ASREN

Arab States Research and Education Network

Summary Report

Arab States Research and Education Network

February 2011

The Arab Organization for Quality Assurance in Education

League of Arab States
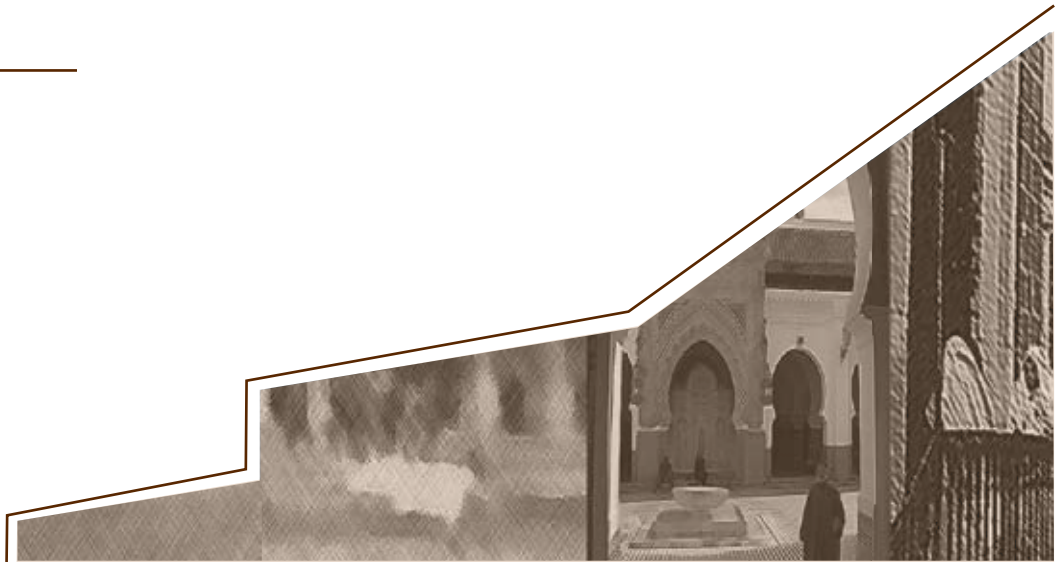
Talal Abu-Ghazaleh Organization

European Union

EUMED CONNECT 2 Project

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1. Introduction

Education and scientific research have become key elements and significant resources for economic development, technological innovation, and knowledge creation in the Arab region. The practice of scientific research is changing dramatically. Researchers working in isolation no longer contribute to technological innovations or social development. Only through multidisciplinary collaborations among research centres, industry and public entities that knowledge, innovation, and know-how can be facilitated. ICT technologies have played a major role in making such collaboration possible. The creation of an educational and research connectivity infrastructure has an amazing potential, most dramatically in its impact on enabling institution to "boot up" and join the globalizing developed world.

It has been noted that cooperation among Arab countries has been weak in scientific research. Renaissance is critically needed to meet regional challenges in areas related to education, health, environment, security, and governance. Today's research imposes new requirements not only in the way it is being conducted, but also in the computational aspects. Therefore, it has become essential to build up special dedicated network to connect research and education institutions with the purpose to:
- Widen the connectivity of National Research and Educational Networks (NRENs) into a Regional Research Networks.
- provide education/ research institutions with reliable means of communication at the regional level
- Strengthen the notion of partnership and encourage joint scientific research at all levels.
- Minimize the cost by using available research, academic and technical resources through a dedicated network with no need for duplicating investment.
- uplift efficiency and productivity and boost the concept of creativity and innovation through the use of e-infrastructure and network available resources

Therefore it has become a necessity to establish a regional network connecting existing NRENs in the Arab countries. Such a regional network still needs to be dedicated to research and education among academic institutions, research centers, and public/ private entities, respond to their demand for dedicated connectivity and centred on a necessity to:
- Establish scientific research networks at the national level NRENs in each country.
- Establish a network at the regional level linking all NRENs.
- Connect the regional network to the global scientific research networks.

2. History

The first intention of forming the Consortium of Arab Mediterranean Research and Education Networks (CAMREN) was first declared in 2006 by the 7 Arab partners of the EUMEDCONNECT project that connect over 2 million academic users and researchers in 400 research centres and educational establishments. The partner countries, Algeria, Egypt, Jordan, Morocco, Palestine, Syria, and Tunisia, are represented by their national research and education network organisations (NRENs) and co-finance the network infrastructure and management costs, a substantial investment of around 1.5 million Euros each year.

In December 2009 the idea is refined and the proposed new regional association is now the Arab States Research and Education Network (ASREN), under the patronage of the League of Arab States and the United Nations Global Alliance for ICT and Development. The lead for this has been taken by the Jordanian NREN, JUNET, and it this replaces the CAMREN proposal and enables a wider participation throughout the Arab region (U.A.E. and Qatar organisations have joined the discussion process). Since then, with the support of EUMEDCONNECT2 funded by the European Commission and managed by DANTE (UK), three strategic planning workshop have been held in Cairo (January 2010) and Brussels (March 2010) and Algiers (July 2010), to finalize all the agreements on the organisation's mission, objectives, structure and strategic plan.

