



Internet-2 in Israel Update

Hank Nussbacher

מתב"א

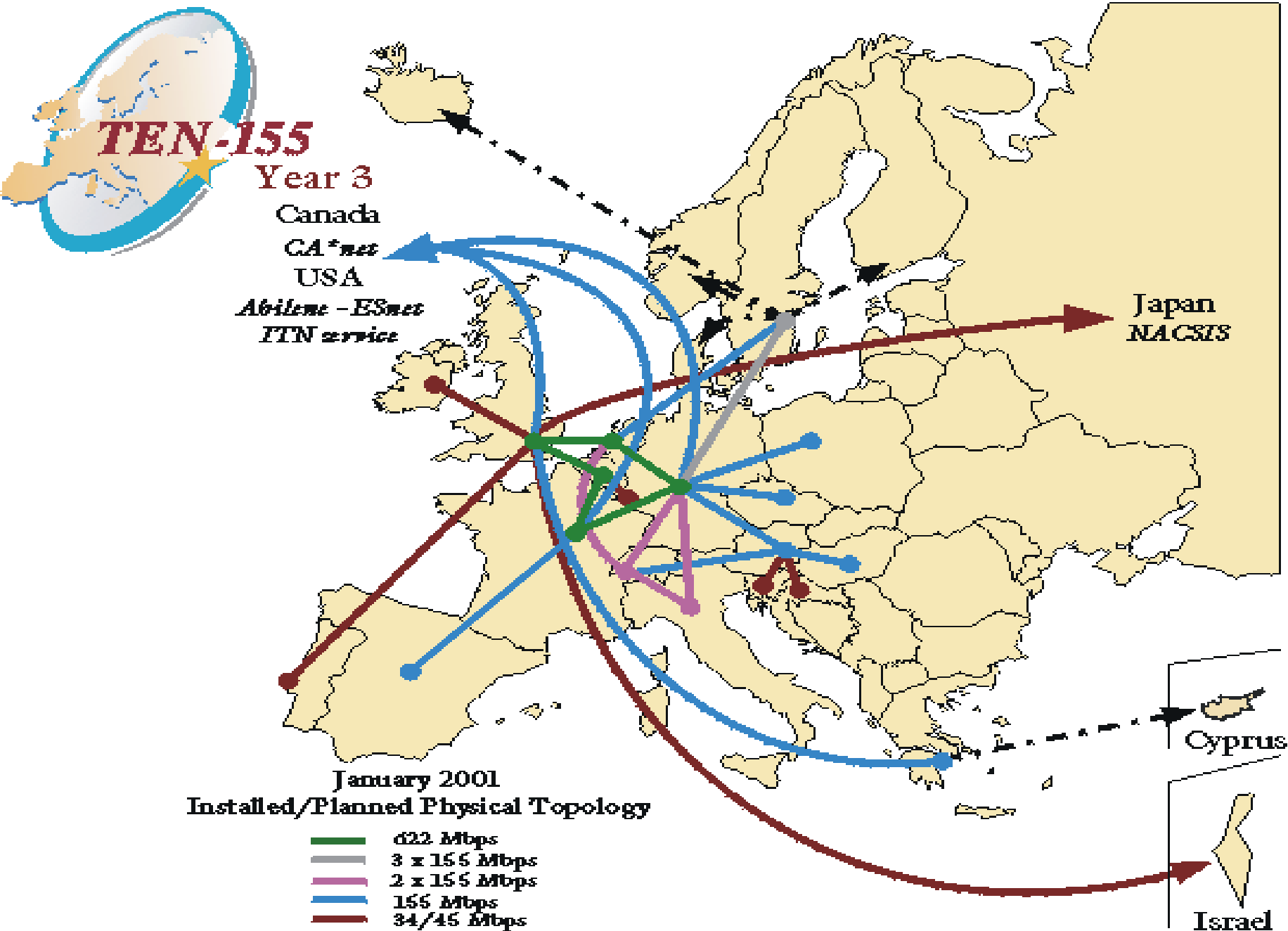
March 4, 2001

Internet Society of Israel



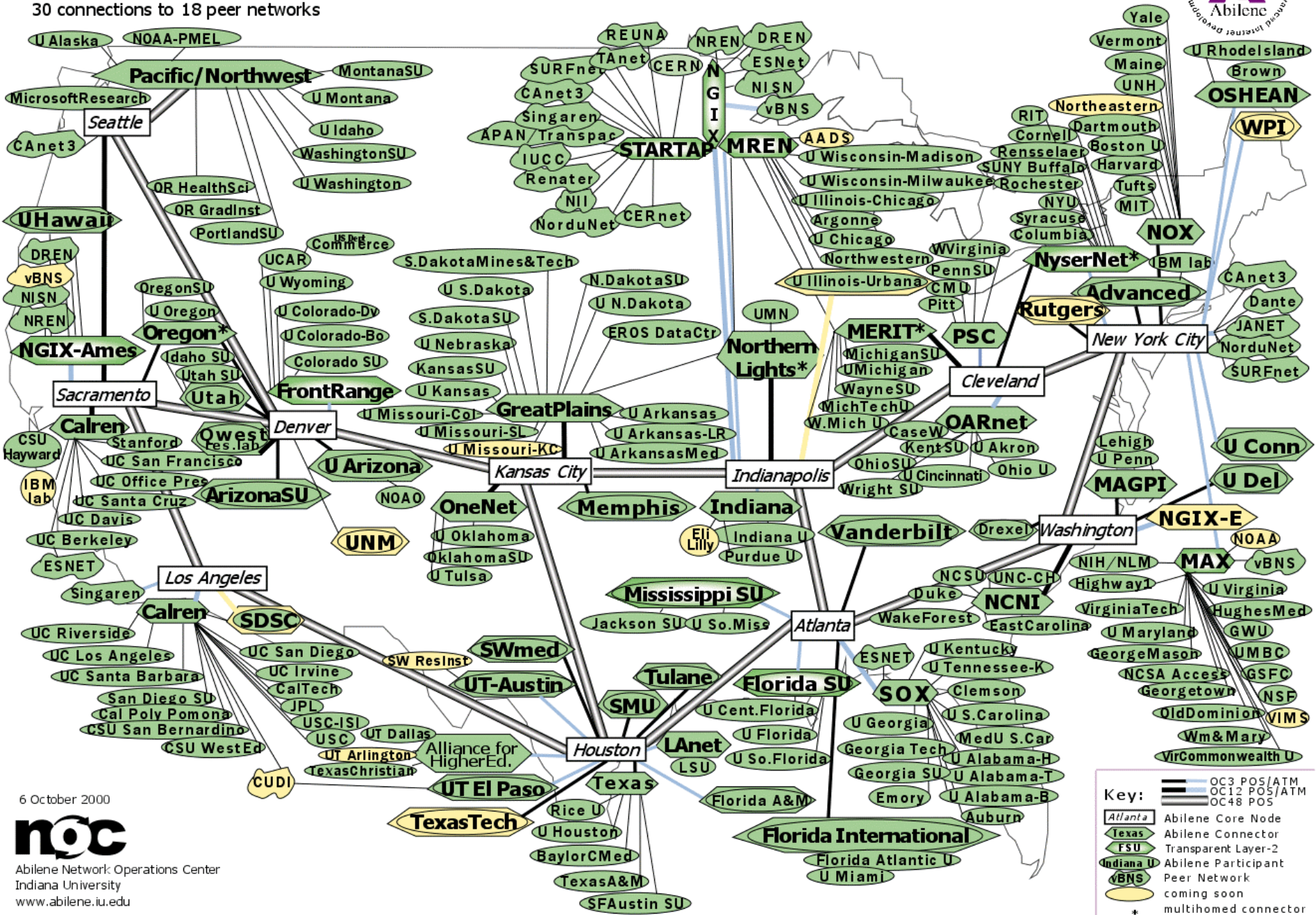
Purpose

- **To provide Israeli researchers with Quality of Service (Qos) and Class of Service (CoS) via the Internet, in order to conduct their R&D activities with colleagues in Europe and the USA**
- **Not intended to speed up standard Internet access**



completed connections:
 175 participants
 42 connectors + 2 NGIXs
 30 connections to 18 peer networks

