

International Research Networking

# EUMEDCONNECT2 and the eInfrastructure in the Mediterranean

Yousef Torman

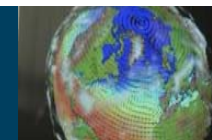
Jordanian Universities Network (JUNet)

Internet2 Middle East Regional Interest Group Meeting

Abu Dhabi, 6 April, 2009



# EUMEDCONNECT2 – In a Nutshell

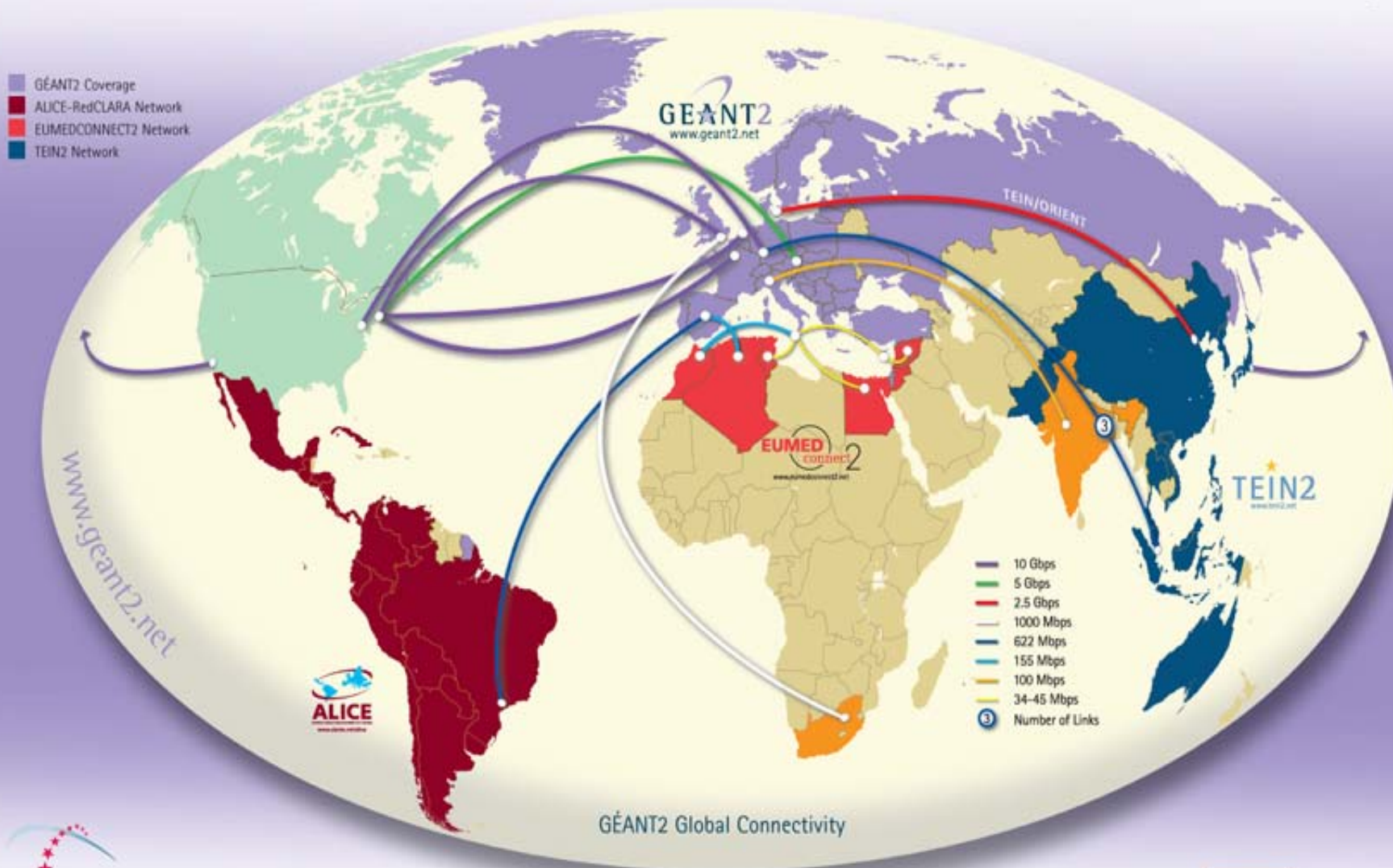


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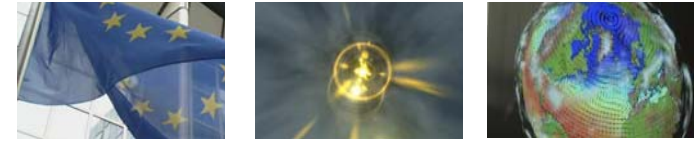
- EUMEDCONNECT2 is a Euro-Mediterranean success story
- Taking forward intra-regional R&E network in the southern rim of the Mediterranean – pioneered by EUMEDCONNECT since 2004
- Via GÉANT2, it enables EU-Med R&E collaboration
- Strengthens links between Northern Africa/Middle East and Europe
- Contributes to bridging the digital divide in the region
- Drives innovative applications with high societal impact and relevance to region (desertification mitigation, water management, telemedicine etc.)
- Fosters regional development and cohesion in the Mediterranean
- Validates EC's strategy of extending global research networking
- Prepares the ground for long-term sustainable research networking



# GEANT2 At the Heart of Global Research Networking



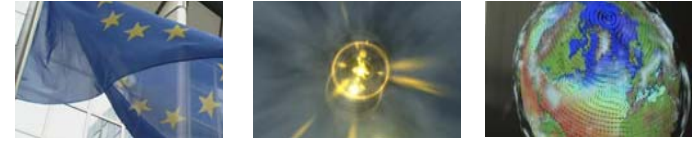




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# Connected Networks





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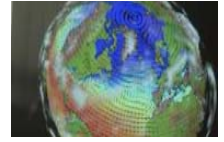
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# EUMEDCONNECT2

- Operated and managed by DANTE
- Built on the success of the EUMEDCONNECT 2004
- Launched in Nov. 2008 in Amman, it will last till late 2010
- 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
- Many research and education projects are using this network
