

Global University System (GUS)

Initiated at the international conference on the
“Emerging Global Electronic Distance Learning (EGEDL/99),”
August 9th - 13th, 1999,
University of Tampere, Finland

The GUS is a network of networks formed in particular by higher education institutions, but also by other organizations sharing the same objectives of developing a co-operation based on solidarity and partnership.

Mission of GUS

The mission of the Global University System program is not the mere enhancement of job skills with e-learning, but the creation of youngsters for the global peace for the eradication of borderless terrorism by reduction of poverty through the use of advanced Information and Communication Technologies (ICT) in remote/rural areas around the world.

Objective of GUS

- **Construction of global broadband Internet networks**
- **Development of teaching materials**
- **Global network of facilitators**

Objectives of GUS

§ improving the global learning and wellness environment for people in the global knowledge society, where the global responsibility is shared by all;

§ sharing and exchanging knowledge among the sectors of education-related research, industry and trade;

§ giving priority to actions improving learning and healthcare world-wide;

§ harnessing the technologies of broadband Internet connectivity among institutions of higher learning in the developing countries, in order to provide learners of all ages access to global e-learning across national and cultural boundaries;

(continue)

Objectives of GUS

(continued)

§ fostering youngsters around the world in a creative competition for relevance and excellence through affordable and accessible broadband Internet;

§ supporting systems which complement the traditional institutions of learning and healthcare by using conventional methods together with advanced electronic media;

§ improving learning and health of the disadvantaged by increasing their access through the utilization of new technologies, basing its long-term orientations on societal aims and needs and reinforcing the role of service to the whole society.

Research findings

- **Learning networks can be as effective or more effective than traditional classrooms, in terms of access and learning outcomes**
- **Collaborative learning designs are more effective for online learning than individuals working alone with materials posted online**

I ask to those people who wish to build artificial intelligence machine; “which of the machine or human brain is superior?” Everybody answer “Of course, human brain is superior.”

I then say to them “If so, rather than spending huge money to develop such machine, wouldn't it be wise and beneficial to world society to spend such money for education of excellent, capable youngsters in developing countries?”

Late Dr. Hiroshi Inose, then Director General of the National Center for Science Information System (NACSIS), and laureate of Marconi Award

Nikkei (February 9, 1992)

Availability of Japanese ODA Fund

Dr. Utsumi helped the Japanese government pledge US\$15 billion to close the digital divide in developing countries during the Okinawa Summit in July of 2000.

Mr. Koizumi, Prime Minister of Japan, made another pledge of US\$2 billion to aid education and healthcare in developing countries during the G8 Summit in Canada in June, and at the Environment Summit in Johannesburg, South Africa in September, of 2002, respectively.

Financing GUS Projects

The GUS projects will combine;

1) Japanese government's Official Development Assistance (ODA) funds and

2) electronic equipment (computer, transceiver, dish antenna, etc.) of Japan with

a) Internet technology and

b) content development of the north America

to help underserved people in rural and remote areas of developing countries.

GUS/UNESCO/UNITWIN Networking Chair program

is to construct global scale knowledge forum with advanced ICT, e.g., with the use of massive parallel processors of globally distributed and yet interconnected mini-supercomputers around the world through **Global Broadband Internet (GBI)** of the **global neural computer network**.

Expected Benefits

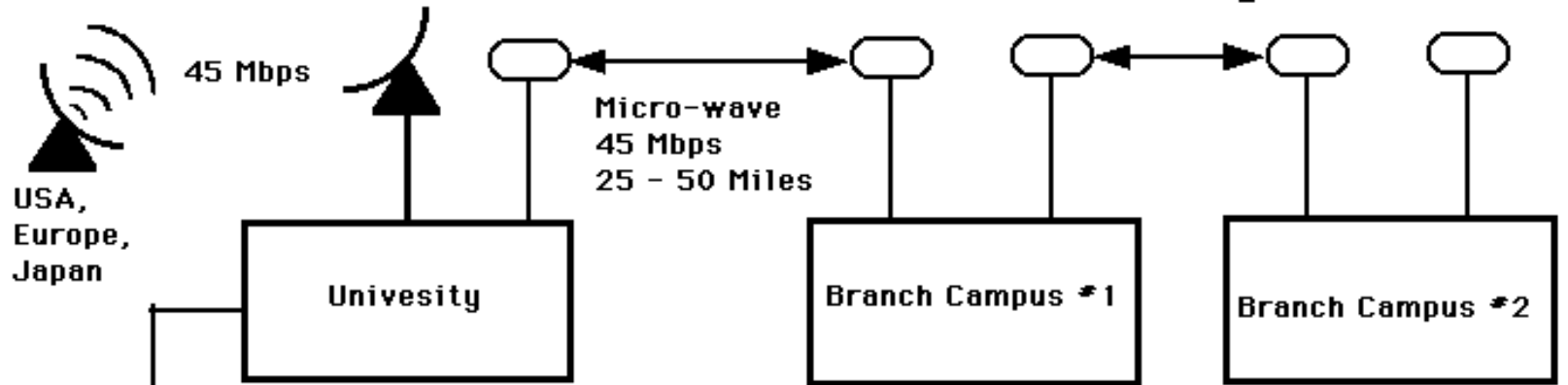
- √ Coalition member universities will be able to build the network of facilitators for support of e-learners,
 - √ Learners may take one course from a university of different country to get his/her degree from the GUS, thus freeing them from being confined with one philosophy of a university and a country,
 - √ The broadband Internet will enable web-based teaching with more interaction among/between learners and instructors compared with less interaction in replicating class-room teaching via satellite, -- thus stimulating global dialogues among them to attain global peace,
- (continue)