The Abilene Network



6 October 2000



Abilene Network: Operations Center
 Indiana University
 www.abilene.iu.edu

Key:

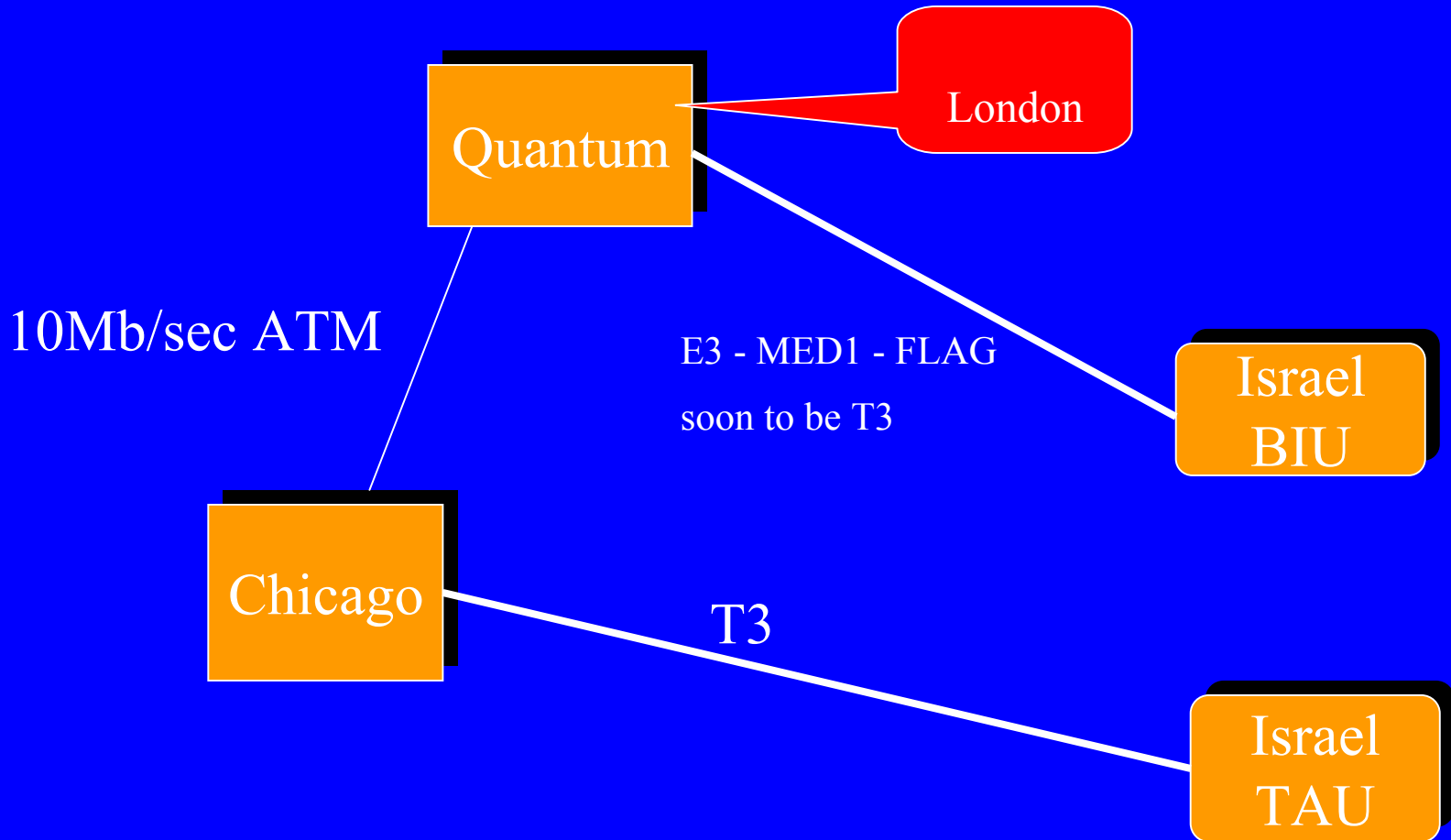
- OC3 POS/ATM
- OC12 POS/ATM
- OC48 POS
- Atlanta Abilene Core Node
- Texas Abilene Connector
- FSU Transparent Layer-2
- Indiana U Abilene Participant
- vBNS Peer Network
- coming soon
- * multihomed connector