A first formal announcement of the creation of ASREN was made at the EU-Med
Conference on e-Infrastructures across the Mediterranean (Event 3) on March 31st 2010 in Brussels, by Dr Talal Abu-Ghazaleh, chairman of the Global Alliance for ICT and Development of the United Nations Department of Economic and Social Affairs (UN-GAID). Since then the Talal Abu-Ghazaleh Organization (TAG-Org) has been providing key technical and financial support in addition to political lobbying for the creation of ASREN. TAG-Org is now leading the registration process of ASREN as a non-profit organization in Germany and has made all its resources available to meet the legal and financial requirements for a legally registered ASREN in Europe and operational in the Arab region. Jordanian Universities Network (JUNet) has also contributed to the process of developing ASREN.

In July 2010, His Excellency Mr. Amre Moussa, Secretary General of the League of Arab States, endorsed the creation of ASREN, and announced the formal ASREN Launching Event to be held under the League of Arab States aegis in December 2010 in Cairo, Egypt. Also several regional bodies as the League of Arab States Secretariat Department in charge of Science and Research, the Arab Education, Science, Culture Organization (ALESCO) and the Arab Union of Scientific Research Councils were invited to join ASREN. The creation process is aimed at finalizing all arrangements, the legal registration, hiring a CEO and selection of secretariat location, during a fourth strategic planning workshop in Rome in November 2010. The formal launch of ASREN took place at the League of Arab States in Cairo on December 8th 2010.

3. ASREN

Arab States Research and Education Network (ASREN) is the association of the Arab region National Research and Education Networks (NRENs) and strategic partners, that aim to implement, manage and extend sustainable Pan-Arab e-Infrastructures dedicated for the Research and Education communities and to boost scientific research and cooperation in member countries through the provision of world-class e-Infrastructures and E-services. It will be a registered, non profit, legal entity owned by the Arab National Research and Education Networks NRENs and partners.

3.1 Vision

Pan-Arab collaborative research and education projects and activities, contribute to boost the scientific research, innovation and education levels in the Arab countries by uplifting efficiency and productivity of research and education communities.

3.2 Mission

To implement, manage and extend sustainable Pan-Arab e-Infrastructures dedicated for the Research and Education communities and to boost scientific research and cooperation in member countries through the provision of world-class e-Infrastructures and E-services.

3.3 Objectives

The objectives of ASREN are defined as:
- To build, maintain and consolidate regional e-Infrastructures dedicated to e-Science and education across the Arab Countries, by
  - Developing, managing and operating a regional network that Interconnect the NRENs of the Arab Countries
  - Promoting harmonization of policies and standards in relevant areas at regional level.
  - Advocating at the regional level amongst decision makers and stakeholders

- To contribute to create and sustain National Research and Education Networks (NRENS) by
  - Supporting them to implementing leading-edge technological solutions while pursuing cost-effectiveness
  - Favouring the exchange of expertise and best practices amongst the NRENs' personnel in the Region
- To facilitate the collaboration and cooperation among the researchers and academicians in the Arab region by:
  - Increasing the availability and accessibility of knowledge resources for students and researchers
  - Promoting the development of Arabic contents and their availability
  - Facilitating knowledge exchange and transfer processes across the region and with relevant partners in Europe and worldwide
  - Promoting the adoption and usage of e-Infrastructures and services among the scientific community, also through training and tutoring activities
  - Strengthening regional partnerships and encouraging joint scientific research at all levels.

3.4 Core functions

The core functions of ASREN are related to:
- Interconnection: Interconnect the NRENs and managing technical and financial resources to manage the regional network infrastructure
- Network management of regional network: that includes design topology, tendering and managing NRENs interconnection, monitoring traffic and providing technical support and training to member (NRENs), etc

- Commercial and financial management of regional network, as managing contracts with network suppliers managing agreements for collecting funds from NRENs, managing contracts with funding organizations or agencies and conducting advocacy activities
- Developing Regional guidelines as for security policy or interoperability of services and protocols for supporting applications

3.5 Support Functions

These equally important support functions are related to develop the use and impact of the infrastructure, promoting content and usage development through the establishment the Research Gateway (Portal) and enabling cross national networks use of research and educational resources available. Also includes promotional activities to promote collaboration in research and education community, encourage and support the joint projects, sensitize decision makers on the research networking usefulness, develop support groups of practice, research and education communities, and promote cross network cooperation in electronic services, applications and e –services. Also ASREN will develop NREN development support actions, by encouraging and supporting establishing sustainable NRENs, organising training and developing technical capacities to operate these networks, among other.

