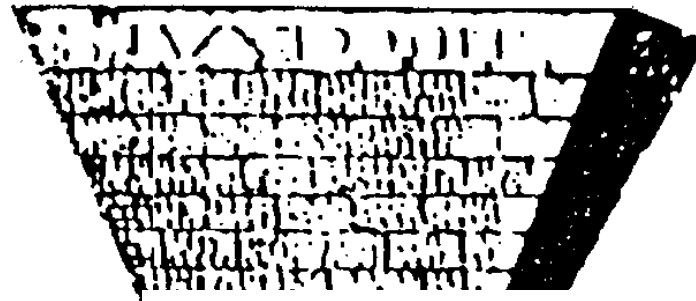


# **Trends of 21st Century**

- 1. Shift of Technology**  
**Analog to Digital**
- 2. Globalization of Society, Commerce, and Culture**  
**Local to Global**
- 3. Emergence of New Knowledge/  
Creative Economy**  
**Obedience to Creativity**

# To lead is to serve.

**Service Class**



**Selfless  
Public Service**



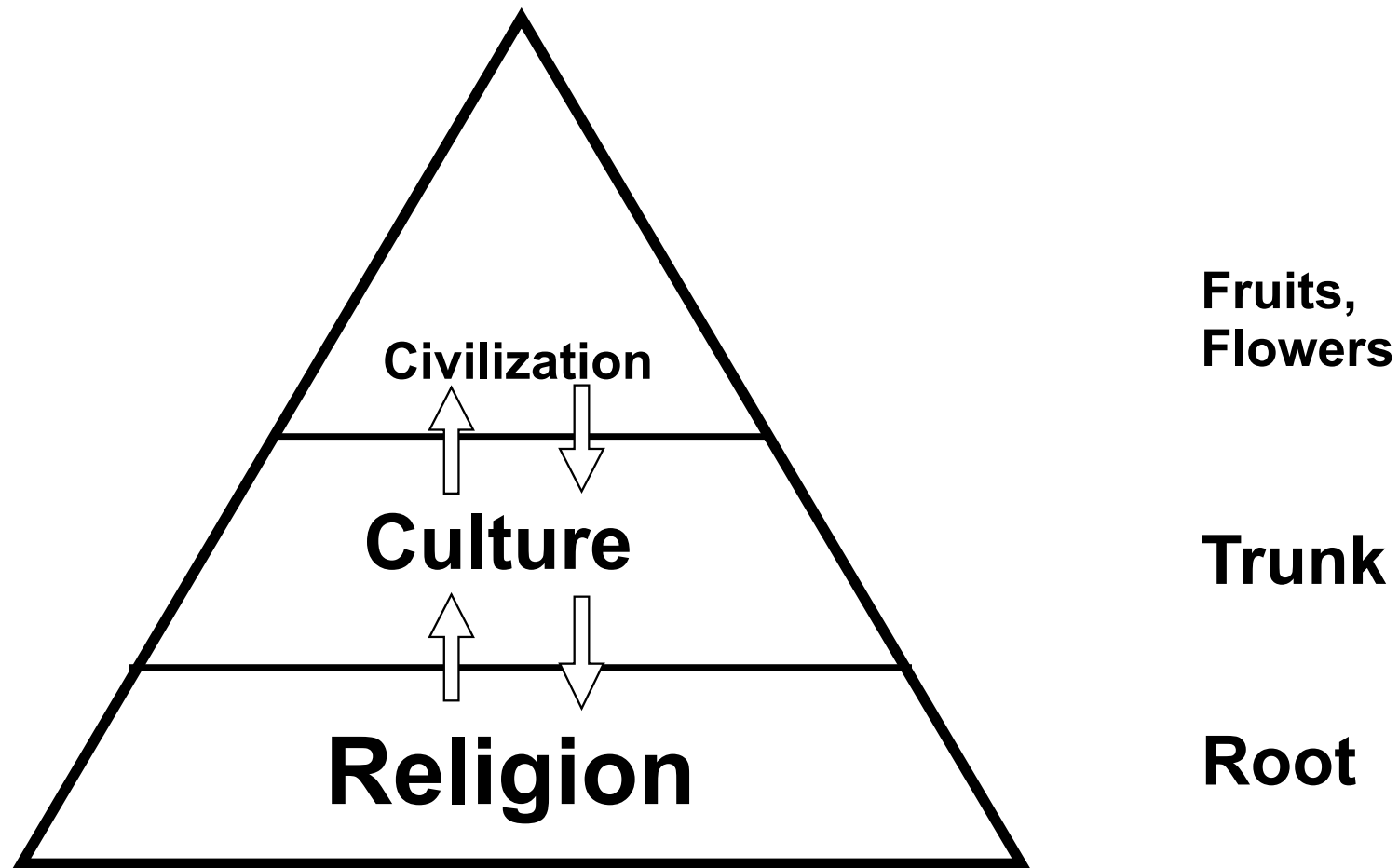
**Creative Class**

**Industrial Society  
of  
20th Century**

**Global Society  
of  
21st Century**

“Why Business Fail in Government,” The New York Times, 1987

# Hierarchy of Civilization, Culture and Religion



# Requirements for Innovation

- **Freedom of thought**
- **Independent thinking**
- **Immigration of new minds**
- **Risk-taking**
- **Intent for transparent bureaucracy**
- **Financial market and venture capital**
- **Spread of democracy should be with cooperative innovation, not by weapons.**

