

# ***The Early History of the Israeli Internet***

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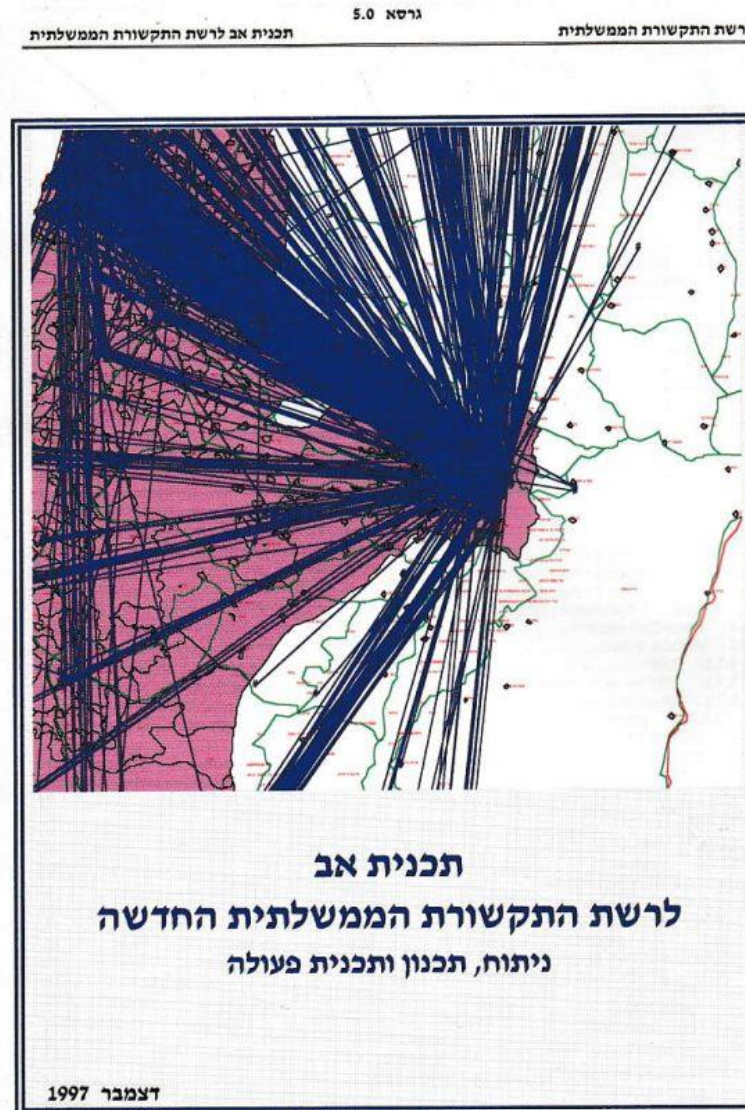


# מי אני?

- **בניתי רשת BITNET בארה"ב - 1981**
- **בניתי הרשת האקדמית – מחב"א משנת 1984**
- **בניתי רשת צהלנט - 1995**
- **בניתי ממשל זמין – 1997**
- **ועוד...**