3.6 Organization

The organizational structure of ASREN will compose General Assembly, Honorary president, Board of Directors, Advisory committees, and Secretariat.

General Assembly
ASREN will have a General Assembly composed of its members and will meet at least once every 2 years, to review and approves the long term strategic plans, secretariat choice/location, activity and financial reports, and all matters related as described in the ASREN bylaws. The main decision making body is the ASREN General Assembly of Members composed of full/voting members that are either:

- The Arab National Research and Education Networks (NRENs) or organisations that have same function, where a NREN does not exist the Research and Higher Education Ministry or the countries High Research Councils if it has a project or interest in creating a national NREN
- Research Support Organisations: National and regional organisations that support Science Education and Research applications using the ASREN network and services
- Associated Organisations, key partners that are investing and supporting ASREN creation and expansion2 (with significant resources), or that strengthen ASREN strategic objectives and sustainability, to be approved by the General Assembly case by case.

Full members are all eligible and vote for all board members. Non-Voting Members: Other national or regional organizations, industry and partners, related to research and education in the Arab region or interested in ASREN; Non-voting members should be not only observers, they should be able to contribute in all aspects except voting i.e. file motions and make proposals.

Honorary president
The General Assembly nominates a distinguished candidate based on services to education and research in the region, where he will be recognised with an award and offered Honorary Presidency of ASREN for his work. This award and presidency can be bestowed upon an appropriate candidate every 2-4 years.

The criteria and guidelines in choosing this candidate need to be set by the GA as part of the organisations bylaws. It has been decided that HE Amre Moussa, the Secretary General of the Arab League will be the Honorary President of ASREN.

Board of Directors

The General Assembly elects a Board of Directors from its members for a 2 year mandate. The board is composed of 7 members elected by the general assembly:

- 4 seats are reserved to NRENs (formal NRENs or institution having similar role/function of national RN network management)
- 3 seats are reserved Research Support Organisations and Associated Organisations

All members of the General Assembly vote for both kinds of board seats. To be eligible, non founding members have to be members for at least one year. The Board will elect the president of the Board (a honorary position) among its members. The Board will also review and approve major projects and programs and will appoint an Executive Director, or CEO for ASREN. It has been decided that the president of ASREN will be HE Senator Talal Abu-Ghazaleh.

Advisory committees

The General assembly will establish 2 advisory committees:

- Technical Committee formed and headed by NRENs who will advise the Board on technical matters and network expansion/management, and support the executive branch in its functions.
- The Science and Research Committee, headed by Research Support Organisations, composed by a selection of all categories members, to advise the board and the executive on matters and issues related to network usage and research activities, including promotion, survey, support of applications and users/researcher communities over the network.

Secretariat

An independent ASREN secretariat is now being established at the premises of Talal Abu-Ghazaleh Organization, while ensuring independence and collaborative synergies.

4. ASREN Launch

ASREN has been officially launched under the patronage of the HE Mr. Amre Moussa, the secretary general of the League of Arab States in Cairo during December 8-9, 2010. The overall objectives of ASREN launch have been:

- To officially launch and publicize the establishment of ASREN.
- To present the ASREN key objectives and strategic plan.
- To bring high level political support to ASREN by inviting key representatives from the region.
- To support the call for the EC to further finance the EUMEDCONNECT3 project.
- To conduct the first shareholders meeting.
- To bring the attention of scientists and researchers on the importance of Infrastructure and to showcase examples of collaborative and joint research projects.

The overall achieved results include:

- ASREN was launched under the patronage of HE Mr. Amre Moussa who also accepted to be the Honorary Chair of ASREN.
- The event was attended by high level participants from the European Commission (EC), Turkey, Italy, UK, France, and representatives of most of the Arab countries.
- Many Arab countries and organizations signed statements of support to join ASREN with intention to support the developments of ASREN.
- Positive signs were perceived about the financing of EUMEDCONNECT3.
- High level participation from the private sector was also an excellent sign indicating that there will be good opportunities for partnership with private sector and researchers.

4.1 Highlights from the Opening Ceremony

HE Senator Talal Abu-Ghazaleh, ASREN chairman, welcomed participants and thanked HE Mr. Amre Moussa for his kind patronage. He also thanked the EC for supporting the eInfrastructuer in the Arab world. He pointed out the importance of involving the young generations in conducting research and that they will be innovative if we assist them. He highlighted the research needs in the Arab world and that we should be able to set research priorities. The coming generation will remember this date and will thank you for this initiative. Thanks to the event sponsors: Tata Communications, Cisco, ZAIN Jordan, Microsoft EMEA, OTE Globe and Hayat Net.

Dr. Saleh Hashem, secretary general of the Association of Arab Universities said: "We have gathered today in the League of Arab States to record a quantum leap in scientific and academic cooperation and research at the level of the Arab world, and that the establishment and launch of the Arab States Research and Education Network (ASREN) will provide the necessary infrastructure for research and education communities across the Arab countries through the construction of a high quality network connecting universities and research institutions.