Friedman, T. L., "The Secret of Our Sauce," The New York Times, March 7, 2004

# 3Bs of having “aHa”!!



**Bus**



**Bed**



**Bathroom**

Archimedes have discovered the principles of density and buoyancy, also known as Archimedes' principle, while taking a bath. The story goes that he then took to the streets naked, being so elated with his discovery that he forgot to dress, crying "Eureka!" ("I have found it!").

**Nobel Economic Prize:**  
Prof. William Vickrey of Columbia University in 1996 for the economic theory of incentives under asymmetric information

# 3Ts for fostering Creativity

 **Technology**

 **Talent**

 **Tolerance**

Florida, Richard, "Geography is Destiny," BusinessWeek, August 7, 2006, page 18

# Change the World

*“Never doubt that a small group of dedicated individuals can change the world. In fact, it is the only thing that ever has.”*

American anthropologist, Margaret Mead (1901-1978)

# **On Creativity**

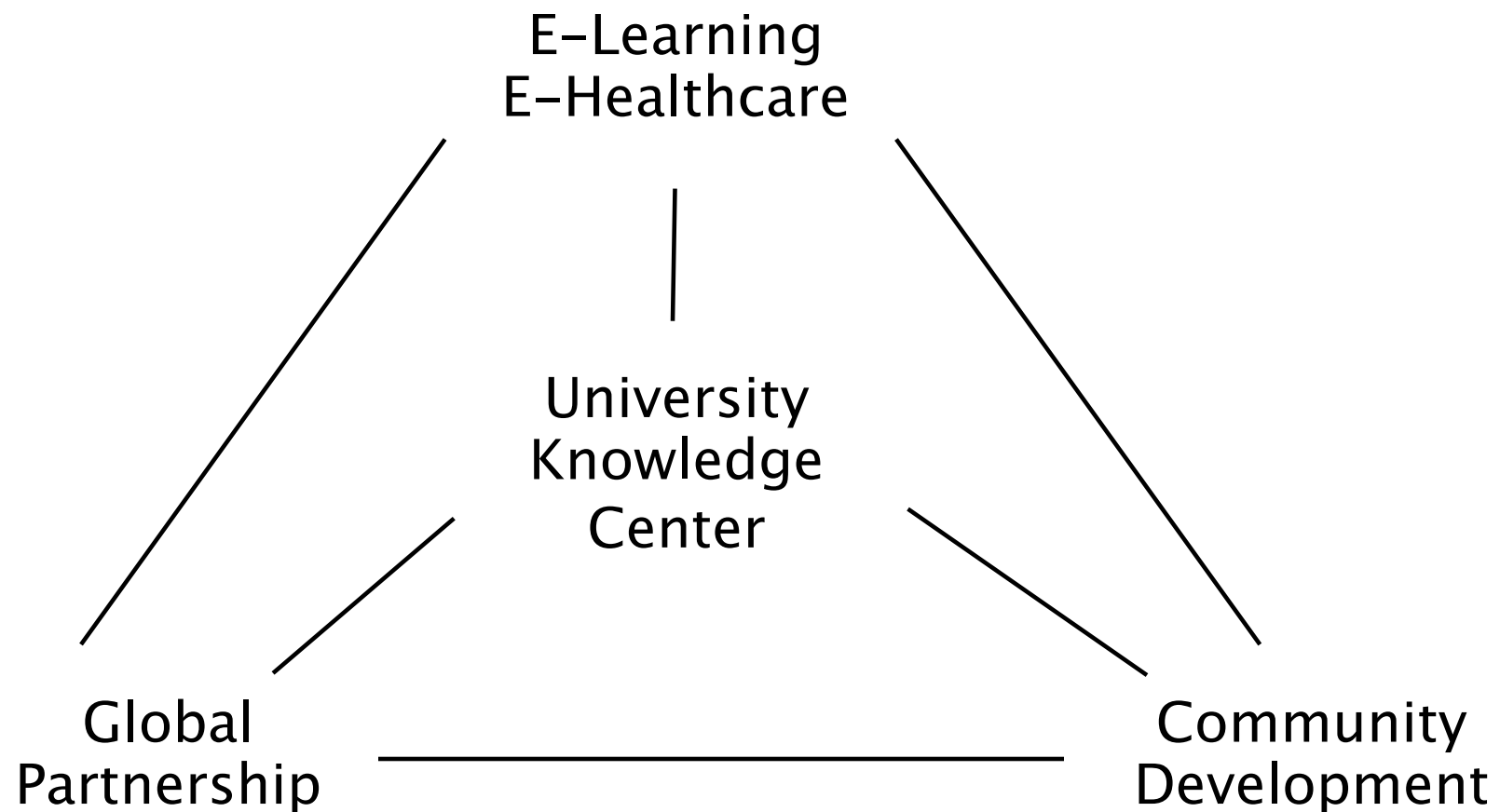
**There is nothing higher than creativeness, and there is no greater joy. Therefore – create and rejoice! Be daring in creative flight. “Create courageously!”**

