National Network

1) Could you please provide a brief technical description of Saudi Arabia's external connectivity to the Internet - including upstream provider(s), international bandwidth of the link(s), etc.

Internet Connectivity

ISU (Internet Services Unit) provides the Internet connectivity locally, all the ISP's, government organizations, and universities obtain their Internet access through ISU. Internet service in KSA is organized into three main levels as follows:

First Level: ISPs

These are commercial companies that provide Internet access to the general public, government and private sector through dialup and leased lines. ISPs are connected to the National Backbone and to the International link at ISU. They provide their subscribers with access to these networks.

In addition ISPs provide subscription accounting, customer support and other value added information services.

Second Level: National Backbone

The Saudi Telecom Company (STC) is developing a high speed network connecting most parts of the Kingdom together. Currently, the main regions of the Kingdom are covered by this backbone with expansion planned for the remaining regions. ISU and all ISPs are connected to the National Backbone which carries Internet traffic inside the Kingdom and to the International Link.

Third Level: International Link

This is the link which connects the National Backbone to the International Internet. The International link is operated by ISU and all international traffic to the Kingdom pass through this link. We are currently operating with 10 STM-1 links with a total bandwidth of (1550 Mbps).

The international providers had been chosen from different geographical locations in order to minimize the risk of losing the connectivity totally due to global catastrophes for example.
Please note that the Internet in KSA is under restructuring.
This will result in near future that the elimination of ISU from the International connectivity services and it will be substituted by 3 licensed DSPs (Data Service Providers). The local ISPs will be connected to any of the 3 DSPs and universities will be connected to the ISU which gets its connectivity through one or more of the 3 DSPs.

The new formed Saudi CITC (Communications and Information Technology Commission) is now responsible of Internet in KSA.

2) Please list the ISPs and Universities/Research Institutions with external/international connectivity currently operating in the country.

All local ISPs and Universities are directly connected to ISU mostly via the STC's ATM network.

For current ISP Line Utilization
http://cgi.isu.net.sa/isputil/english/

For *ISP's bandwidths without names, see:
http://www.isu.net.sa/surveys-amp-statistics/isp-bandwidth.htm

For the list of ISPs see:
http://www.isu.net.sa/saudi-internet/local-information/All-isps.htm

ACADEMIC/RESEARCH NETWORK
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1) Please give a technical description of the network topology and connectivity of the academic and research network in Saudi Arabia.

Universities are connected to ISU in the same manner as ISPs except that they have special prices. See:

http://www.isu.net.sa/for-isp's/isp-prices.htm
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