"We, in the Association of Arab Universities which includes in its membership 220 Arab universities teaching more than 60 million students and more than 2 million academics and researchers, are in desperate need for such a network in the aspects of collaboration and joining efforts, namely in students development, faculty and researchers cooperation, universities' libraries and the Arabic contents."

HE Ersat Hurmuzlu, senior advisor to the president of the Republic of Turkiye emphasized the importance of Research and Education Network in connecting institutions in the region. The Network will play an important role in strengthening educational links between Turkey and the Arab countries.

HE Marc Franco, ambassador / head of European Union Delegation to the Arab Republic of Egypt, accredited to the League of Arab States, expressed the strong support of the European Union for the establishment of ASREN. He reminded participants that the EC has been supporting the first research and education network in the region through the EUMEDCONNECT program since 2004 and urged ASREN to build on this successful experience. He also announced that the European Commission is intending to provide further funding for a third and final stage of the EUMEDCONNECT program to provide concrete support for the establishment of ASREN.

The representative of the European Commission DG Information Society and Media, Dr. Kostas Glinos stressed the importance of e-infrastructure for participation by Arab scientists and researchers in major collaborative programs with Europe. He saw the creation of ASREN as a milestone in the development of a pan-Arab network for long term institutional and financial self sufficiency.

HE Mr. Amre Moussa, secretary general of the League of Arab States welcomed the creation of ASREN as the key organisation to developing a pan Arab dedicated Research and Education e-Infrastructures, with a focus to interconnect the Arab National Research and Education Networks; Support the creation, usage and cross-national sharing of Arab research and education contents; Support multi-disciplinary collaboration in the research and education community; Support the National Research and Education Network and encourage the establishment of sustainable e-Infrastructures; and Facilitate technology transfer and promote advanced competences in the field of ICT across the Arab countries.

4.2 ASREN Agreement Signing Ceremony

Symbolic signing took place after the opening ceremony. A statement of support was signed by the following:

1. HE Senator Talal Abu-Ghazaleh, TAG-Org, Jordan
2. HE Prof. Mubarak M. A. Magzoub, Federation of Arab Scientific Research Council (FARSC), Sudan
3. HH Taimur A. Al Said, The Research Council (TRC), Oman
4. HE Ersat Hurmuzlu, Senior Advisor to the President of Turkiye, Turkiye
5. HE Prof. Saleh Hashem, Association of Arab Universities (AUA), Jordan
6. Prof. Ali Zaidan Abu Zuhri, Ministry of Education and Higher Education, Palestine
7. Badr Hubais, Khalifa University, Emirate Advanced Network for Research & Education, ANKABUT, UAE
8. Prof. Ashraf Hussein, Supreme Council of Universities, Egypt
9. Dr. Iman Abdelrahman, Sudanese Universities Information Network, SUIN, Sudan
10. Dr. Abdullah Al-Subyani, Arabian Knowledge Economy Association, KSA
11. Redouane Merrouch, Moroccan Academic and Research Wide Area Network (MARWAN), Morocco
12. Yousef Torman, Jordanian Universities Network, JUNet, Jordan

13. Dr. Sherif Gad, Arab Federation for Quality, Jordan
14. Prof. Enzo Valante, Consourtium GARR, Italy
15. Prof. Bahlul Eliagoubi, National Authority for Scientific Research, Libya
16. Ben Fatma Mohamed, Expert International Education, Tunis
17. Dr. Faeqa Saeed Al Saleh, League of Arab States, Egypt
18. Dr. Khadija Ghariani, Arab ICT Organization, (AICTO), Tunisia
19. Nada Kadhim, National Research Fund (NRF), UAE

4.3 Keynote speeches

"A Global World, A Global Education" By Yves Poppe, TATA Communications Director for Business Development and Strategy IP Services Global Carrier Solutions and Radwan Moussalli, TATA Communications Managing Director / Regional Head for Middle East & N. Africa presented a concept on "A Global World, A Global Education".

Poppe said: "Major research instruments can be anywhere, information repositories can be anywhere, competent collaborators and teaching staff can be anywhere. Research & Education Networks (REN) make it possible to share human and material resources and lower the cost of R&E while collaboration mostly produces better science and results. Our goal is to provide our educators, researchers, scientists and students the communication tools to help them compete and serve their nations in an increasingly interdependent world and a global economy.