International connectivity



- **Israsat/Gilat won initial tender for link to USA**
 - T3 satellite from July 1999 - November 2000
 - switched to T3 fiber link via Golden Lines in November 2000
- **E3 link to Europe via Golden Lines started in May 1999**
 - upgraded to T3 fiber in April 2001

Solution



How much of the Internet?



- **2700 from Europe**
- **2500 from USA**
- **$5200/97000 = 5.3\%$ of the Internet is accessible via Internet-2**

Industry and international access

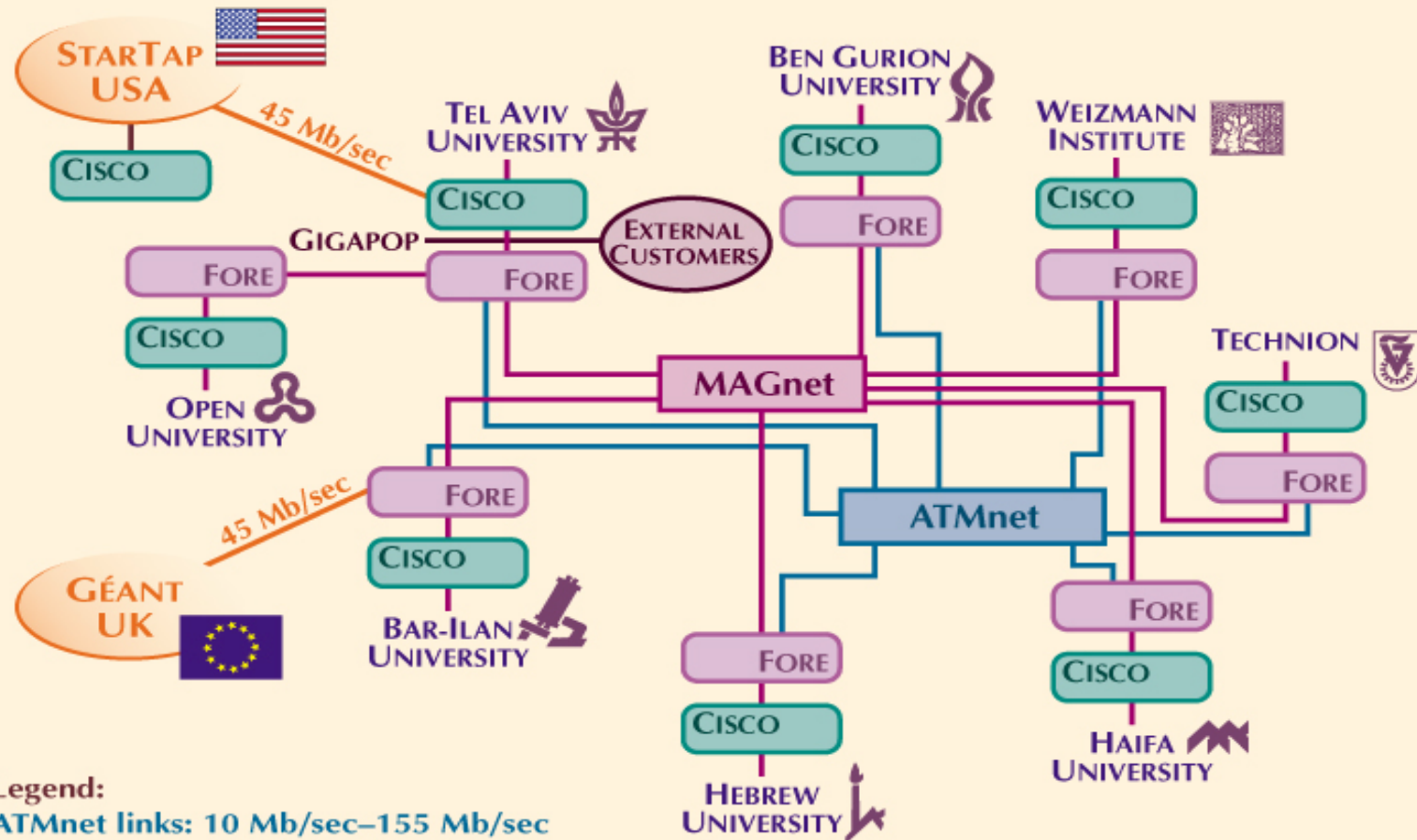


- **Not meant to replace Internet-1 (commodity) access**
 - R&D units still **required** to maintain their Internet-1 access lines
- **Will provide up to 45Mb/sec throughput for high-speed R&D projects**

Internet-2 design



THE ISRAEL INTERNET² NETWORK 2001 TOPOLOGY



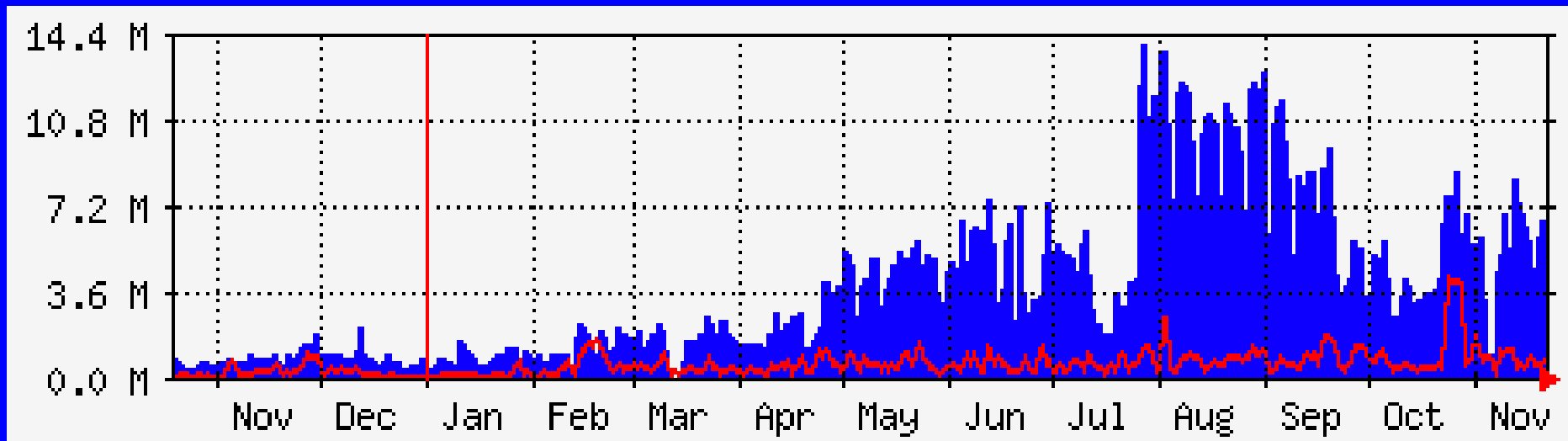
Legend:
 ATMnet links: 10 Mb/sec–155 Mb/sec
 MAGnet links: 155 Kb/sec
<http://www.internet-2.org.il>