Expected Benefits (continued)

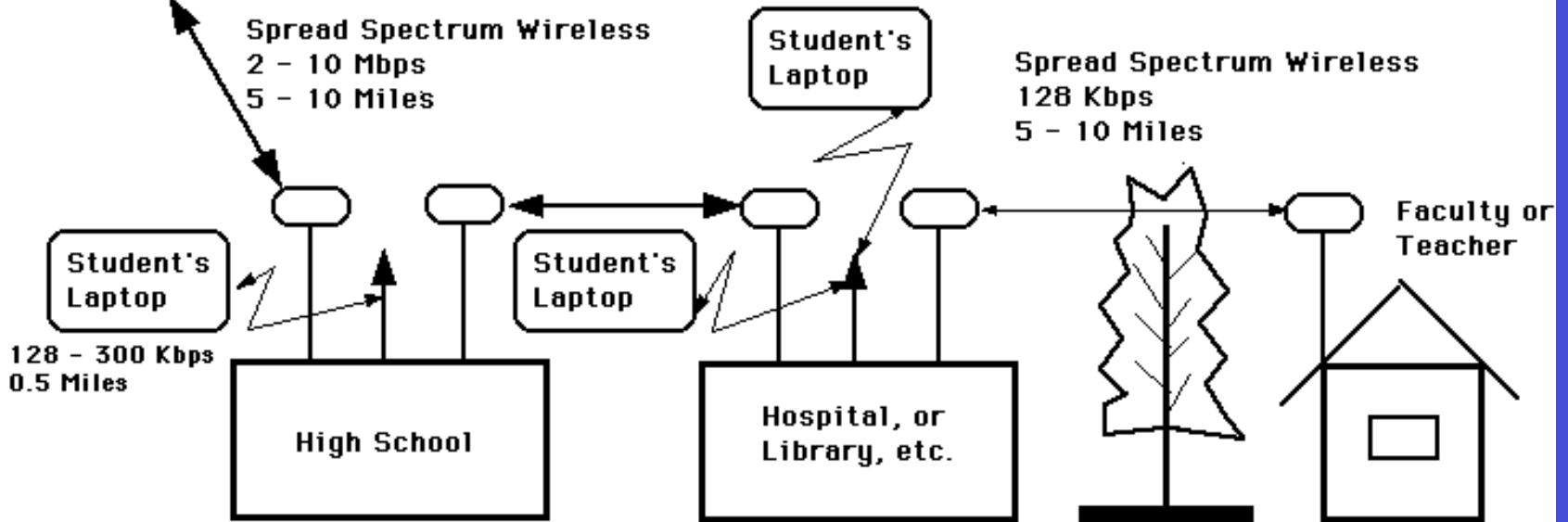
- v Learners and faculties at the member universities can promote exchange of ideas, information, knowledge and joint research and development of web-based teaching materials, community development, and many others locally, regionally and even in global scale,
- v Researchers in even developing countries can perform joint collaborative Hi-Tech research and development on various subjects, e.g., Globally Collaborative Environmental Peace Gaming, microbiology, meteorology, chemical molecular study, DNA analysis, 3D human anatomy, design of space shuttle (a NASA project for training high school students around the world), etc.