Radwan Mossalli talked about Al Khawarizmi R&E Network concept. "The Arabian Peninsula is witnessing a number of new cables which will make it possible to connect economically the national R&E networks in the region and beyond. The objective is to one day connect all centres of higher education,
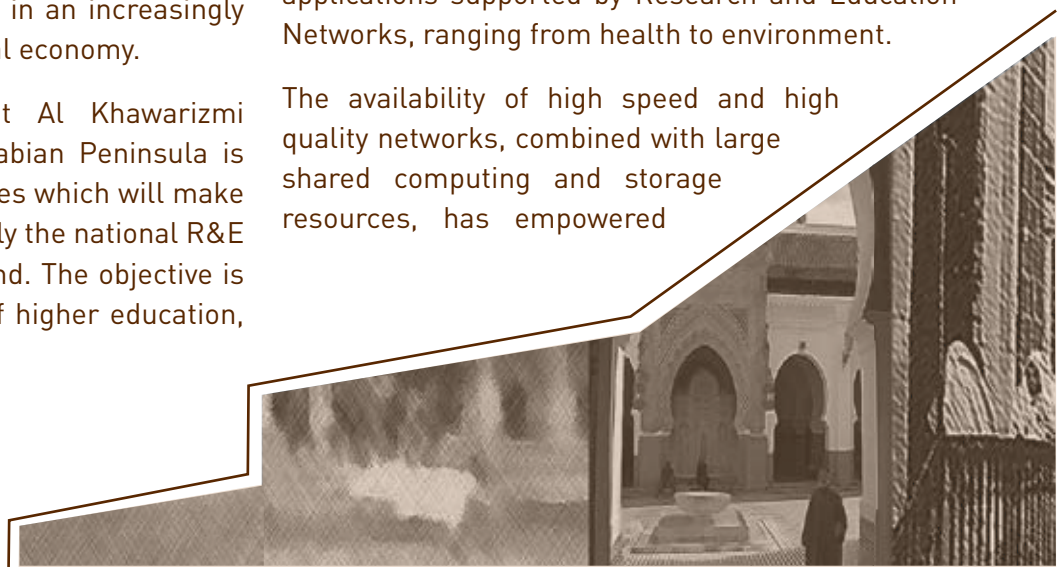
learning and research in the Islamic world to each other and to the rest of the world through a high speed world class R&E network."

"Unveiling ASREN Strategic Plan" By Yousef Torman, executive director of Jordanian Universities Network tackled the status of NRENs in the Arab world and the efforts towards establishing a regional Arab Research Network which was finally concluded by the creation of ASREN. Torman presented the major ASREN objectives and how the Strategic Plan for the next three years will achieve these objectives. After presenting the major concerns and obstacles that faced the previous initiatives, Torman emphasized on the key points for the success of ASREN:

- **LAS:** getting the political support from high level ministers & decision makers in the Arab states.
- **TAG:** continue supporting ASREN and to help us in securing funds.
- **EC:** fund EUMEDCONNECT3 as it is crucial for the success of ASREN.
- **NRENs:** be more involved in planning and supporting ASREN.
- **Scientists and Researchers:** start exploring & crystallizing projects and ideas to use this Network.

Other keynotes and presentations were focused on showing the importance of Research and Education in applications that can be deployed on the eInfrastructures (Networks and Grids). The distinguished speakers, from different scientific perspectives, showed also the social impact of applications supported by Research and Education Networks, ranging from health to environment.

The availability of high speed and high quality networks, combined with large shared computing and storage resources, has empowered

many scientific communities in the universities or research centres and allowed for a large international cooperation across continents and countries.

- Giovanni Frisoni, Vice Scientific Director, IRCCS Centro San Giovanni di Dio FBF, Italian Centre for Alzheimer's and Mental Diseases - neuGRID/OutGRID/DECIDE projects
- Amal El-Beshlawy, El Monira University Hospital, University of Cairo, Egypt - ITHANET project
- Rajaa Cherkaoui El Moursli, University Mohammed V-Agdal, Academie Hassan II des Sciences et Techniques, Morocco, ATLAS project
- Dr. Luigi Fusco , Department of Physics of Roma Tre, ESA/ESRIN Italy
- Ashraf Hussein, Director, Higher Education Information Centre at Supreme Council of Universities, Ministry of Higher Education, Egypt

Highlights from the Panel Discussion "NREN Perspectives": Panel discussion chaired by David West (DANTE) Panellists:

- Enzo Valente (GARR, Italian NREN)
- Iman Abuel Maaly Abdelrahman (SUIN, Sudan)
- Redouane Merrouch (MARWAN, Moroccan NREN)
- Badr Hubais (ANKABUT, United Arab Emirates NREN)

David West introduced the session by describing the development of the EC co-funded EUMEDCONNECT regional R&E network since 2004 and the opportunities ASREN presents for extending the network and the networking expertise across the Arab region. Dr. Abuel Maaly Abdelrahman described R&E developments in Sudan and its role in Ubuntunet. Mr. Valente identified the many areas for EU/Arab collaboration ranging from high energy physics to cultural heritage. He recommended that ASREN focuses on top-down infrastructure development and on bottom up applications/user initiatives for success.

