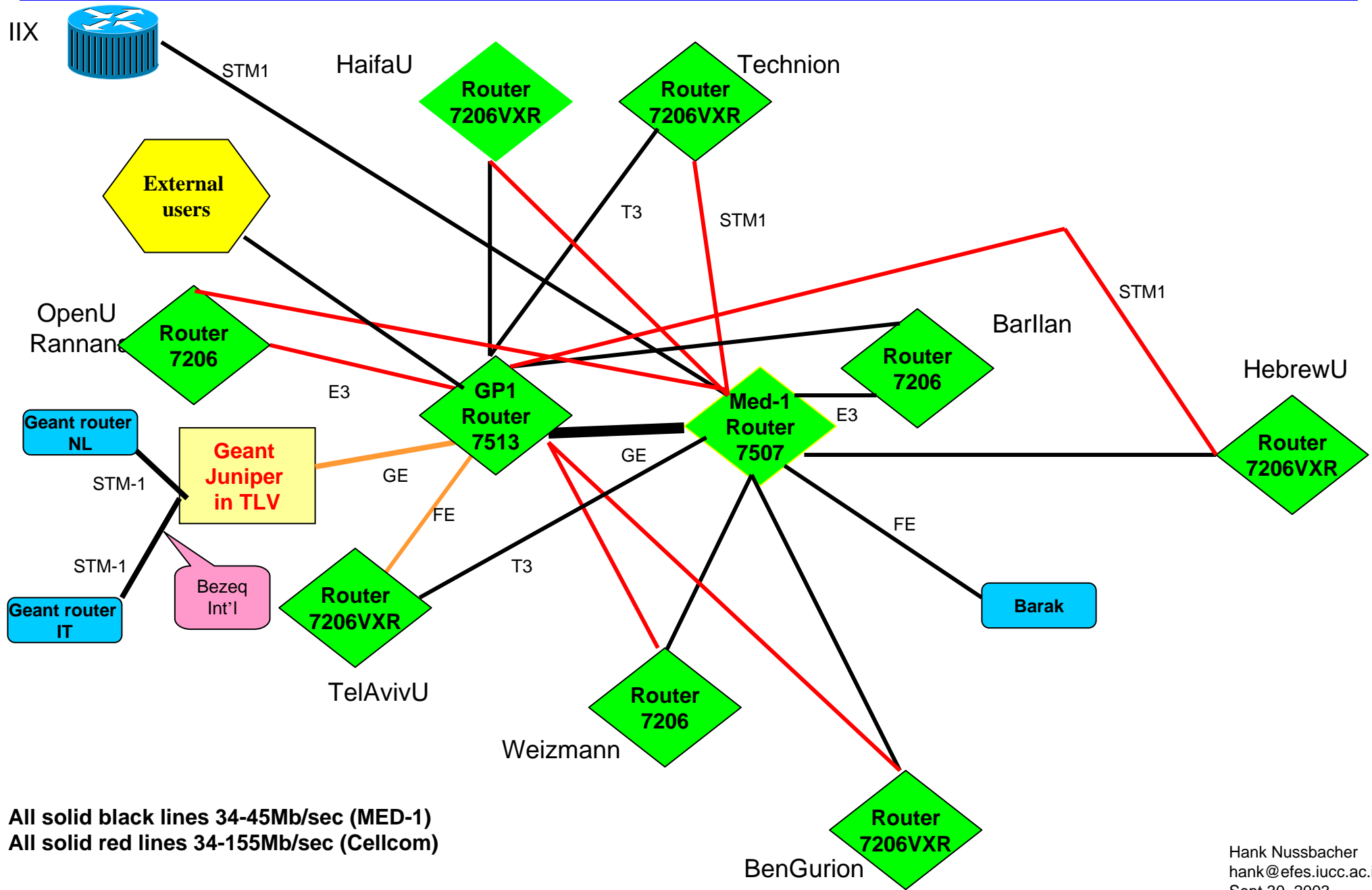


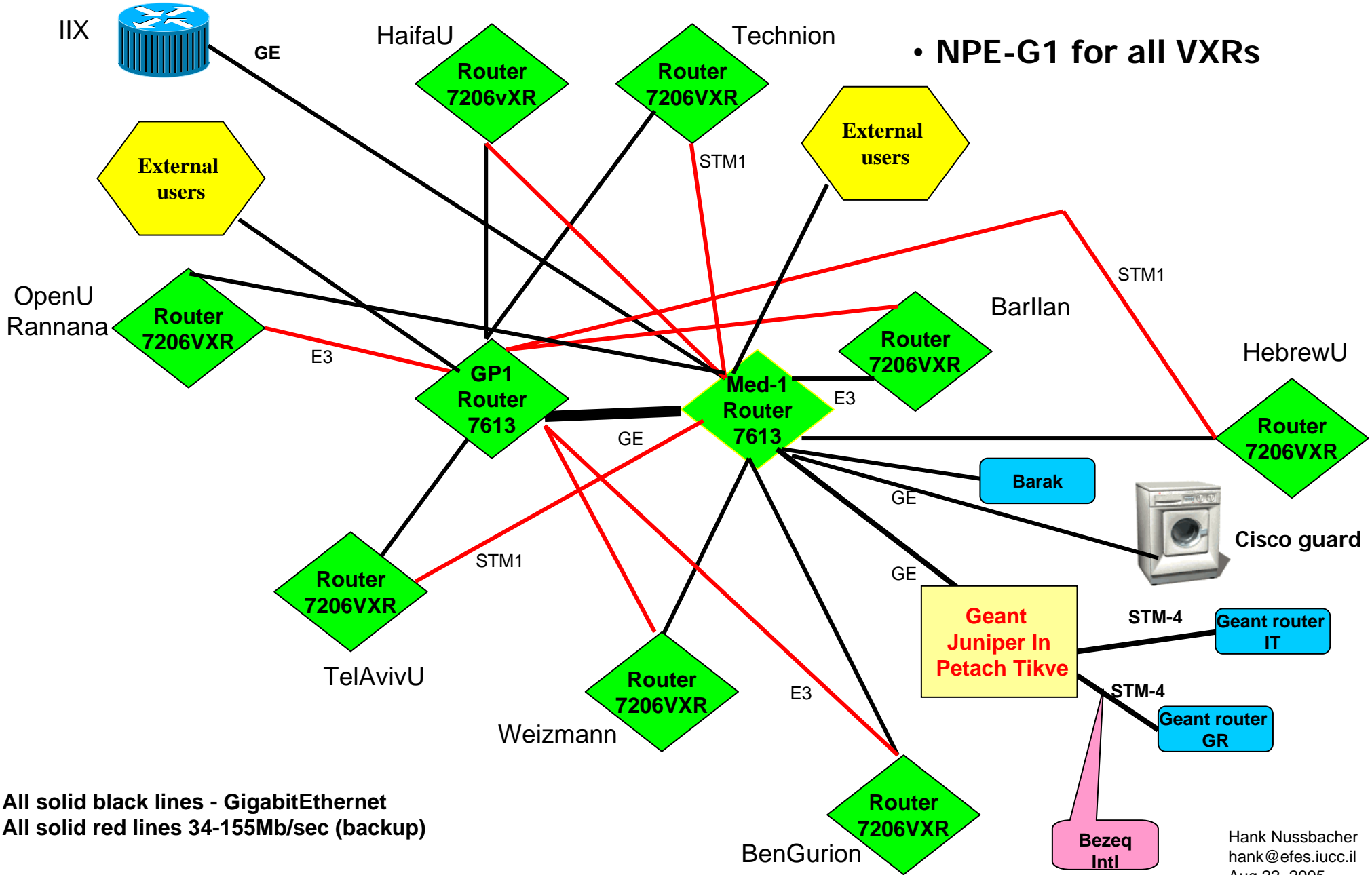
Israel GN2 network

Hank Nussbacher
IUCC – hank@efes.iucc.ac.il

Ra'anana
September 28, 2005



All solid black lines 34-45Mb/sec (MED-1)
All solid red lines 34-155Mb/sec (Cellcom)