**Let thought undistorted and unrestricted be impressed in your being. Let it be free from the shadow of the censor’s scalpel.**

**Be true to yourself because there is nothing higher than creativeness.**

Slide taken from World Island Project

# University: Leader of Community in the Knowledge Society in the 21st Century



# Characteristics of GUS

- **Local/international collaboration at all levels**
- **Integrated, multi-use internet infrastructure**
- **Cutting-edge, globally collaborative university research on “best practices”**
- **Optimal use of existing resources**
- **Agendas for gender, indigenous peoples, special-needs populations**
- **An experimental spirit**

# **Expected Benefits**

- **Support of e-learners and e-healthcare**
- **Freedom from geographical limitations**
- **Global dialogues for global peace**
- **Exchange of ideas, information, knowledge**
- **Joint collaborative Hi-Tech research and development**

# Paul Baran

Inventor of  
Packet-switching Data Telecom Technology



# Deregulation of Japanese Telecom Policy for the Use of Email



UNITED STATES DEPARTMENT OF COMMERCE  
International Trade Administration  
Washington, D.C. 20230

APR 8 1982

Dr. Takeshi Utsumi  
Global Information Services  
43-23 Colden Street  
Flushing, N.Y. 11355

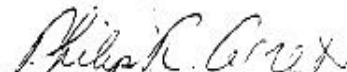
Dear Dr. Utsumi:

Enclosed are three cables from the U.S. Embassy in Tokyo reporting on the recent move by the Ministry of Posts and Telecommunications (MPT) to remove the usage restrictions on the ICAS system.

According to the Embassy, MPT's action will allow Global Information Services to offer electronic mail, computer conferencing, and word processing services to Japanese customers via the ICAS system. It thus appears that Global's TFC case has been favorably resolved.

Please review the enclosed cables and let me know your reaction. If you have no objection, we will close this case.

Sincerely,

  
Philip R. Agress  
TFC Staff Officer

Enclosures (3)

# Users of E-mail

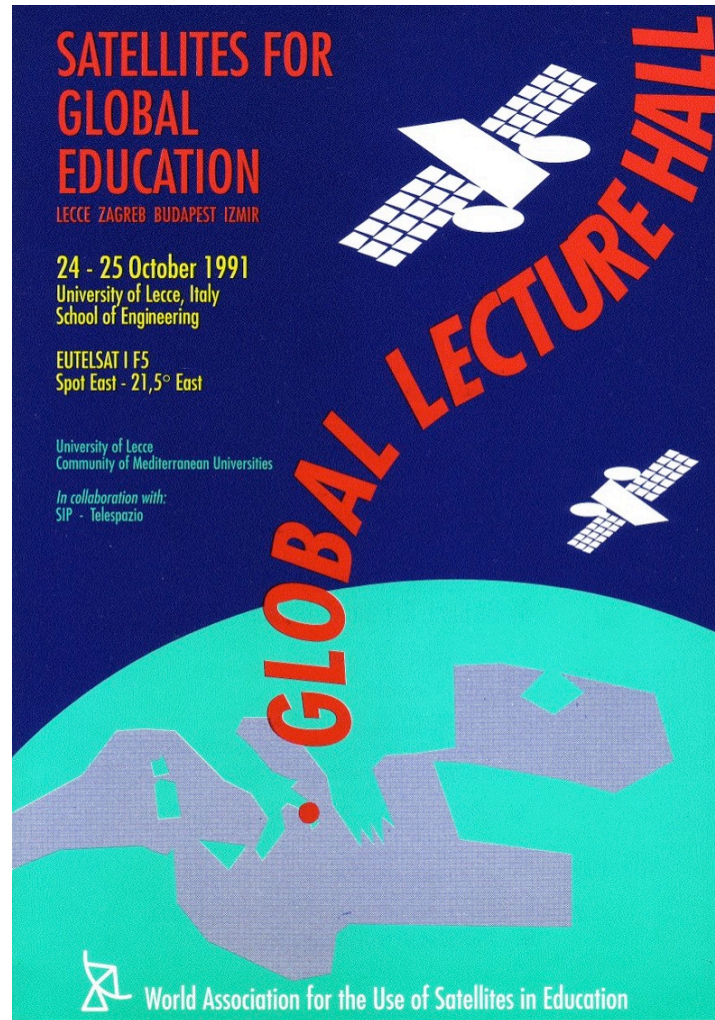
(over one billion as of 2005)