Mr. Merrouch called on all NREN's in the region to join ASREN and take their share of the responsibility so that the ASREN's e-infrastructure is operated effectively and it fosters cooperation between researchers. Mr. Hubais briefly described the work underway to form ANKABUT as the NREN for the Emirates and urged ASREN to be a harmonising, not standardising, institution.

ASREN to Increase Arab Researchers Collaboration and Impact session introduced by Dr. Salem Al-Agtash, emphasizing on the important role of the technology provider sector in supporting the operations of ASREN. In their presentations, the interlinks, available capacity, connectivity, and applications, services, and solutions have been highlighted in the presentations and discussions of the panel. The panellists represent the following companies:

- TATA Communications,
- Cisco,
- ZAIN (Jordan),
- OTEGlobe (Greece),

ASREN Science and Research Committee Strategic Planning

HE Prof. Mubarak Al Magzoub, secretary general of the Federation of Arab Scientific Research Council, presented the vision, mission and strategy of the council for the years 2008-2016.

He also presented the research priorities in the Arab world. As a shareholder of ASREN, FARSC will work closely with ASREN to achieve our common goals, he concluded. Yacine Khelladi, the consultant of DANTE for the ASREN Development, introduced the ASREN Science and Research Committee, Its role and strategic objectives. The audience discussed how to achieve the committee's objectives.

5. ASREN Provisional Resolutions

5.1 ASREN Interim Board Meeting

A. Interim Board of Directors:
1. Honorary President: HE Mr. Amre Moussa / Secretary General of the League of Arab States
2. Chair: HE Senator Talal Abu-Ghazaleh / TAG-Org
3. Co-Chair: Dr. Saleh Hashem / Secretary General of the Association of Arab Universities
4. Secretary–Redouane Merrouch / MARWAN – Morocco
5. Directors
   - HE Dr. Khedija Ghariani/ Secretary General of the Arab Information and Communication Technologies Organization
   - Dr. Faeqa Saleh / League of Arab States
   - Mr. Yousef Torman / Jordan University Network
   - Dr. Salem Al-Agtash / TAG-Org
6. DANTE's current EUMEDCONNECT2 project manager-special ASREN executive board advisor
7. Invited-Turkish Academic Network and Information Center (ULAKBIM)

B. Infrastructure Committee:
1. Arab Information and Communication Technology Organization
2. Egypt University Network
3. League of Arab States
4. NRENs
5. Talal Abu-Ghazaleh Organization
6. DANTE
7. Turkish Academic Network and Information Center (ULAKBIM)- (per invitation)

C. Scientific Research Committee
1. Arab League for Science, Education, and Culture Organization (Chair)
2. Federation of the Arab Scientific Research Councils (Coordinator)
3. League of Arab States
4. Association of Arab Universities

5. Talal Abu-Ghazaleh Organization
6. The Turkish Scientific and Technological Research Council (TUBITAK) –(per invitation)

D. Legal name to be the "Organization of Arab States Research and Education Networks" but keeps the name ASREN for branding purposes

E. Board composition and Interim Board's decisions to be ratified at first Board Meeting after ASREN is registered. (Same for Infrastructure Committee)

F. ASREN to be registered as soon as possible, estimated within eight weeks. Initial Signatories: Algeria, Jordan, Morocco, TAG, Arab League, Egypt (to confirm soon)
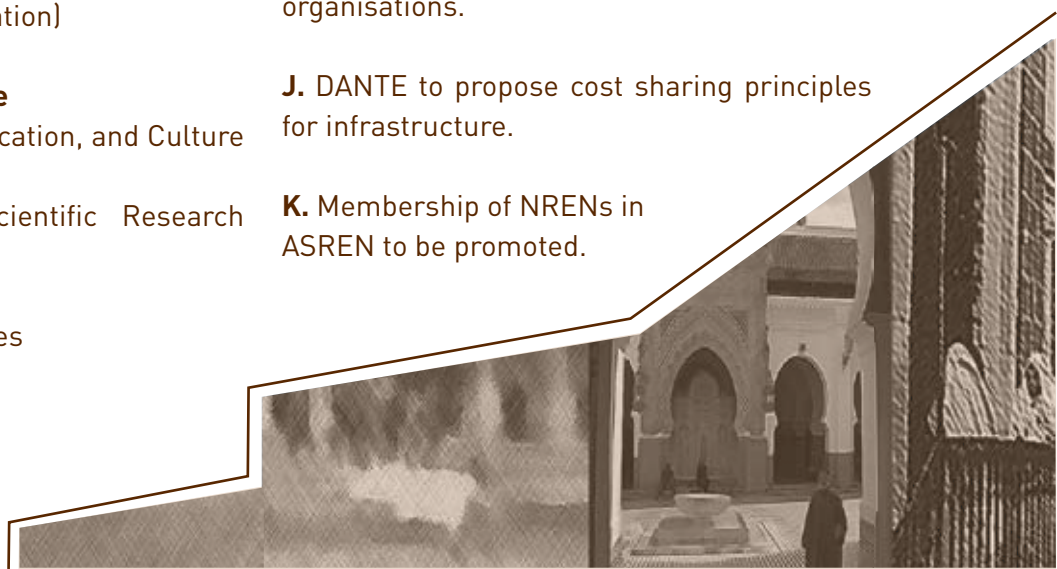
G. DANTE to propose transition plan for ASREN:
1. To engage additional countries to make it 'Arab-inclusive' in collaboration with the Republic of Turkey.
2. To work out with the ASREN Technical Committee procedural steps for the transition, including a realistic timeline.
3. To plan re-tendering of the network with ASREN.

