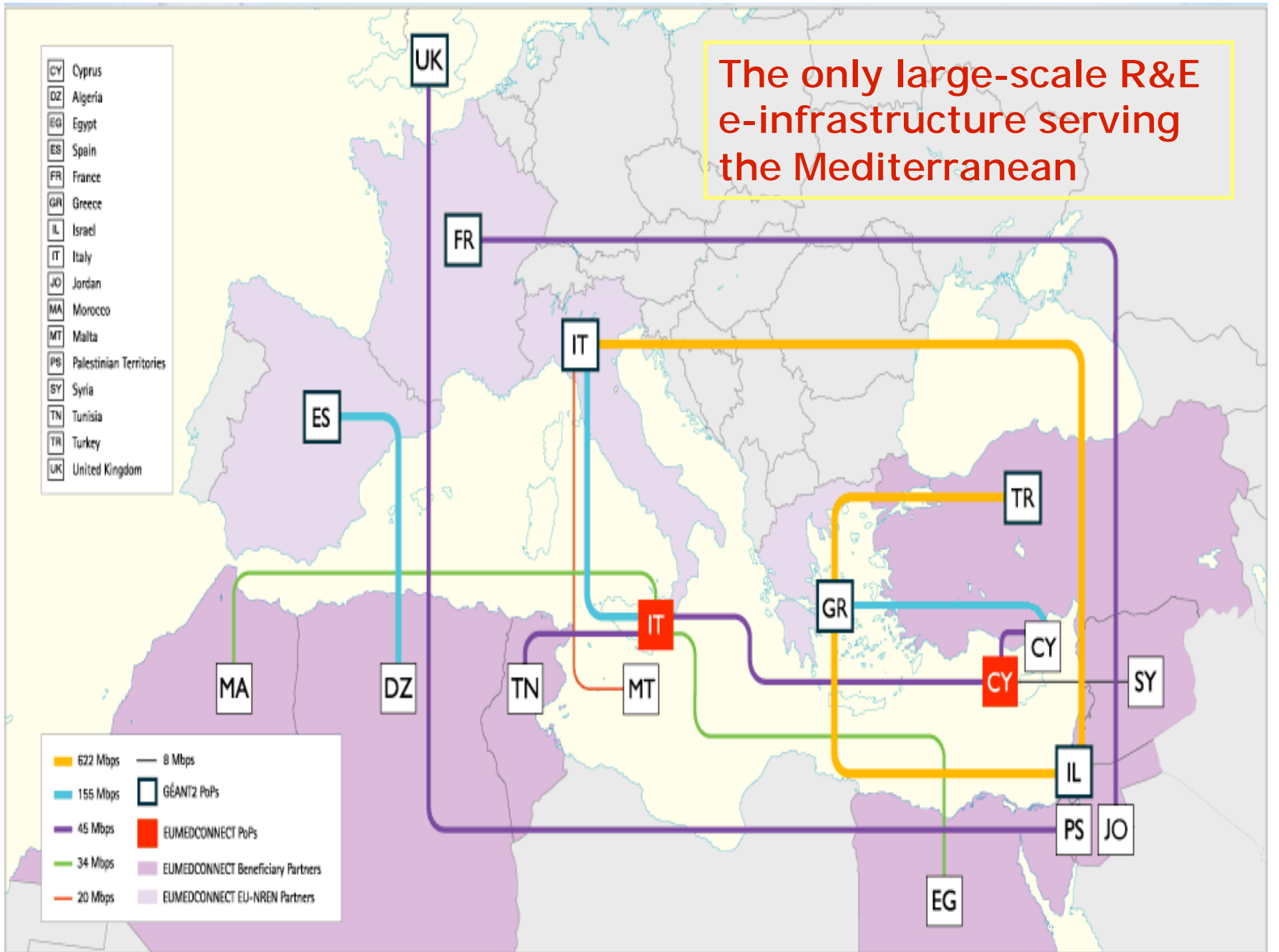


- First EC funded regional R&E project outside Europe
- 11 MED partners, 4 EU partners
- Network started 2004

The only large-scale R&E e-infrastructure serving the Mediterranean

- CY Cyprus
- DZ Algeria
- EG Egypt
- ES Spain
- FR France
- GR Greece
- IL Israel
- IT Italy
- JO Jordan
- MA Morocco
- MT Malta
- PS Palestinian Territories
- SY Syria
- TN Tunisia
- TR Turkey
- UK United Kingdom