Business Week, June 27, 1994, page 6

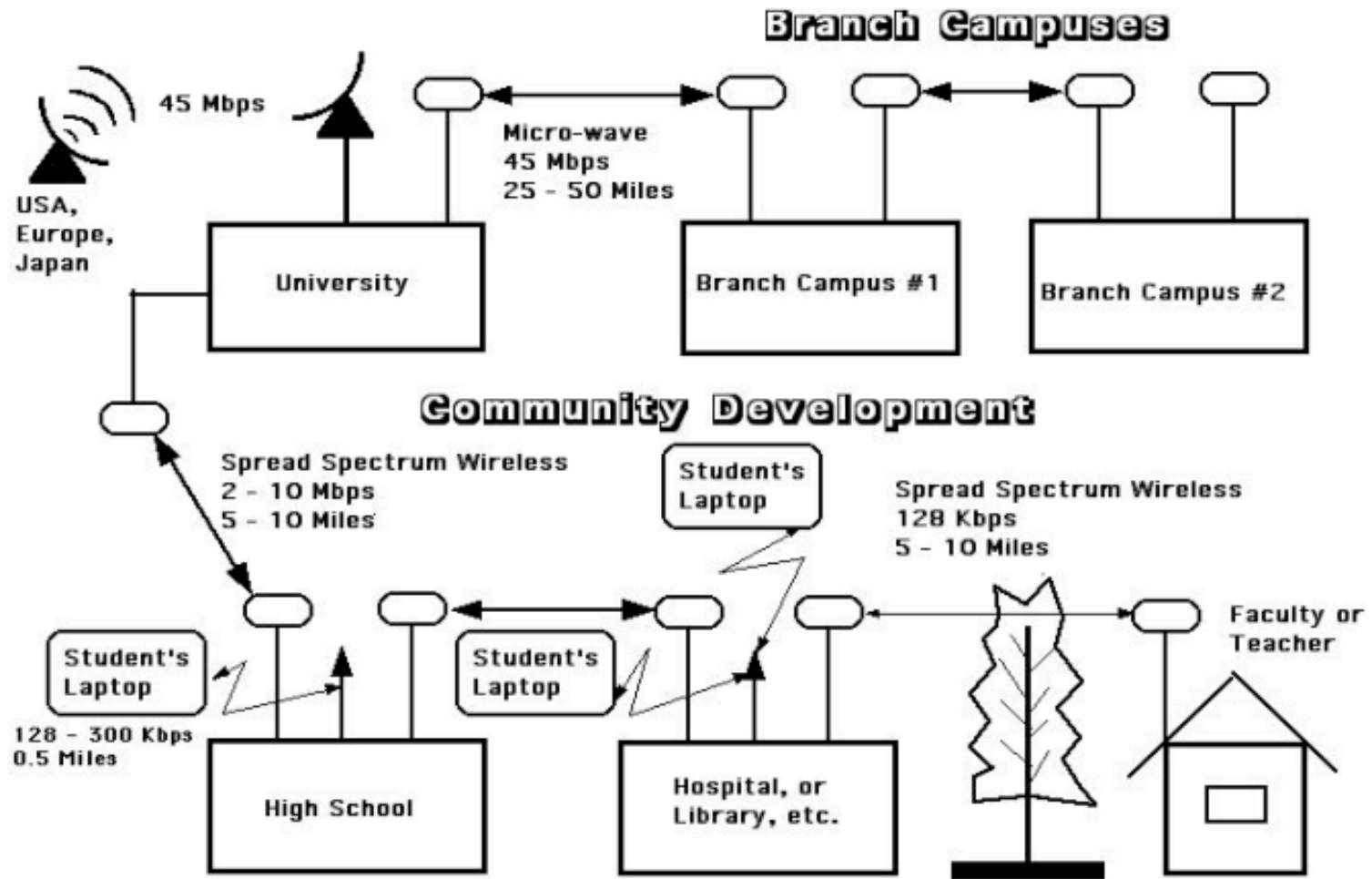
# Global Lecture Hall (GLH)