- More cooperation proposals are being submitted and Many initiatives started.





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# Connected Projects

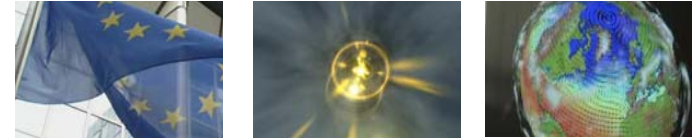
EUMEDGRID  
MedGeNet  
MOSAICS  
PROHITECH  
NEAREST  
EUMEDGRID  
NET-ADDED  
MAC-OILS  
AQUARHIZ  
PROMET  
SOWAMED  
PARASOL

YOUNG-TRAIN  
ECHINONET  
ADU-RES  
CYCLER-SUPPORT  
MELIA  
INNOVA-MED  
CIBEWU  
WATNITMED  
EU-MED AGPOL  
LEISH-MED  
DIMAS  
AQUARHIZ  
PLEIADES

WEMED  
TRITIMED  
KASSA  
PERMED  
SWAP  
OPTIWHEAT  
QUALIWATER  
ERA-MED  
IDEALIST7FP  
FOOD-N-CO  
EURO-MEDANET  
PROMEDACCESS  
MED 7

MEDINDUS  
C.H.E.R.K.  
OPTIMA  
RAMSES II  
C.H.E.R.M.  
HERMES  
DESIRE  
WADI  
SHADUF  
PAPERTECH  
MED-COLOUR-TECH  
MAP-IT!  
HYRESS

# EUMEDGRID



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- EUMEDGRID project is one of the most important achievements of EUMEDCONNECT, it provided the researchers in our region with huge distributed computing resources. It was funded by DG INFSO's FP6 programme but this funding came to end in February 2008.
- EUMEDGRID created a human network among the researchers in the partners' countries: Morocco, Algeria, Tunisia, Egypt, Jordan, Palestine, Syria, Turkey, Greece, Italy, Spain and DANTE
- EUMEDGRID2 proposal was submitted to the FP7 in March 2009.





# Social Impact

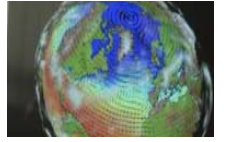
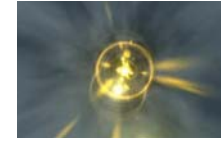


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- Many Thanks to EUMEDCONNECT For bringing researchers in the Mediterranean together and closer for the first time
- Many thanks also to EUMEDCONNECT and EUMEDGRID for bringing Mediterranean NREN Managers together and for assisting them in promoting the collaborative approach in conducting research using the research infrastructures



