



[empowering eScience across the Mediterranean]

GRNET

High Quality e-Infrastructures for Education and Research

www.grnet.gr

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GRNET mission

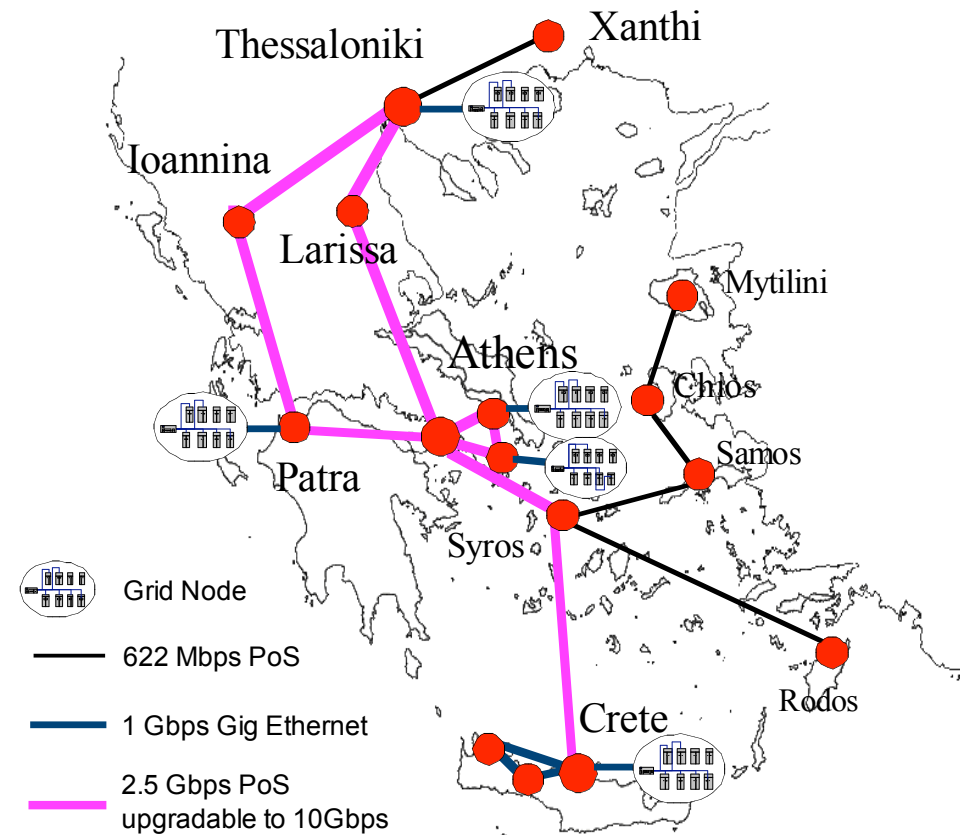
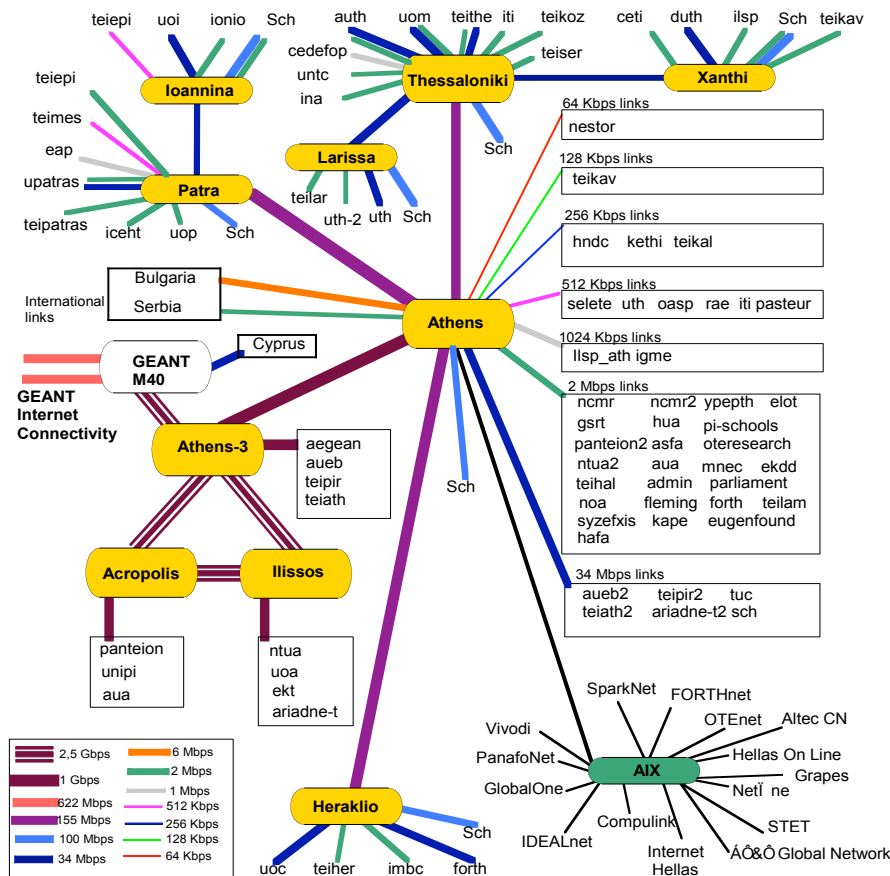
- ◆ GRNET is a state-owned company operating under the supervision of the Ministry of Development (General Secretariat of Research & Technology)
- ◆ Its main mission is to provide high-quality **electronic infrastructure** services to the Greek academic and research institutions:
 - ➔ National and international connectivity services
 - ➔ Grid infrastructure services (computing, storage, visualisation)
- ◆ A secondary mission is the promotion and dissemination of the use of Information and Communication Technologies (ICT) in the public and private sector towards an e-Government, e-Learning and e-Business environment