Lecce, Zagreb, Budapest, Izmir  
University of Lecce, October 24-25, 1991

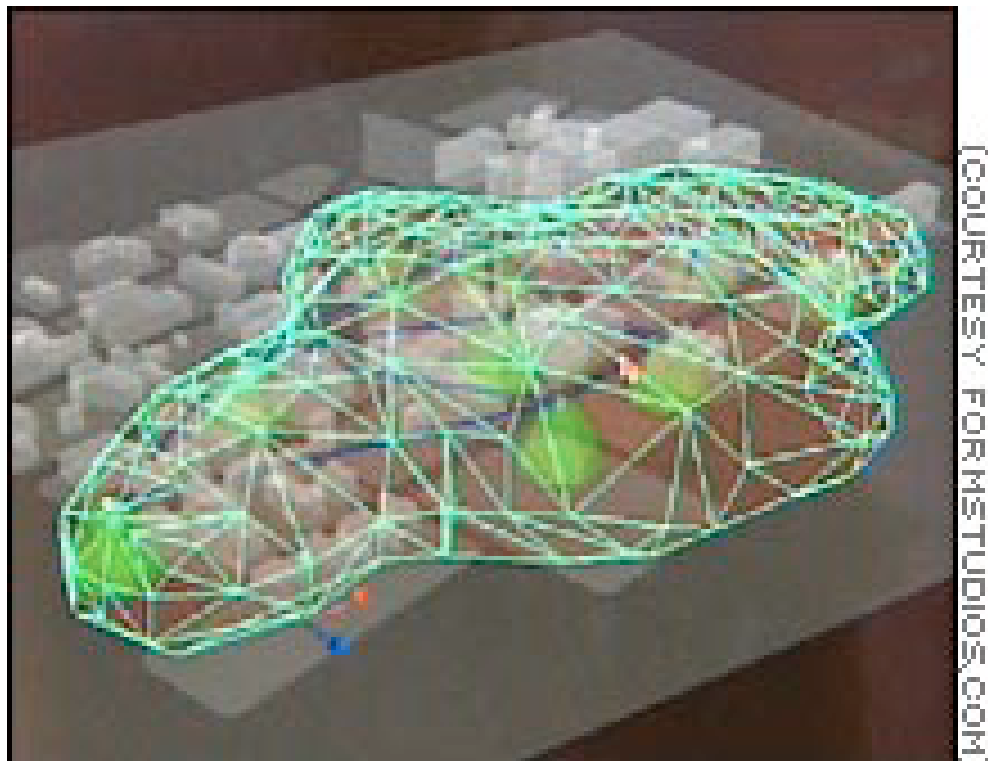


# Global Broadband Internet

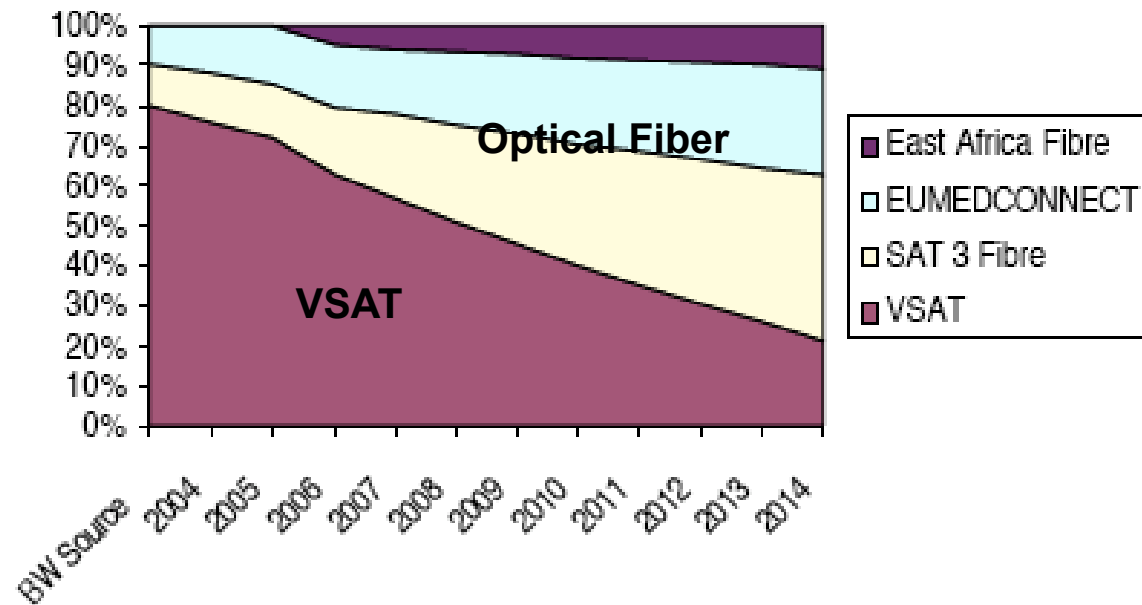
Global Broadband Wireless and Satellite Internet Virtual Private Network (11-9-02)