H. HE Senator Talal Abu-Ghazaleh accepted with pleasure to host ASREN offices in Amman during the incubation period until the establishment of permanent base in NREN or standalone.

I. Need to further develop business plan to start to enhance awareness and generate support of donor organisations.

J. DANTE to propose cost sharing principles for infrastructure.

K. Membership of NRENs in ASREN to be promoted.

L. First Board Meeting needs to be planned: Could coincide with next EUMEDCONNECT2 meeting in March and/or ASREN registration signing in Dusseldorf.

M.TAG/JUNet/DANTE will continue to jointly provide support pending CEO, but to appoint immediately an ASREN office administrator.

N. Prepare and print ASREN Launch booklet, and publish all related presentations, declarations, and documentation on ASREN Launch website.

O.Organize a registration frame for technology patents; Plan the architecture of the Pan-Arab e-Infrastructure with a facility for resource sharing and joint content development; and Promote partnership with private sector.

P. Plan with the Arab Information and Communication Technologies Organization to organize an Arab Ministerial Meeting in Tunis to discuss cooperation venues towards a unified ASREN e-Infrastructure as a pan – Arab network dedicated to research and education.

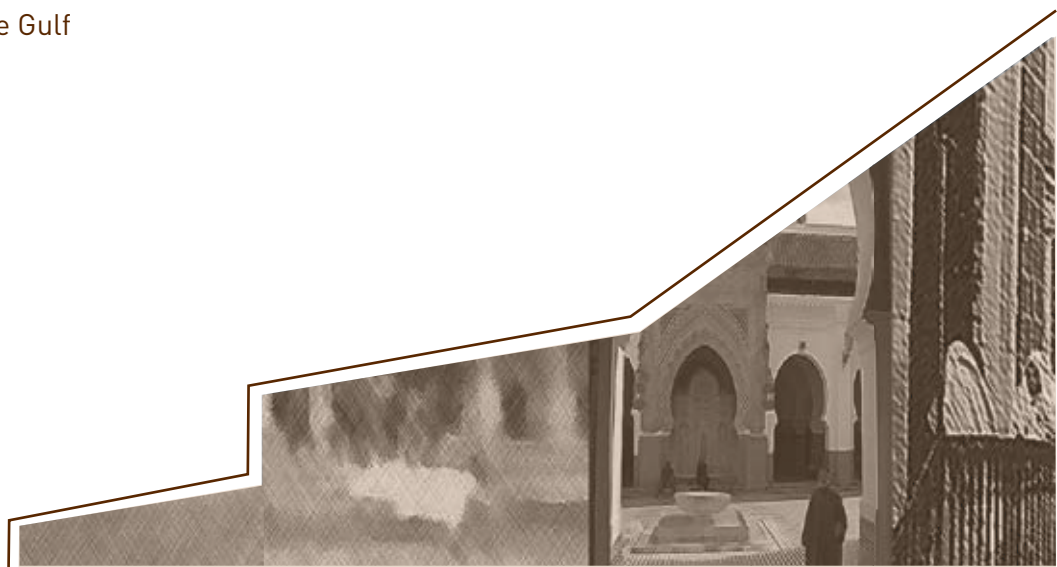**Q.**Plan to start annual ASREN conference from late 2011
* ASREN 1st annual conference in Amman – December 2011

R.Financing
1. Clear business plan to be submitted to donors
2. New partners, mainly from the Gulf
3. Membership

5.2 ASREN Infrastructure Committee Meeting

1. Interim Infrastructure Committee composition and decisions to be ratified at first meeting after ASREN is registered.

* DANTE is a member of the Infrastructure Committee
* TAG-Org is a member of the Infrastructure Committee
* NRENs are members of the Infrastructure Committee

2. EUN to develop a proposal by 20 December, 2011 on how to prepare network plan based on strategic plan, Mme El-Maouhab's document and relevant points from the CEO TOR

6. Strategic plan and implementation

The strategic objective of ASREN is to contribute to boost the scientific research, innovation and education levels in the Arab countries by uplifting efficiency and productivity of research and education communities. The overall expected result of the strategic plan implementation is that after 3 years, there is in place and sustainable a Pan-Arab Research and Education Network dedicated to support Research and Education communities and to boost scientific research and cooperation through the provision of world-class e-Infrastructures and E-services.