Year 2000: The GRNET network

From GRNET1 to GRNET2

GRNET1 (T0-2000):
155Mbps backbone (SDH)
2-34 Mbps, access (PDH)

GRNET2 (2000-2005):
2,5Gbps leased lambdas. up to Gbds access. HellasGrid nodes



Year 2007: The GRNET network

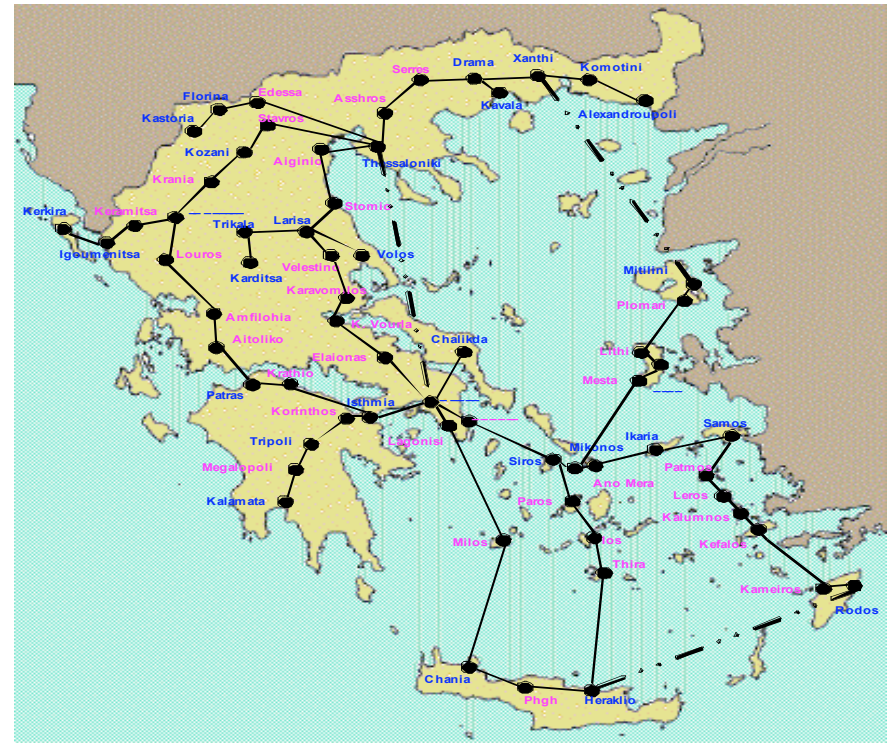
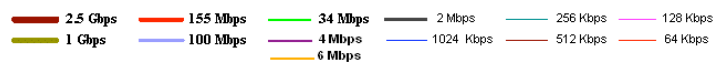
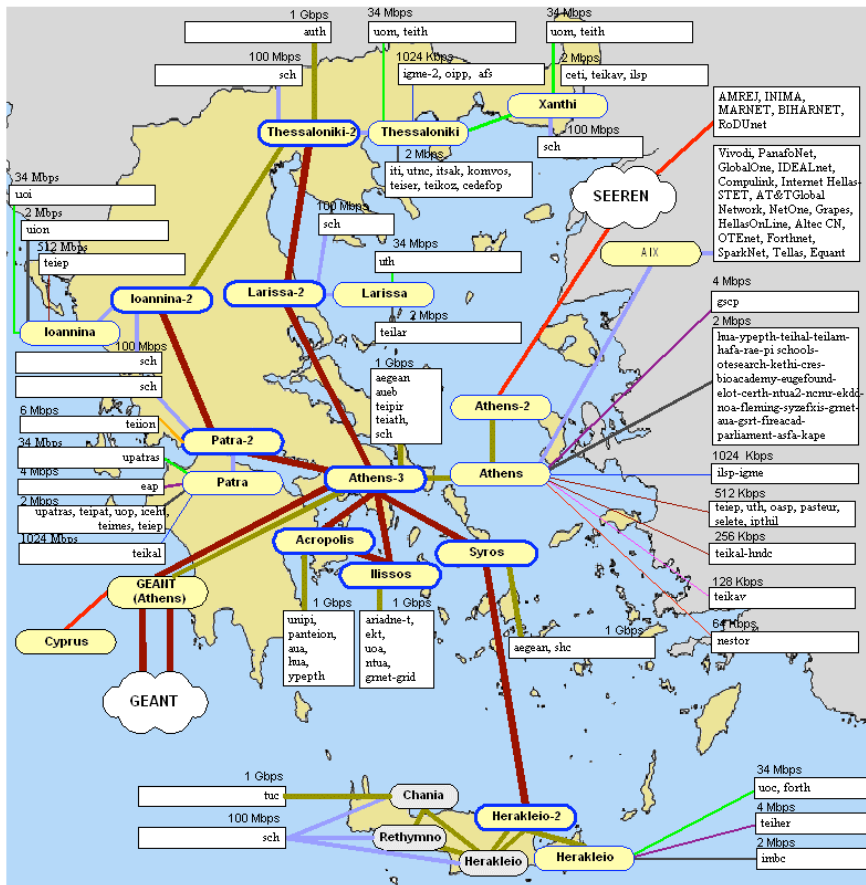
From GRNET2 to GRNET3

GRNET2:

2,5Gbps leased lambdas, 20M€, 2000-2005

GRNET3:

dark fibre based, 10Gbps capable, 30M€, 2005-2008



Total of ~8.000 km of dark fibers!

GRNET network observations

- ◆ GRNET, as most NRENs, does not have a license from the National Telecom Regulatory Authority
 - ➔ The network is only for Research / Science, non-for profit aim, not in competition with ISPs, no subscription fees
- ◆ GRNET network is one step ahead of local Internet Service providers
 - ➔ In terms of technologies: hybrid Internet and switched network following GEANT model
 - Normal Internet Service
 - Switched point-to-point optical connections (SDH circuits) to connect different institutes enabling e-Science experiments
 - ➔ In terms of speeds: Soon 10Gbps access/core, currently 20Gbps international connectivity to be upgraded
 - Note: Telecom Operators can offer national and international connectivity in very low prices (big discounts) compared to commercial prices
 - ➔ In terms of services (IPv6, QoS, Multicast, Advanced Video conferencing, etc.)
- ◆ GRNET enables Greek Students and Researchers to collaborate with their European and world-wide counterparts
 - ➔ “Connecting the finest minds”
 - ➔ “Sharing scientific resources”
 - ➔ “Building global e-Science virtual communities”



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For more:

www.grnet.gr

www.hellasgrid.gr

www.egee-see.org

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