# WiFi Cloud

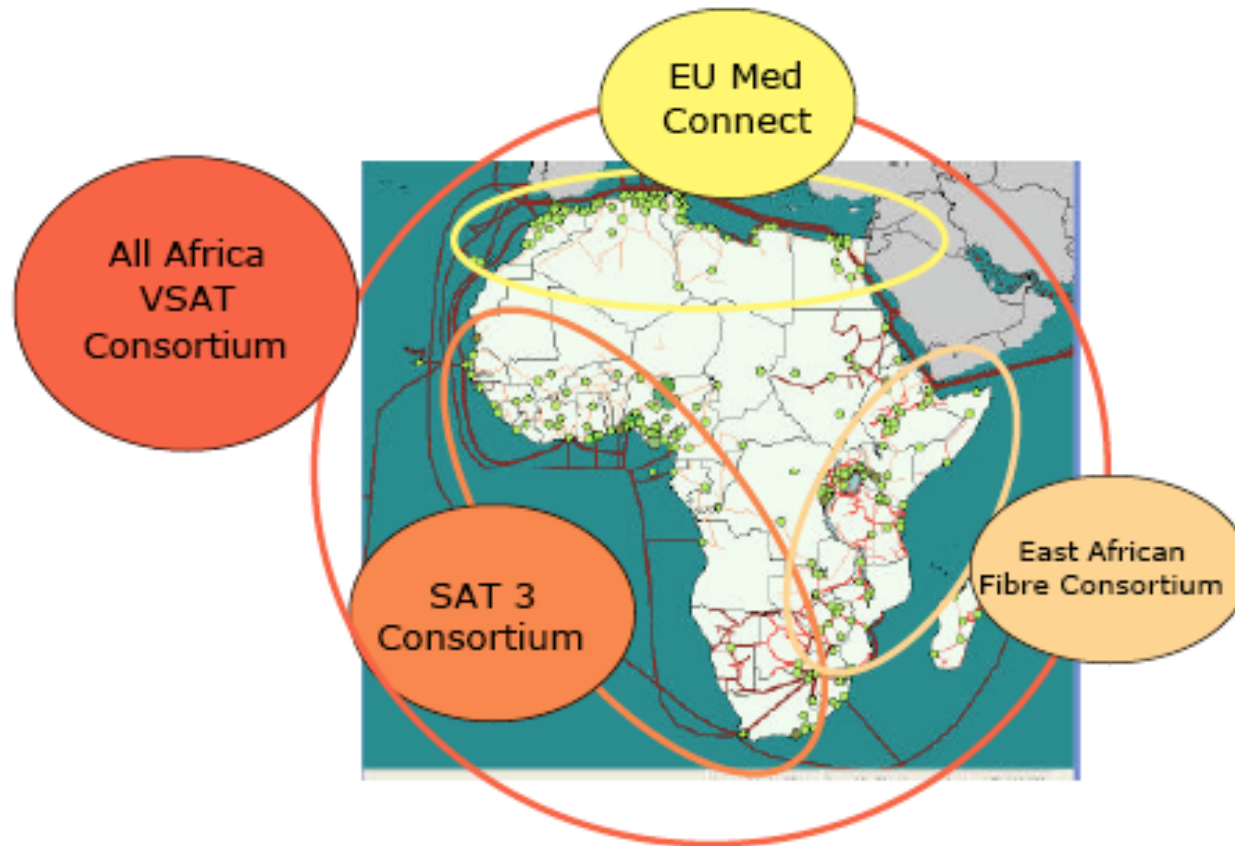


# Growing importance of Optical Fiber



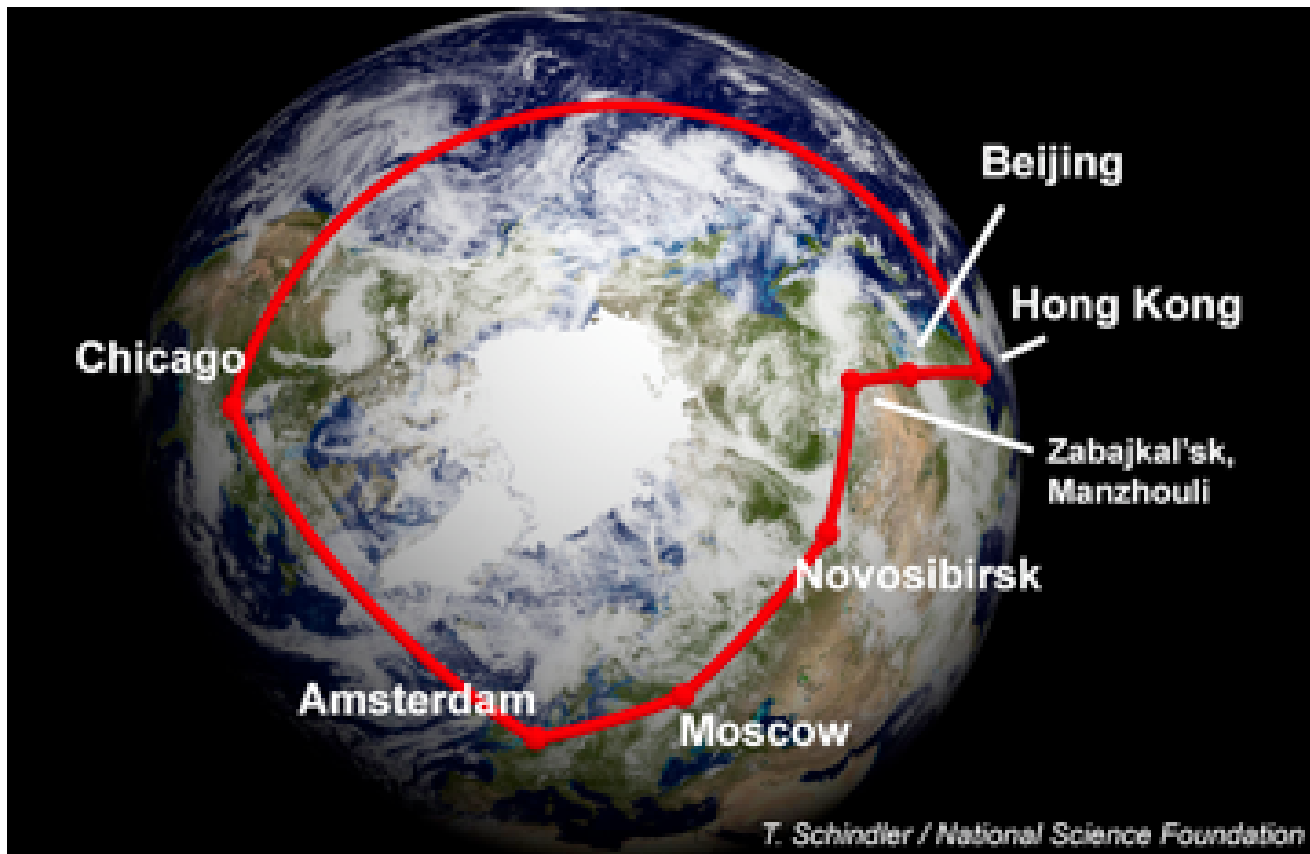
# Potential Consortia in Africa

[http://www.connectivityafrica.ca/page.php?file=PAREN\\_Report\\_final.pdf](http://www.connectivityafrica.ca/page.php?file=PAREN_Report_final.pdf)



# GLORIAD

(Global Ring Network for Advanced Application Development)