Please include your  
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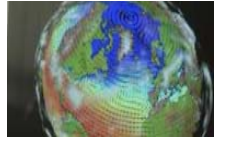
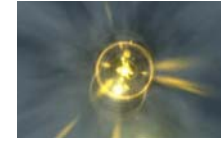
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# Efforts towards Establishing Research Networks in the Region



# National Efforts in Jordan

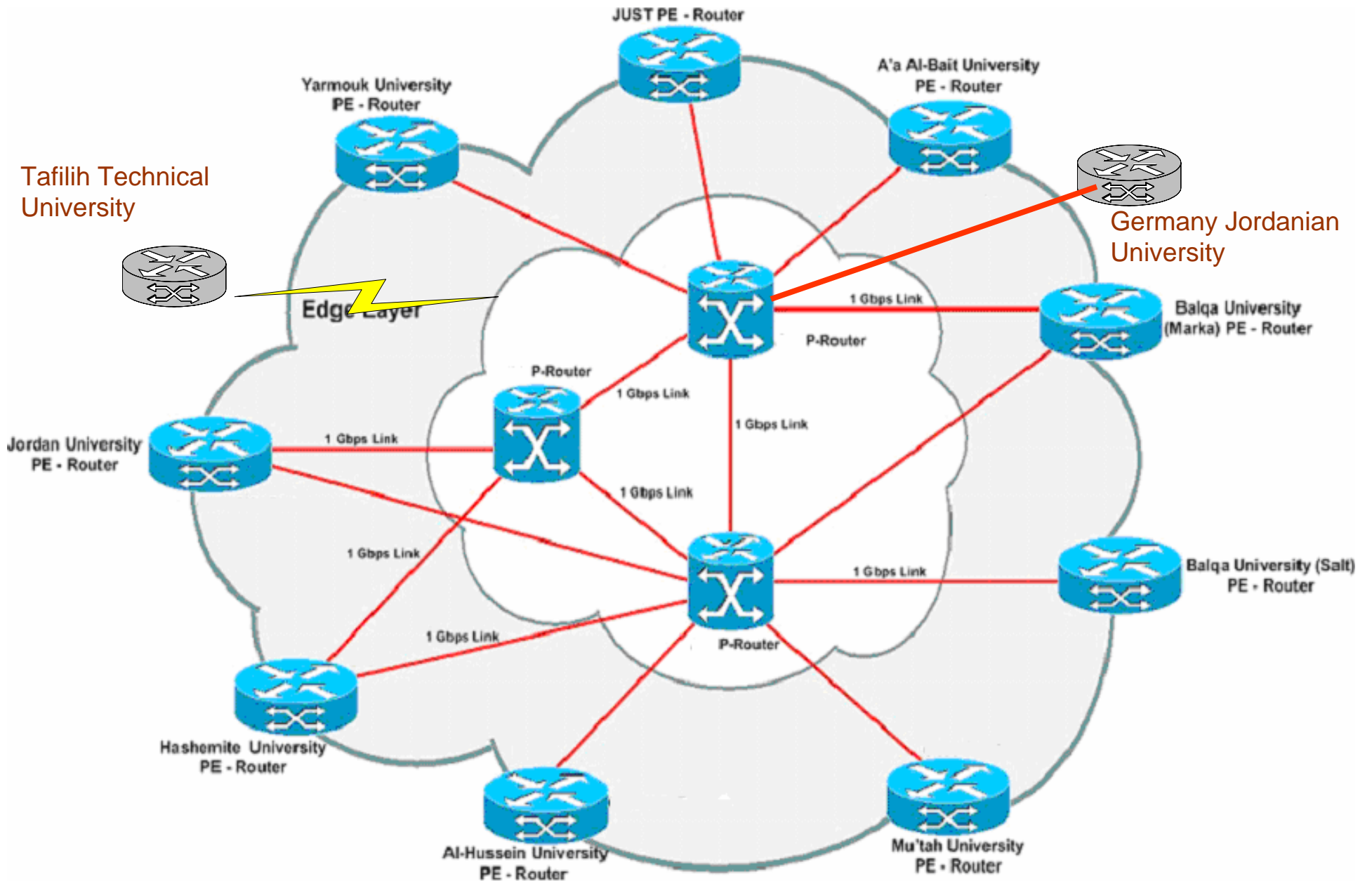


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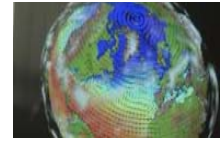
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- The Jordanian National Broadband Network NBN is a national program to use dark fiber to connect around 3200 schools, 10 Public Universities and around 110 Public Access Sites
- The Jordanian Universities Network (JUNet) is the official NREN of Jordan, 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.