DECEMBER 2000



Yearly USA traffic

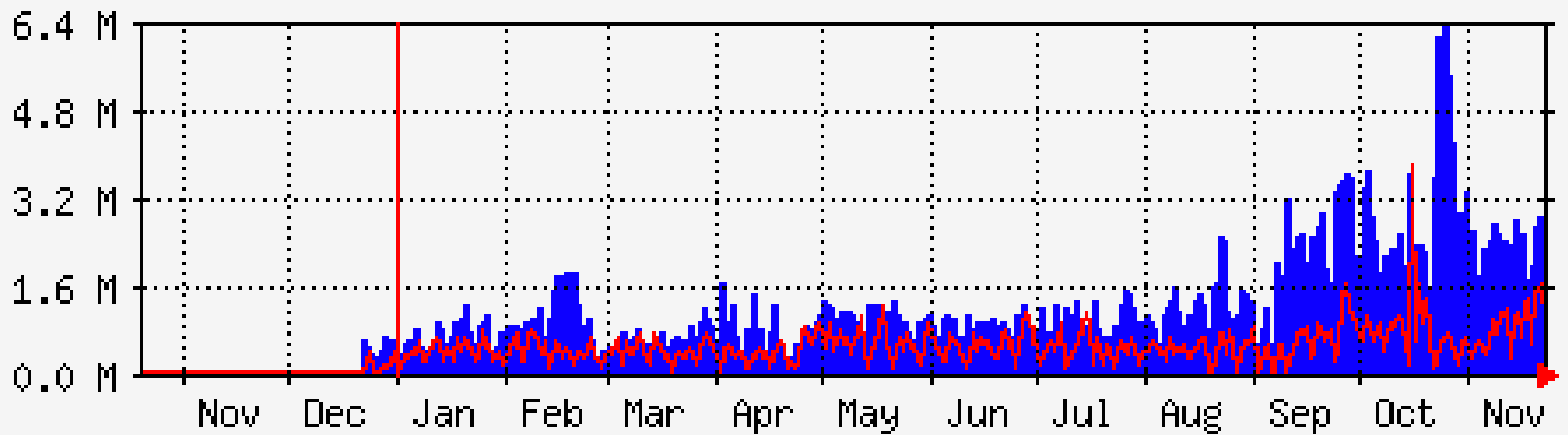
מתוך 34Mbs





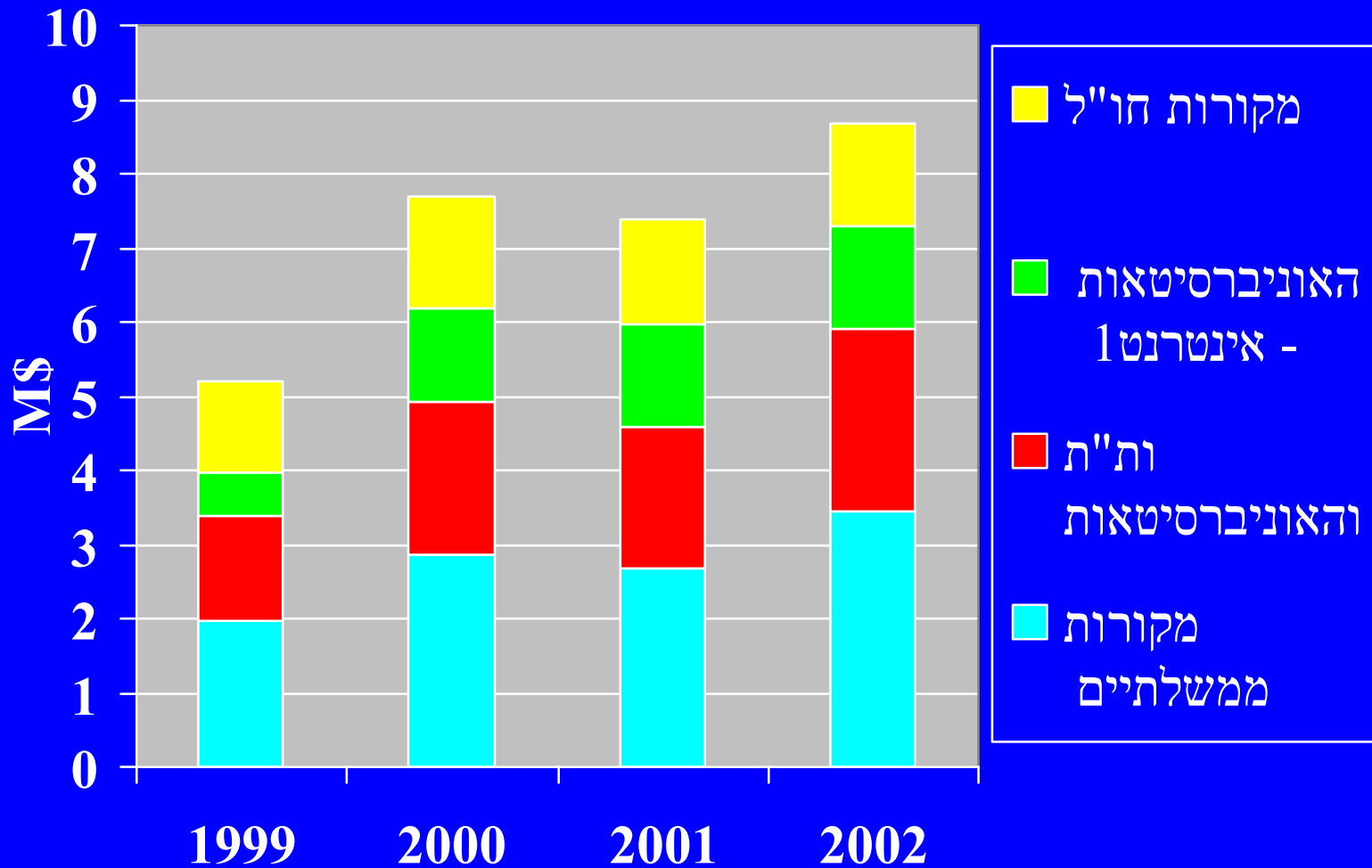
Yearly European traffic

מתוך 22Mbs





Financing of Internet-2



Internet-2 external customers



- בזק
- MOST
- שירות המטורולוגי
- Bandwiz Ltd
- מכון הביולוגי (soon)
- Israel-1
- ביה"ח רמב"ם
- ביה"ח סורוקה



Management structure

- **Government decision from June 9, 1998 to set up Internet-2**
- **ועת היגוי**
 - **co-chairs of מנכ"ל משרד המדע and מנכ"ל ות"ת**
 - **members include: מנכ"ל הילה, יו"ר איגוד תעשיות האלקטרוניקה, מנכ"ל משרד התקשורת, סגן ראש אגף תקציבים במשרד האוצר**



Management - continued

- **מנהלת**

- **מנכ"ל מחב"א, נציג התעשיינים, נציג ממשלה**

- **Many observers from: Ministry of Science, Ministry of Communications**

- **handles all tenders and all day to day policy**

- **מחב"א**

- **is mandated to handle all operational issues of setting up and running the network**



Policy

- **Policy as to who/what qualifies as R&D industry**
 - will be based on a per project basis
 - requests to connect have to be sent to the **מנהלת**
 - the **מנהלת** will set price levels
 - initially free till July 2001



More?

- **<http://www.internet-2.org.il>**
 - **FAQ, news, maps, Authorized Use Policy, etc.**