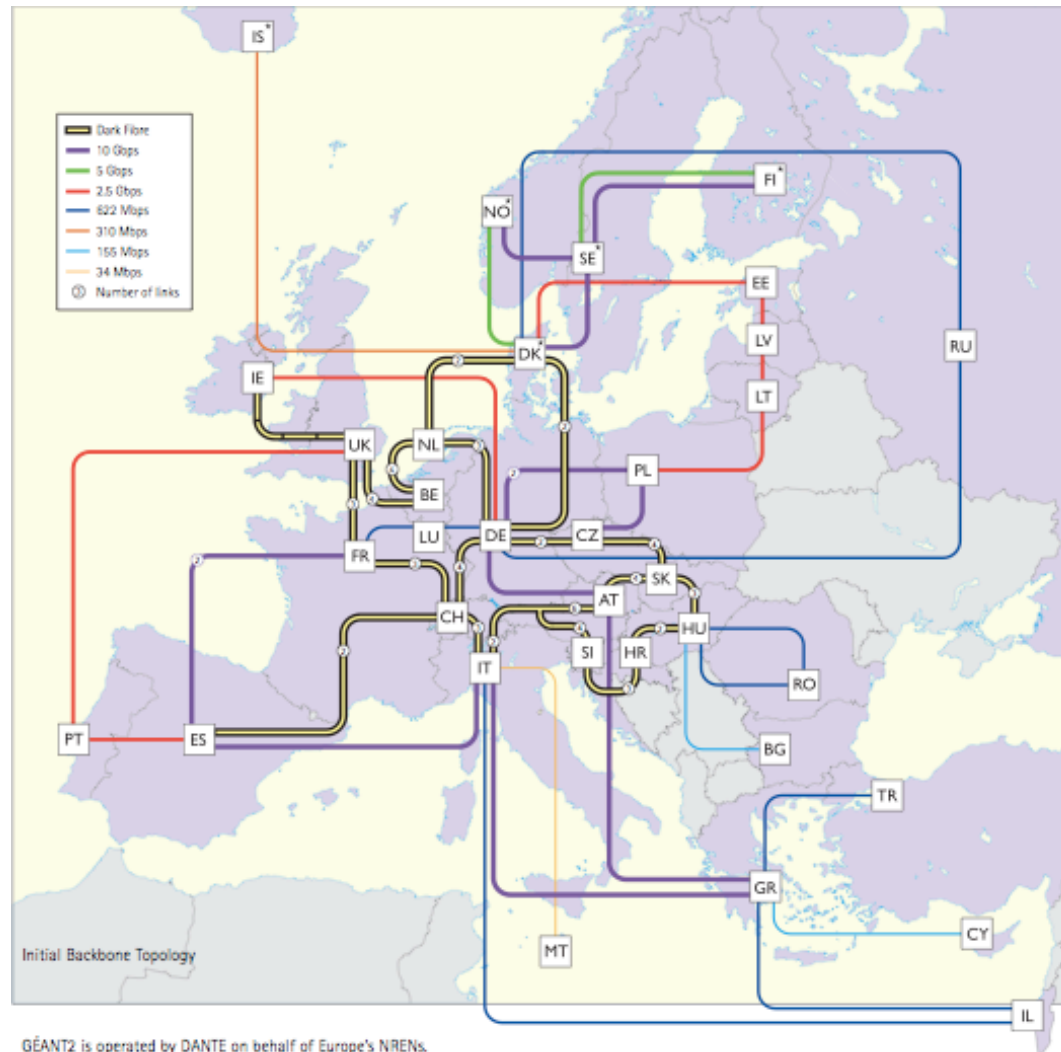


# **Working Groups of GUS/Altai Mir**



-  **Infrastructure**
-  **Global e-learning**
-  **Global e-healthcare/telemedicine**
-  **Community Development**
-  **Globally Collaborative Research and Development**

# GEANT2

<[http://www.geant2.net/upload/pdf/GEANT2\\_Topology\\_August\\_05.pdf](http://www.geant2.net/upload/pdf/GEANT2_Topology_August_05.pdf)>