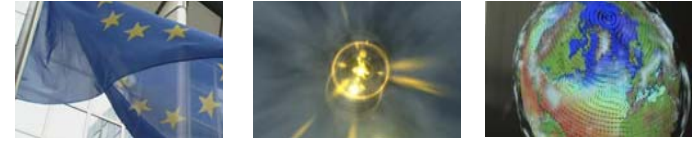
# National Efforts (Arab Mediterranean)



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Morocco	Moroccan Academic and Research Wide Area Network	MARWAN
Algeria	Algerian Academic Research Network	AARN
Egypt	Egyptian Universities Network	EUN
Palestine	Palestinian Association for the Development of Internet 2	PADI 2
Tunisia	Khawarizmi Computing Centre	KCC
Syria	Syrian Higher Education and Research Network	SHERN



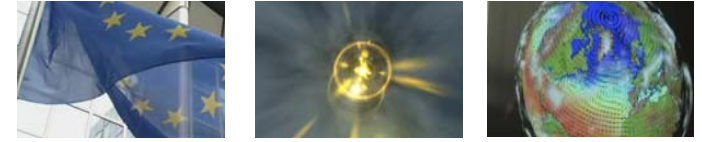


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# PAN Arab Network

- 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





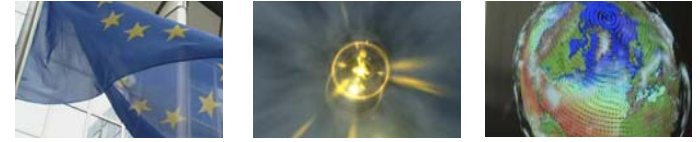
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# NAP: Arab States Network Access Point Initiative

- 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



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# NAP Proposed Locations

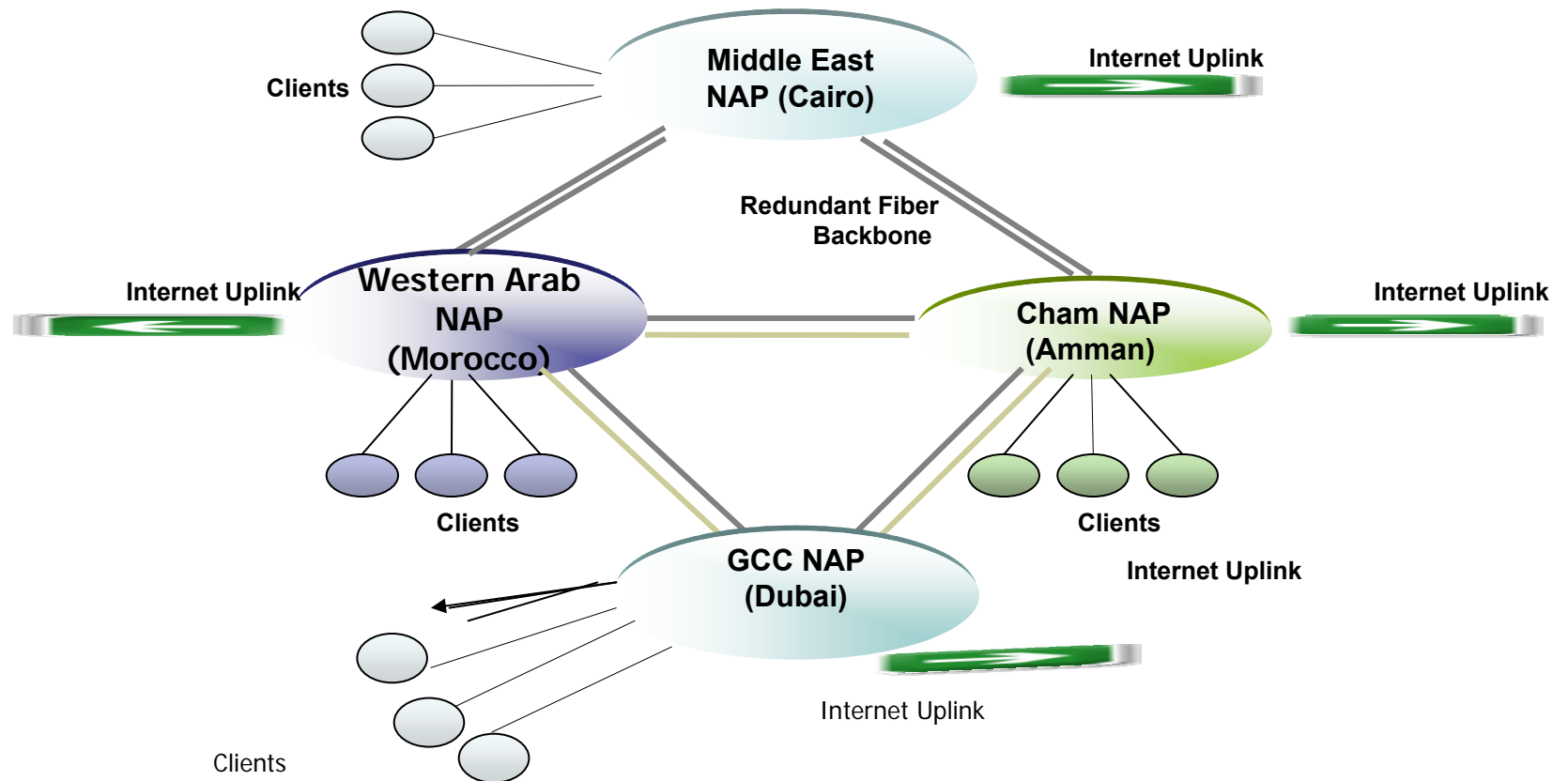
- **Western Arab NAP:** located in **Morocco** to cover Algeria, Mauritania, Libya and Tunisia
- **Middle East NAP:** located in **Egypt** to connect Sudan, Somalia, Djibouti and Comoros.
- **GCC NAP:** located in **Dubai** to connect Kuwait , Saudi Arabia , Qatar, Oman, Bahrain, UAE and Yemen.
- **Cham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