• NPE-G1 for all VXR's

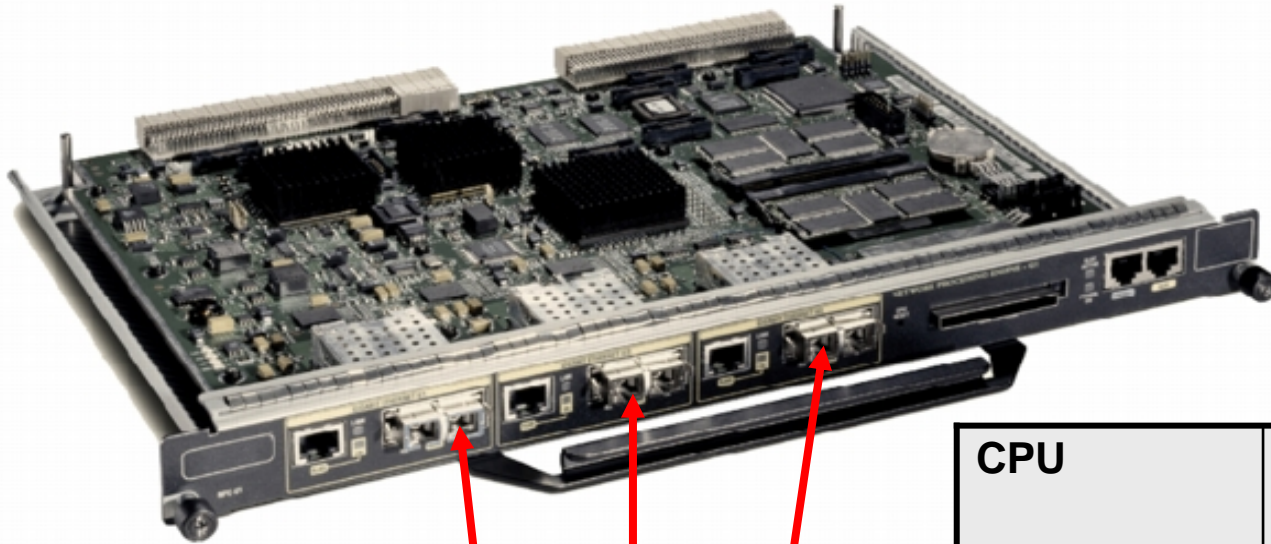
All solid black lines - GigabitEthernet
 All solid red lines 34-155Mb/sec (backup)



- 720Gbps aggregate performance
- 40Gbps per slot vs 2Gbps in current system
- 30Mpps vs 470kpps in current system

Israel Network

All university campus gateways to upgrade to NPE-G1



3 Gigabit Ethernet ports

CPU	Switching power	Where
NPE-225	225kpps	Weizmann, BIU, OpenU
NPE-400	400kpps	TAU, HUJI, Technion, HaifaU, BGU
NPE-G1	900kpps	All – 1/2006