## ממשל זמין



# צהלנט

תאריך: 19.3.99  
גירסה: 1.2

## טיוטה

**אפיון טכני לפרויקט הקמה ועדכון אתרי WEB בממר"ס**

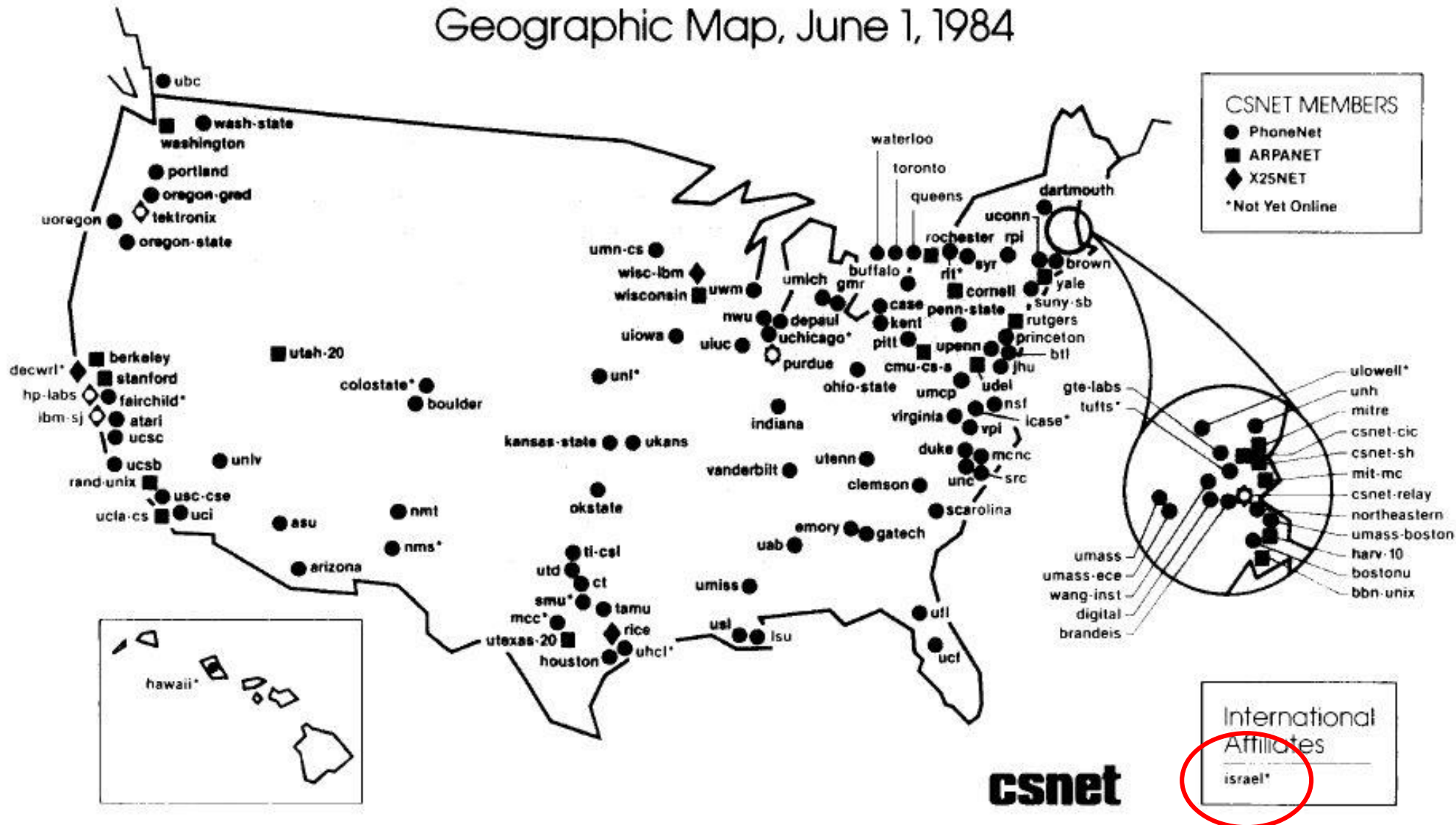


## *Internet precursors*

- **Csnet – April 1984**
  - 9.6kb IP/x.25 connection
- **Bitnet/EARN – August 1984**
  - 9.6kb leased line to Europe



Geographic Map, June 1, 1984



1 City University of New York, USA	05/05/81
2 Yale University, USA	05/05/81
3 Pennsylvania State University, USA	10/02/81
4 New Jersey Educational Computer Network, USA	01/19/82
5 Brown University, USA	01/20/82
6 Cornell University, USA	02/06/82
7 Princeton University, USA	03/29/82
8 Columbia University, USA	05/03/82
9 Rockefeller University	06/01/82
10 Boston University, USA	06/06/82
11 University of California at Berkeley, USA	07/18/82
12 University of California at San Francisco, USA	07/27/82
13 Massachusetts Institute of Technology, USA	08/05/82
14 University of Rochester, USA	08/25/82
15 State University of New York/Binghamton, USA	09/08/82
16 Harvard University, USA	09/16/82
70 IBM Israel Scientific Center, Haifa, IL	08/13/84
71 Technion - Haifa, IL	08/13/84
72 Haifa University, IL	08/13/84
73 Tel Aviv University, IL	08/13/84
74 Weizmann Institute of Science	08/13/84