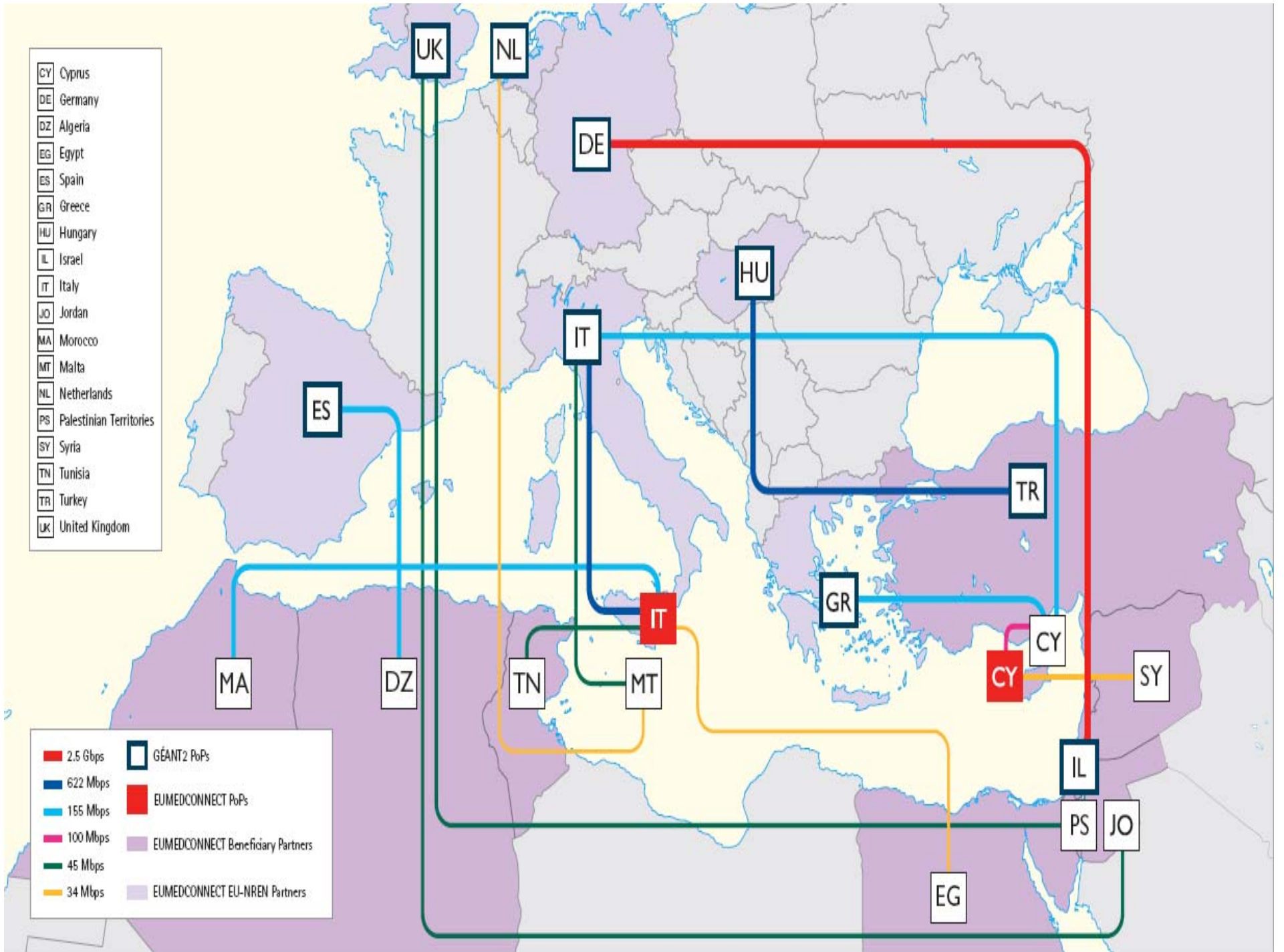
- 622 Mbps
- 155 Mbps
- 45 Mbps
- 34 Mbps
- 20 Mbps
- 8 Mbps
- GÉANT2 PoPs
- EUMEDCONNECT PoPs
- EUMEDCONNECT Beneficiary Partners
- EUMEDCONNECT EU-NREN Partners



# EUMEDCONNECT 2



- Operated by DANTE
- Built on the success of the EUMEDCONNECT
- Launched in November 2008 in Amman
- The EC contribution is 4 M Euro, and the partners contribute 50% of the cost of the connection.
- More than 2 M users in around 700 institutions are connected
- The project will last until late 2010
- Many research and education projects are using this connection
- More cooperation proposals are submitted,
- May initiatives started.