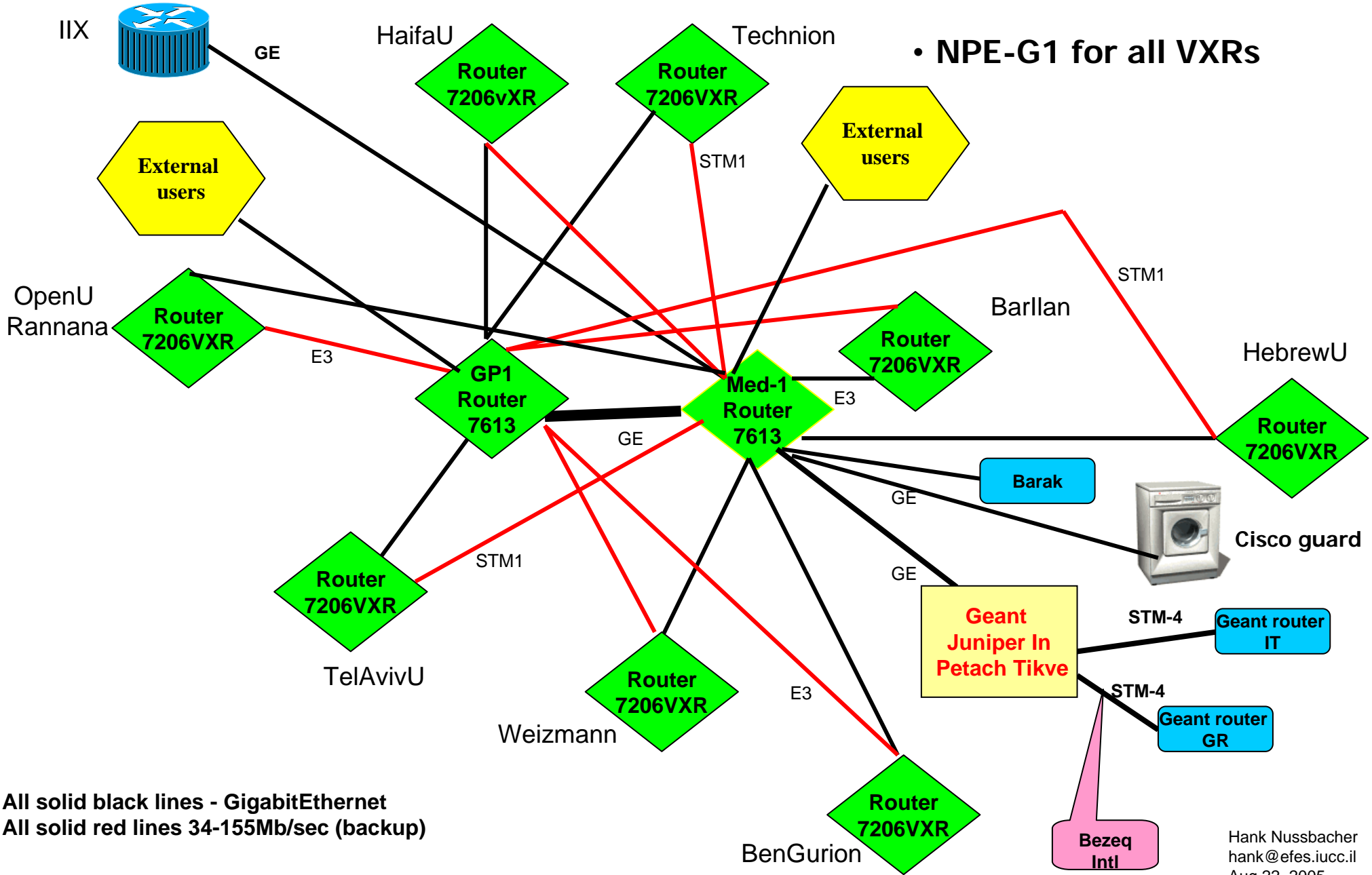
Handling DDOS attacks

Cisco Guard XT 5650:

- **Attack analysis & mitigation**
- **Diverts traffic for on-demand protection**
- **2 GE Fiber/Copper**
- **Developed by Israeli company – Riverhead Networks**