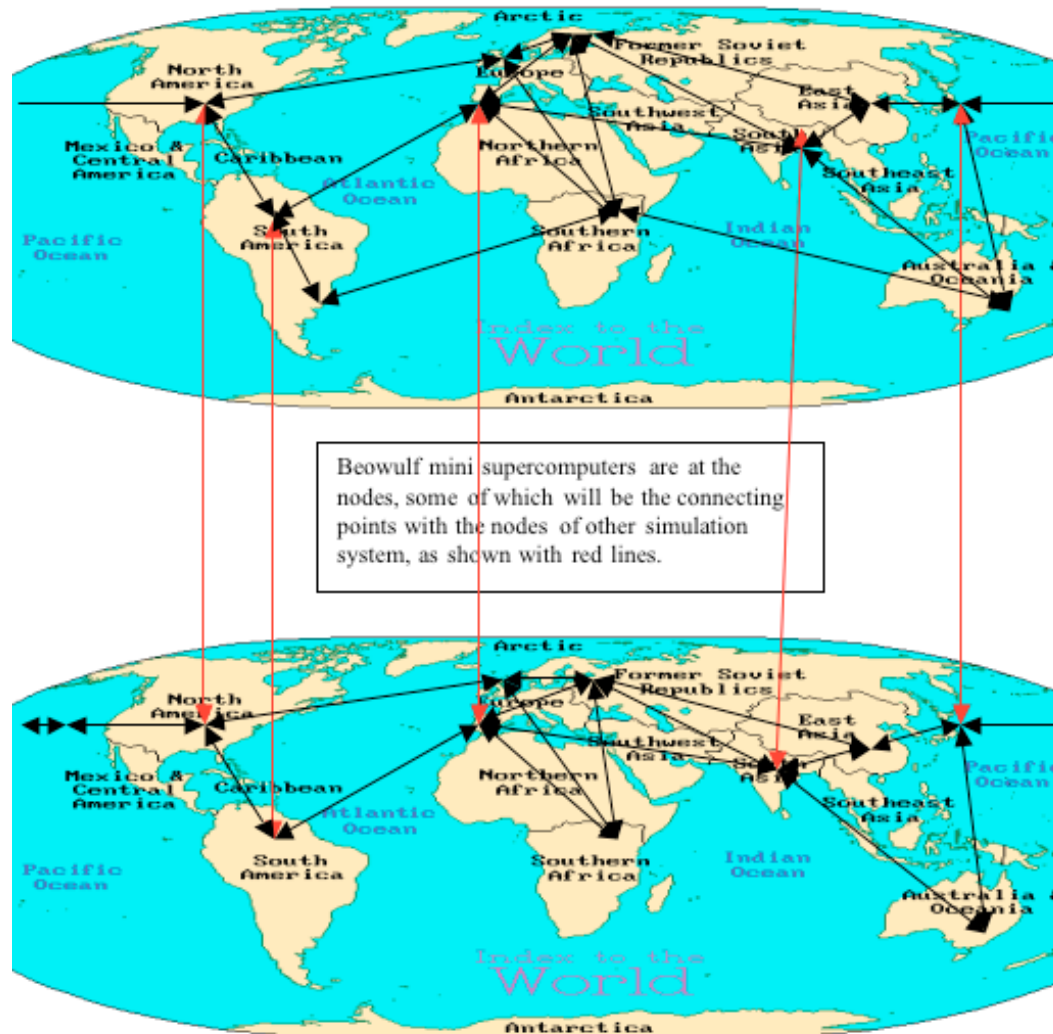
# **GRID Computer Network**

-  **Mini super-computer with clusters of PCs**
-  **Global Collaborative Problem Solving**



# Globally Collaborative Environmental Peace Gaming (GCEPG)

## Globally Distributed Climate Simulation System



## Globally Distributed Socio-Economic-Environmental Simulation System

# Two Tier System

- **One for training young would-be decision makers in crisis management, conflict resolution, and negotiation techniques basing on “facts and figures,”**
- **The other for helping decision makers construct a globally distributed decision-support system for positive sum/win-win alternatives to conflict and war.**




# Principles of Information and Knowledge Societies

- **Information Society**  
Packet-switching technology  
Sharing
- **Knowledge Society**  
GRID technology  
Collaboration
- **Global Peace**  
Sharing and Collaboration

# Funding

- **GUS projects will combine (1) the Japanese government's Official Development Assistance (ODA) funds, (2) medical, commercial, and foundation funds and (3) Japanese electronic equipment with**
- **(a) the Internet technology and (b) content development of North America and Europe**
- **to help underserved people in rural and remote areas of developing countries by closing the digital divide.**

## **Dr. Utsumi's Overview/History**

-  **Enabled global e-mail by de-regulation of Japanese policy. (Received Lord Perry Award for the Excellence on Distance Education in 1994.)**
-  **Initiated Japanese government's pledge of \$15 billion to close the digital divide in developing countries.**
-  **I am now working on the recipient side for the available Japanese funds for GUS.**