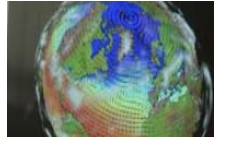


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# NAP: Layout





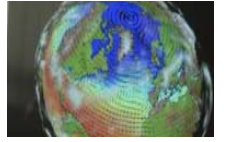
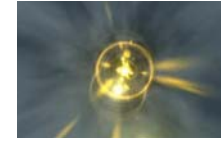


# Rome Declaration

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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

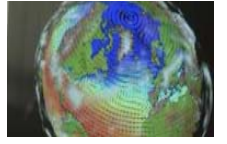
(September 2006)

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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.



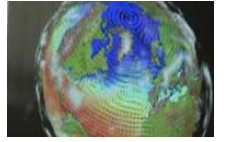


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## إتحاد شبكات البحث العلمي والتعليم للدول العربية المتوسطية

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

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



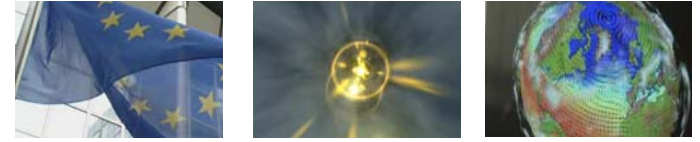
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# CAMREN

- Currently; the CAMREN proposal includes the NRENs of the following Countries:
  - Syria
  - Palestine
  - Jordan
  - Egypt
  - Algeria
  - Morocco
  - Tunisia
- Other countries are also invited



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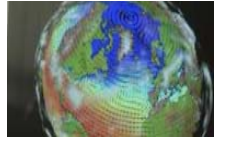
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# CAMREN, Steps...

- A consortium agreement was prepared by the directors and representatives of the NREN of these Countries. Amman was selected to host the consortium
- The agreement was forwarded to the related government bodies of these countries, and most of the countries have agreed to sign.
- Due to many changes of Ministers and officials in some countries; the signature of the consortium has been delayed and no date is currently decided
- Jordan took the initiative of writing to the Ministers of Higher Education in these countries to encourage them to take action in this regard.
- EUMEDCONNECT 2 Project offered support to establish the consortium







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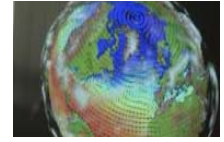
# Major Concerns, Obstacles ...

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

*Note: this slide is unorganized intentionally*

# EU-MED EVENT I

*Brussels, October 2007*



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## Royal request for time to kick-start Mediterranean e-infrastructures



- HRH Princess of Jordan Sumaya Bint Al Hassan added her voice to calls for a continuation of European funding support for vital Mediterranean e-infrastructures, during last week's EUMED Event. The event, held in Brussels 23-24 October, brought together VIP speakers and an invited audience from around Europe and the Mediterranean region.