# Rome Declaration

After several meetings and discussions, the representatives of the Arab Mediterranean NRENs recognized that:

- The importance for the academic and research community in the Mediterranean region to count on **a regional infrastructure for data communication to improve cooperation in the area of academic research and investigation and education within the region and globally.**
- The importance for the academic and research community in the Mediterranean region to count on **a regional consortium to support the development and implementation of a regional infrastructure for data communication based on advanced networks.**
- The importance for the academic and research community in the Mediterranean region to count on **a regional consortium to support applications and e-services that assist research, education and learning in these countries.**

# Rome Declaration (September 2006)

Therefore the representatives of the Arab Mediterranean NRENs Declared:

- The necessity for the existence of national research and education networks
- The desire to further develop and consolidate the Mediterranean EUMEDCONNECT network .
- That it is desirable to establish a Mediterranean research and education network based on the existing research networks in several countries.
- To cooperate in the development and consolidation of national research and education networks in those countries in the Mediterranean region, where they do not yet exist or where they have recently been founded
- To create a Mediterranean coordination space for the integration and regional coordination of the national research and education networks.



إتحاد شبكات البحث العلمي والتعليم للدول العربية المتوسطة

## Consortium of Arab Mediterranean Research and Education Networks (CAMREN)

- The consortium was introduced as an action point for the Rome Declaration



# Major Obstacles ...

- Financial support
- Technical Support
- Political Support
- Applications
- Promotion
- Bureaucracy
- Monopoly
- Time...

*Note: this slide is unorganized intentionally*





# Do We Need the Network?

## Do we need more initiatives?

- These Questions were discussed again during the EUMEDCENNECT2 meeting in Cairo 27-28 January 2010.
- All agreed that we need the network and we should connect our research insitiutions across the Arab region and beyond.



# ASREN

- Arab Scientific Research and Education Network
- The idea of ASREN came out to overcome the obstacles facing the previous initiatives



# Major Tasks and Responsibilities

- To encourage and support establishing sustainable NRENs in the member countries and to help in training and developing technical capacities to operate these networks
- To build the Pan Arab Research and education network to connect the NRENs in the Arab Countries, and providing all necessary technical and financial resources needed to operate and manage this network.
- To create the Arab Research Gateway
- To make use of the scientific and technical resources around the network for the benefit of the whole users of the network.



# Major Tasks and Responsibilities

- Promoting the collaborative approach of doing research and education and to encourage the joint projects and to provide the necessary requirements for this.
- Creating the awareness across the researchers and academicians on the new technologies and developments in ICT and how can this technology help in boosting the research.
- Establishing scientific research communities and interest groups and to provide the necessary tools and services to facilitate the communications for these groups.
- Connecting the libraries and scientific databases and other data and information resources and educational contents to the network and make it available for all users on the network.





# Legal Form

- ASREN will be registered as an independent nonprofit international organization under the umbrellas of the Arab League and the United Nations
- Will be Honorary chaired by H.E. Amro Moussa, the Secretary General of the Arab League
- Will be chaired Chairman: Dr. Tala Abu Ghazaleh, Chairman of UN-GAID, Chairman, Talal Abu Ghazaleh Groups



# Membership

- The members of ASREN should consist of the NRENs of the Arab Countries or any NGO representing the research network in its country in case that country doesn't have an NREN yet.
- Nonvoting Membership is also possible for the any research institution or establishment that conducts similar activities and or donates for or promotes such kind of activities.



# Management structure

- ASREN will be managed by the following:
  - Honorary President
  - Chairman
  - Executive Director
  - Board of Directors
  - General Assembly
  - Technical board



# Funding sources

- European Commission
- Donors from the wealthy Arab Countries
- Members contribution
- Governments
- Fees for the usage of the network
- Research institutes
- Funding institutes and international and governmental bodies.
- Companies.....

**Thank You**

[yousef@junet.edu.jo](mailto:yousef@junet.edu.jo)



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