## Bitnet

**The first Bitnet  
& EARN connections**



**EARN**

INTERNATIONAL LINES



## *Internet and int'l circuits*

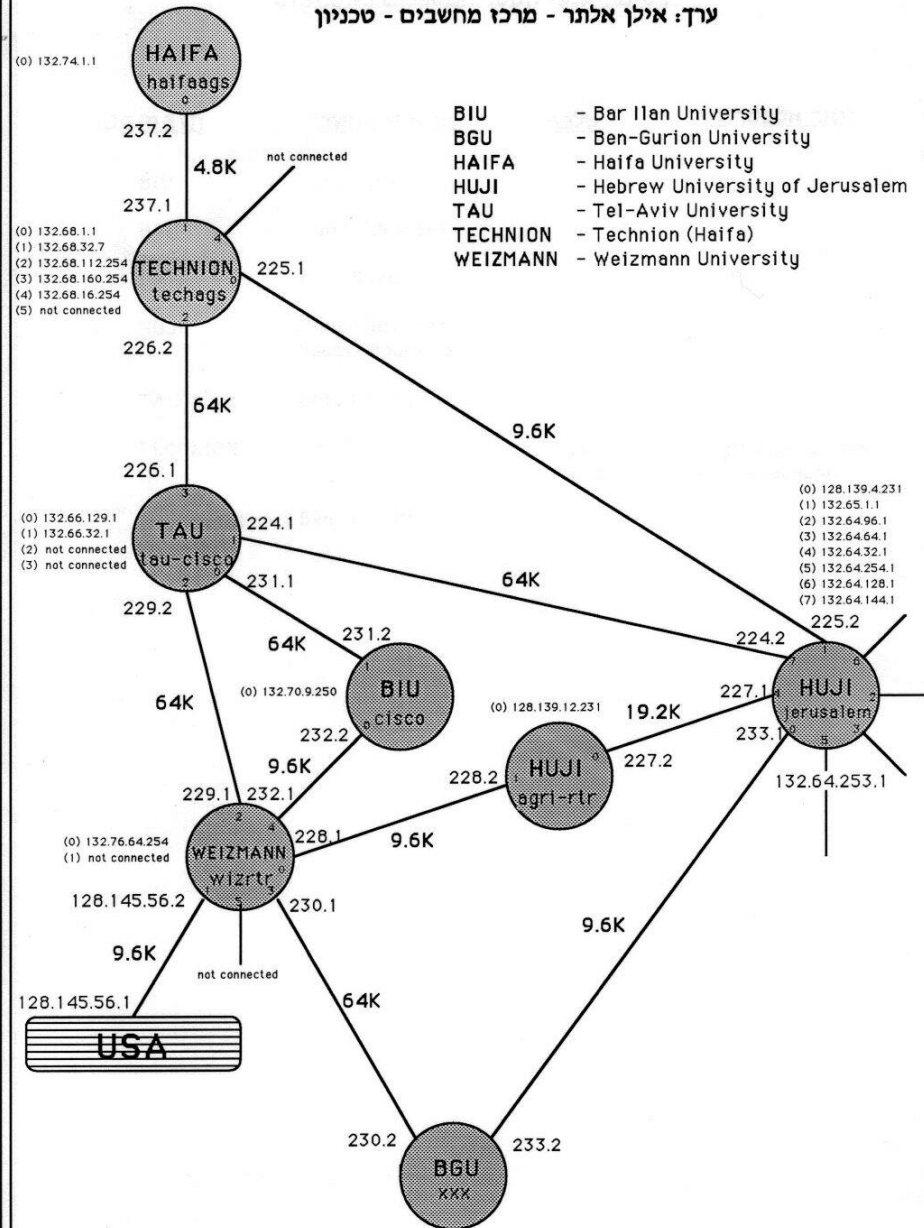
- July 1989 – מחב"א orders the first int'l 56kb link to Nysernet in USA
- Sept 1989 – Bezeq informs מחב"א that a 56kb link will not be available for another 10 months
  - מחב"א orders a 9.6kb link
  - Bezeq informs מחב"א that מחב"א has to find a US carrier for the other half – MCI is selected in Feb 1990
- June 26, 1990 – 9.6kb leased line Internet link to USA becomes operational