Almost 90 politicians, network operators, users, civil servants, and managers of national research and education networks came from more than 15 countries to discuss collaborations in e-infrastructures and networking for research and education.

# EU-MED EVENT II

*Amman November 2008*

- Euro-Mediterranean policy makers renew commitment to the e-Infrastructures in the region

**EU-MED EVENT III**

**Q1: 2010**

**ALL ARE INVITED**



With the support of the European Commission



GEANT2 EUMED connect2 LINKSCEM 2008 2009

## EU-Med Event 2

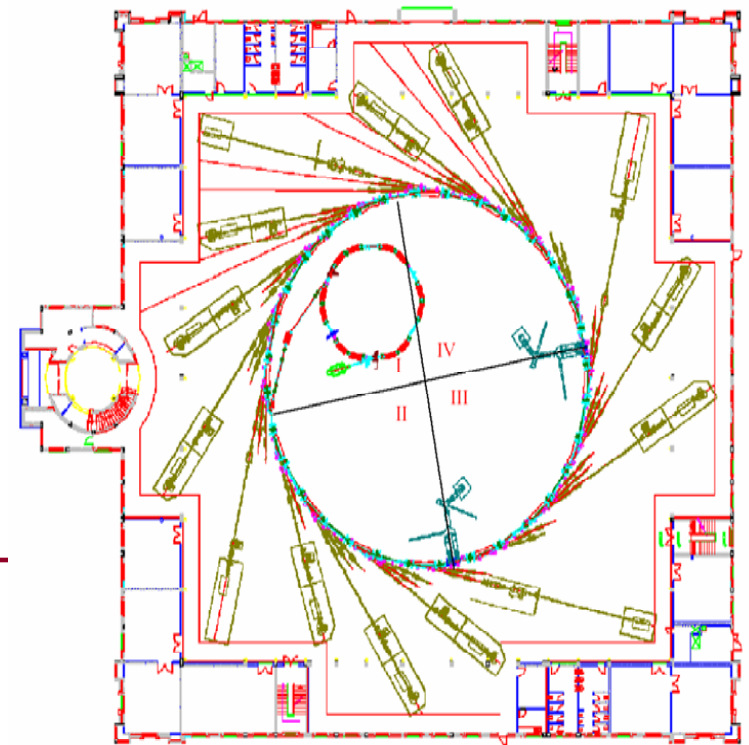
E-Infrastructures in the Mediterranean  
*Amman, 4 November 2008*

**WELCOME**

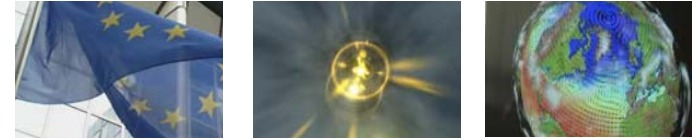


# SESAME

- Synchrotron-light for Experimental Science and Applications in the Middle East
- Member Countries include Bahrain, Cyprus, Egypt, Israel, Jordan, Pakistan, Palestinian Authority and Turkey
- Observer Countries include France, Germany, Greece, Italy, Kuwait, Portugal, Russian Federation, Sweden and UK

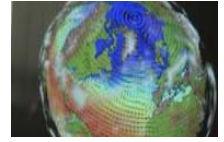






- Linking Scientific Computing in Europe and the Eastern Mediterranean (LinkSCEEM)
- The Cyprus Institute is developing a Computation-based Science and Technology Research Centre (CSTRC) that will include a high-performance computing (HPC) facility whose scale is expected to be in the tens of teraflops
- This project includes a component to conduct a study for building a high speed network to connect the East Mediterranean to this facility





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# Upcoming Activities

**TERENA Networking Conference 2009**  
**'Virtuality into Reality'**

**8 - 11 June 2009**

**Málaga, Spain**

**<http://tnc2009.terena.org/>**

***All are invited***

**EUMEDCONNECT2 Meeting**

**Málaga, Spain**

**June 10, 2009**

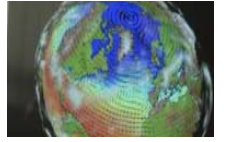
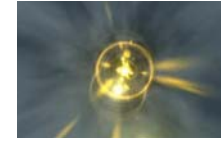
***NRENs are invited***

**EU-MED EVENT III**

**Q1: 2010**

***All are invited***





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# Thank You

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