More specific result, after three years, are that:
- **Result1:** ASREN is a sustainable regional organisation
- **Result2:** Are Built, maintained regional e-Infrastructures dedicated to e-Science and education across the Arab Countries
- **Result 3:** ASREN contributed to create and sustain NRENS
- **Result4:** ASREN facilitated the collaboration and cooperation among the researchers and academicians in the Arab region
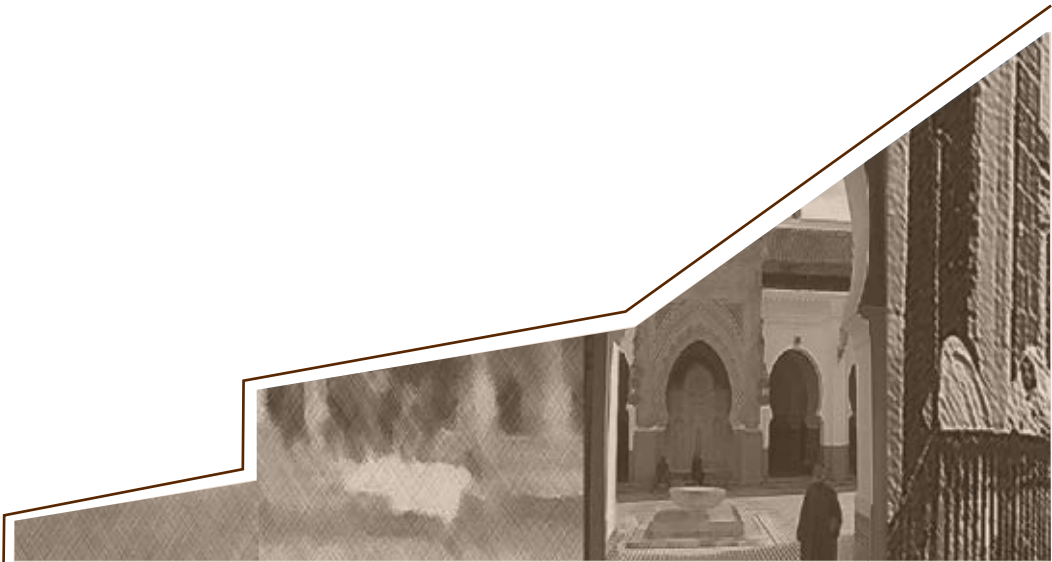
6.1 Work plan

The following work plan is proposed during the next 6 months to contribute to achieving the short-term targets and results outlined above.
1. 1.A. Finalize all tasks related to ASREN creation and incorporation. Plan to register ASREN by end March, including 2 NREN signatories, and further 2 NRENs join by end of July
- 1.1 Finalize incorporation in Germany (legal aspects)
- 1.2 Manage registration/recognition in each country as necessary, and HQ location in particular, ASREN branding, etc.
- 1.3 Support shareholders / members joining process
- 1.4 Open and manage ASREN bank accounts
- 1.5 Manage legal specialists to support the achievement of these tasks

2. Plan together with Infrastructure Committee, board members and DANTE the 'transition plan' with a target date for agreeing in May (dates subject to timing of EC decision process) and start its implementation
- 2.1 Co-manage with DANTE the tendering process
- 2.2 Co-manage with DANTE the contract for any further EC funding
- 2.3 Co-manage with DANTE new agreements between NRENs and ASREN to provide connectivity services in return for financial contributions
- 2.4 Design/define the Network Operation Centre (NOC) and support functions
- 2.5 Process supplier contracts and manage transition

3. Contract and supervise the set up of ASREN secretariat
- 3.1 Set up office/HQ facilities
- 3.2 Select and manage full time administrative support staff member
- 3.3 Select, hire key staff if additional funding for ASREN is available
- 3.4 Define with each key staff work plans and monitor its implementation
- 3.5 Develop the ASREN administration and procedure manual (includes all administrative and management)
- 3.6 Supervise the web page development

4. Coordinate, implement fundraising activities and liaise with donors
- 4.1 Submission of projects proposals
- 4.2 Follow up on Funding

5. Prepare, facilitate and report on the ASREN Board Meetings (Rapporteur) and hold at least one meeting in the period to end July
- 5.1 Prepare and present activity/financial reports for the ASREN Board and DANTE manager
- 5.2 Formalize and plan and implement of Board decisions

6. Coordinate and organize the work of the ASREN committees (Technical committee and Science and Research committee) to make sure that ASREN fulfil its obligations and hold at least one meeting each in the period to end July
- 6.1 Lead and manage the Infrastructure Committee
- 6.2 Lead and manage the Science and Research Committee
- 6.3 Provide support for ASREN Board meetings

7. Promote and Represent ASREN in all instances
- 7.1 Organizing ASREN Board meeting
- 7.1 Organizing ASREN 1st Annual meeting