אוגוסט 1990  
Ver: 1.0

## מפת רשת התיקשורת הארצית (128.139.XX.XX)

ערך: אילן אלטר - מרכז מחשבים - טכניון



## *Int'l links*

- March 1991 – 64kb satellite link via Bezeq is made operational
- Oct 1991 – 64kb link to Europe via Bezeq is made operational
- Jan 1993 – 128kb satellite link via Israsat
- Jan 1994 - Sat link to US upgraded to 256kb
- Nov 1994 – Link to Europe upgraded to 128kb
- Jun 2010 – 2x 2.5Gb to Europe



## *How ISPs got started in Israel*

- June 1991 meeting with Ministry of Science, Ministry of Trade and Ministry of Communications to convince מחב"א to allow commercial companies access to this “Internet” thing
  - מחב"א requests self-limitation in license for only R&D companies as well as education
- Gov't continues to try to convince מחב"א to handle not only leased line companies but also dialup.
  - Feb 20, 1992 – מחב"א turns down gov't to handle dialup users and recommends that gov't issue licenses for companies to be formed
  - Gov't accepts מחב"א view and issues at end of 1992 the first ISP licenses to Actcom, Dataserv and Netmanage



## *The birth of Israeli ISPs*

- Inter-ministry committee decides which companies can connect to מחב"א
  - During 1992-1994 - 50 companies allowed to connect to מחב"א and hundreds to the new ISPs – through gov't ITEX initiative
- May 1994 – MoC grants open ISP licenses to Elron, Darcom, and Netmanage
- 1995 – 5 ISPs exist – Elron, Netvision, Actcom, Shani and Dataserve



## *The first connections to the Internet*

- 1. KavManche connected on Dec 7, 1992 (9.6kb)
- 2. IEC connected on Dec 9, 1992 (9.6kb)
- 3. Open U upgraded to 19.2kb on Mar 3, 1993
- 4. E&M Michshoov connected on Mar 7, 1993 (9.6kb)
- 5. BRM connected on Mar 8, 1993 (9.6kb) [BRM later became Checkpoint]
- 6. Datasrv connected on Mar 21, 1993 (64kb)
- 7. RAD connected on Mar 22, 1993 (19.2kb)
- 8. BezekZahav connected on Apr 23, 1993 (19.2kb)
- 9. Fibronics connected on May 4, 1993 (19.2kb)
- 10. Lanoptics connected on May 4, 1993 (9.6kb)
- 11. Applied Materials connected on May 4, 1993 (9.6kb)
- 12. Aleph Yissum connected on May 12, 1993 (9.6kb)
- 13. Onyx connected on May 23, 1993 (9.6kb)
- 14. Actcom connected on June 10, 1993 (9.6kb)
- 15. Bahai World Center connected on July 1, 1993 (64kb)
- 16. Netmanage connected on July 21, 1993 (19.2kb)



<http://www.interall.co.il/israel-internet-connections.html>

## IIX

- Gov't informs מחב"א that all commercial companies have to be disconnected by May 1996
- Dec 31, 1995 - איגוד האינטרנט decides to create an Israeli Internet Exchange modeled after similar US based systems
- The IIX is born



## ***\*.il domains***

- **.il is 3<sup>rd</sup> ccTLD established in 1985**
  - **.us in Feb 1985**
  - **.uk in July 1985**
  - **.il in Oct 1985**
  - **.au in Mar 1986**
  - **.nl in Apt 1986**



## ***\*.il domains***

- Decided on co.il, ac.il, org.il, etc. in 1992
- More formalized rules published in 1996
- The 1<sup>st</sup> Israeli domains
  - All universities: huji.ac.il, tau.ac.il, bgu.ac.il, etc. – July 1990
  - Commercial
    - iec.co.il – July 1992
  - Amutot
    - matimop.org.il – Oct 1993
  - ISP
    - actcom.net.il – Oct 1994 (bought out by Bezeqint)
  - School
    - misgav.k12.il – June 1995 (gone)
  - Municipal
    - ladpc.gov.il – July 1995 (changed to ladpc.co.il)