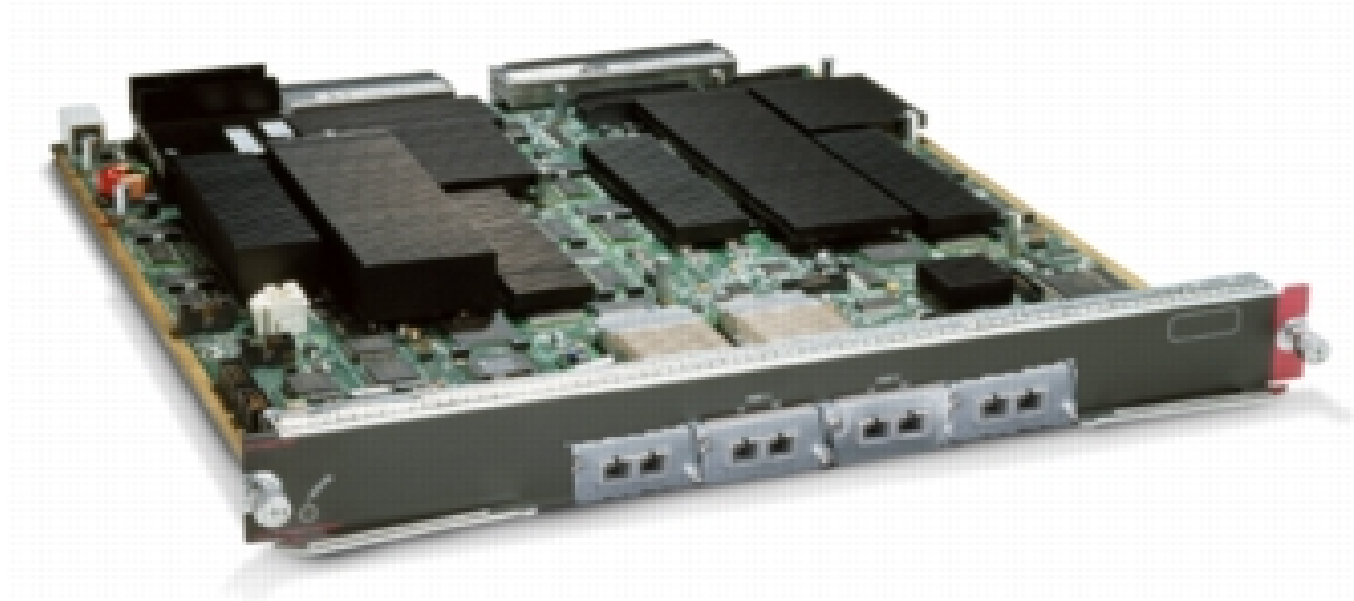


Cisco Guard XT 5650



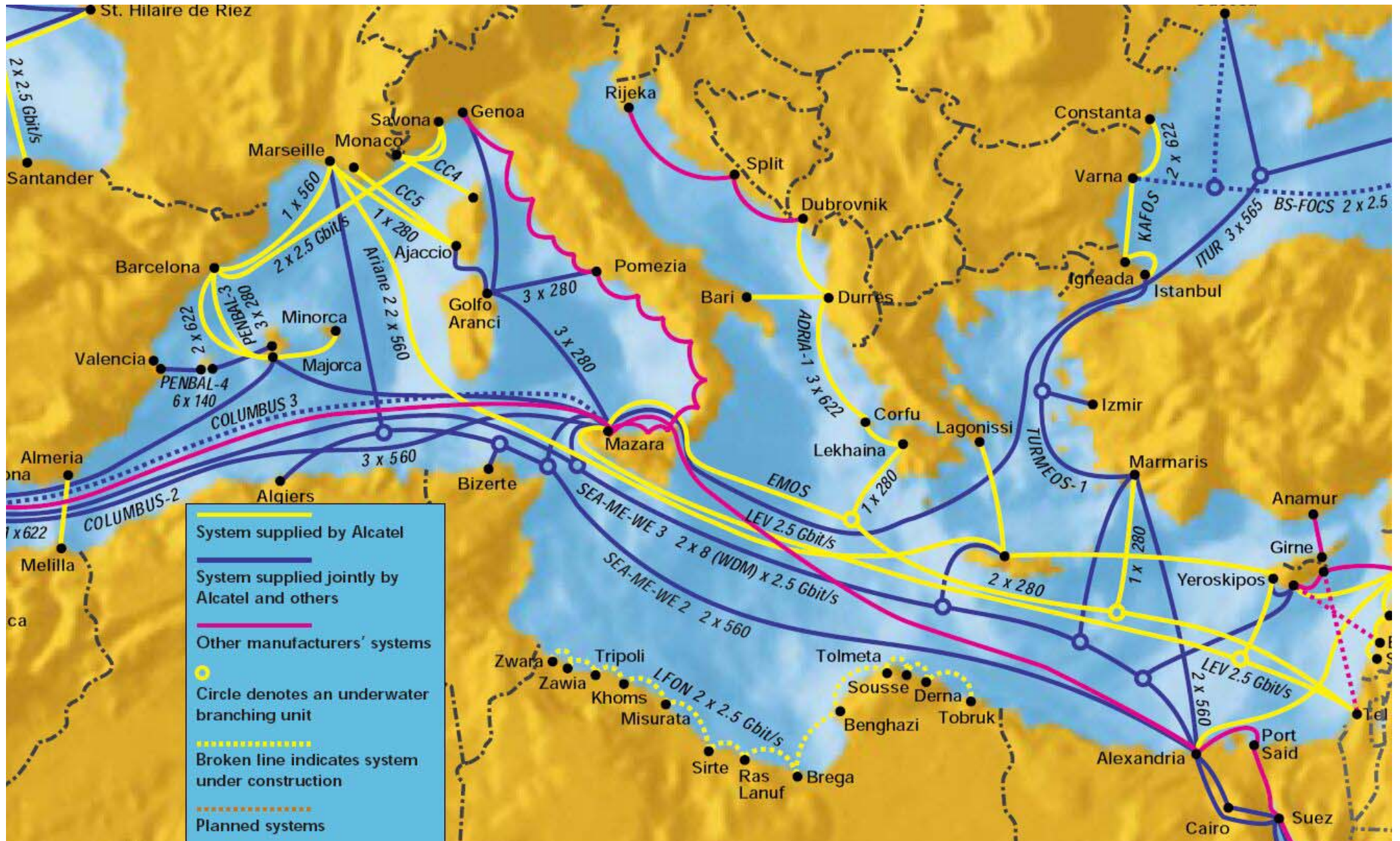
All solid black lines - GigabitEthernet
 All solid red lines 34-155Mb/sec (backup)

10GE link over 15km dark fiber

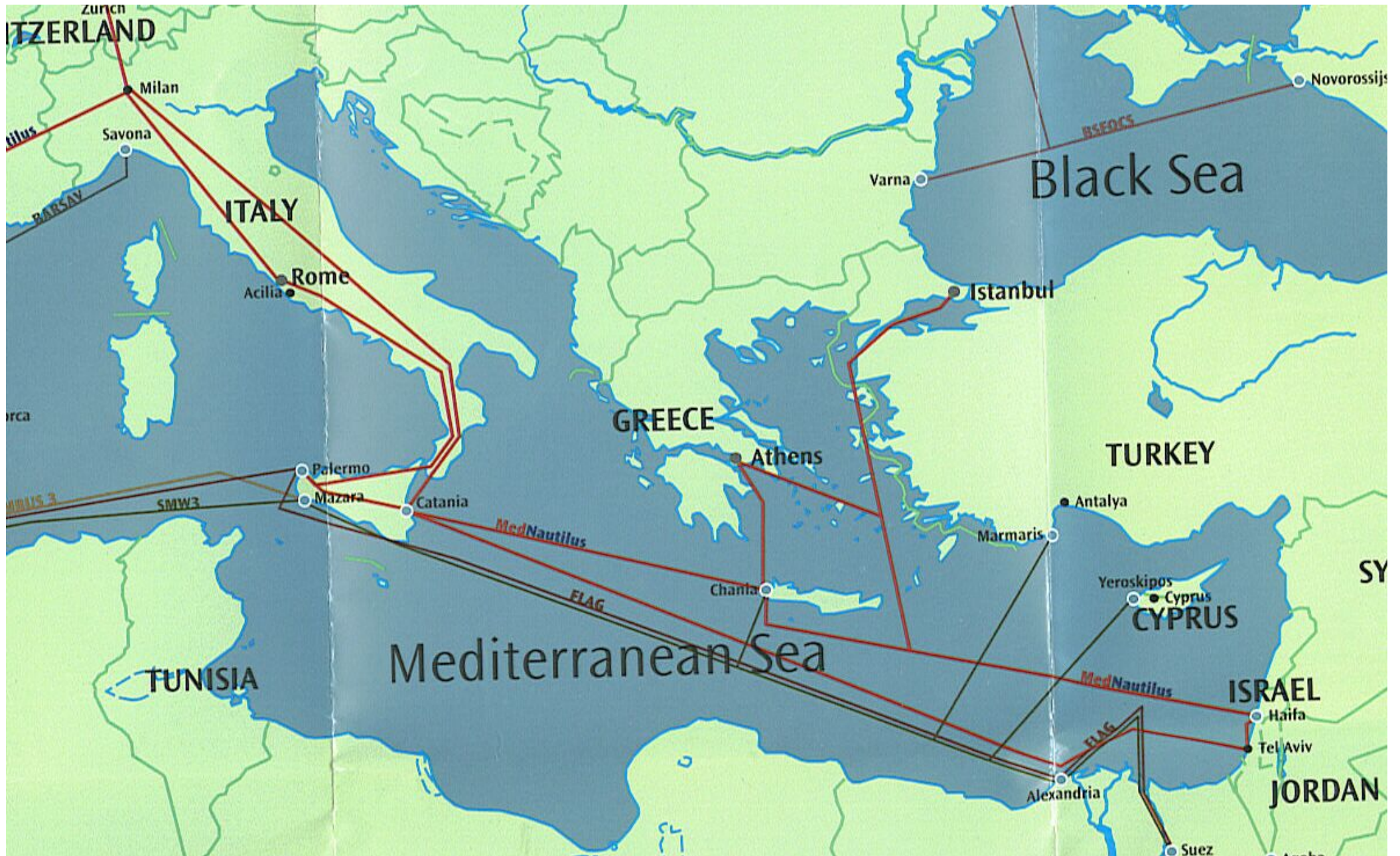


Ramat Aviv (TAU) to Petach Tikve (Med-1)

Israel Network



Israel Network



Israel Network

Proposed GN-2 network topology for 4Q2005