Global Broadband Wireless and Satellite Internet Virtual Private Network

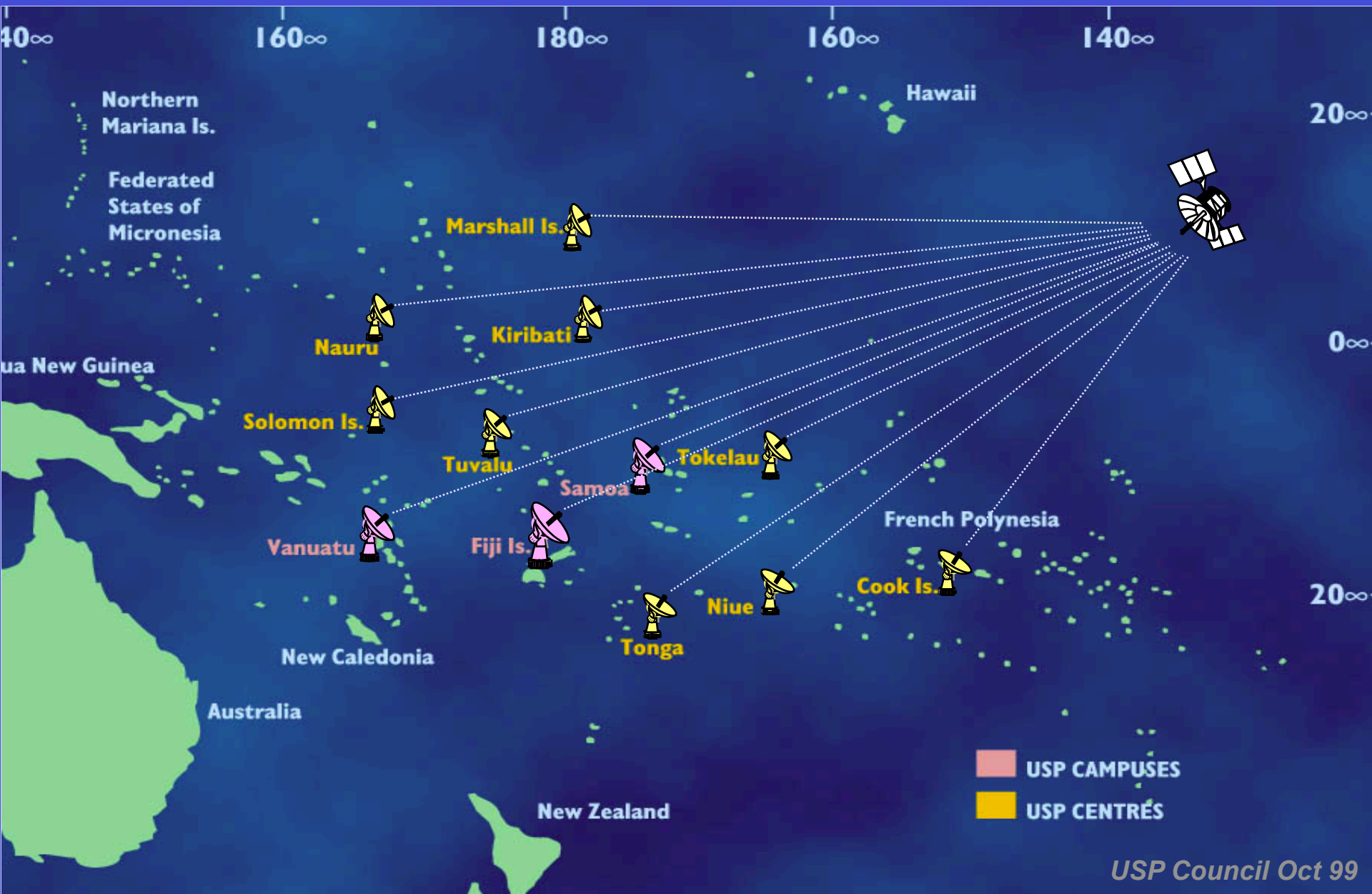
Branch Campuses



Community Development



USPNet VSAT Network

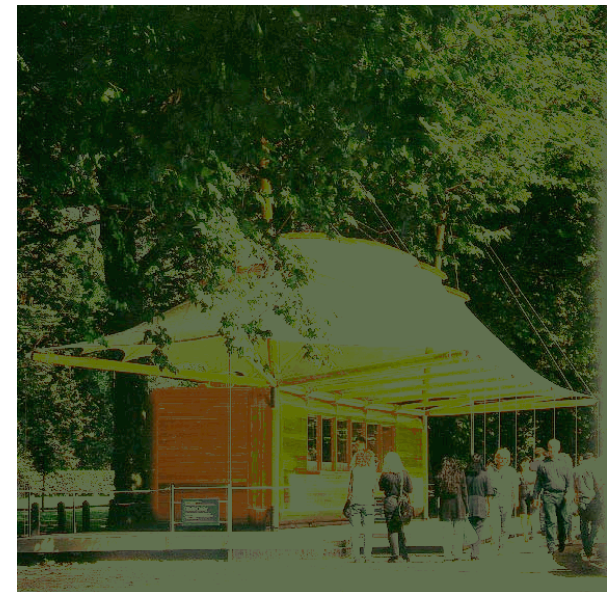


LINCOS (Little Intelligent Communities) or “Unwiring the World”



Foundation for Sustainable Development of Costa Rica
Institute of Technology of Costa Rica
MIT Media Lab
University of Rochester

Hewlett-Packard, Microsoft,
FTL Happold, Northsails, UTC,
Becton-Dickenson, Wyle, V-Tel,
Tachyon



Digital Town Centers



- 8-10 Computers
- 2 Printers, 2 Scanners
- Cell phone base station (15 mile radius)
- Smart card reader
- Medical diagnostic bay
- Analytical equipment as appropriate
- External large screen (when available)
- VSAT satellite connection

Purpose: to provide a multi-purpose information center for isolated regions, with high-speed (40 Mb/s) internet access and integrated local wireless communications, at affordable cost for developing nations

- Telemedicine
- Agricultural extension services
- Environmental monitoring
- Education

- Computer Lab
- Electronic Commerce
- Banking
- Digital Services

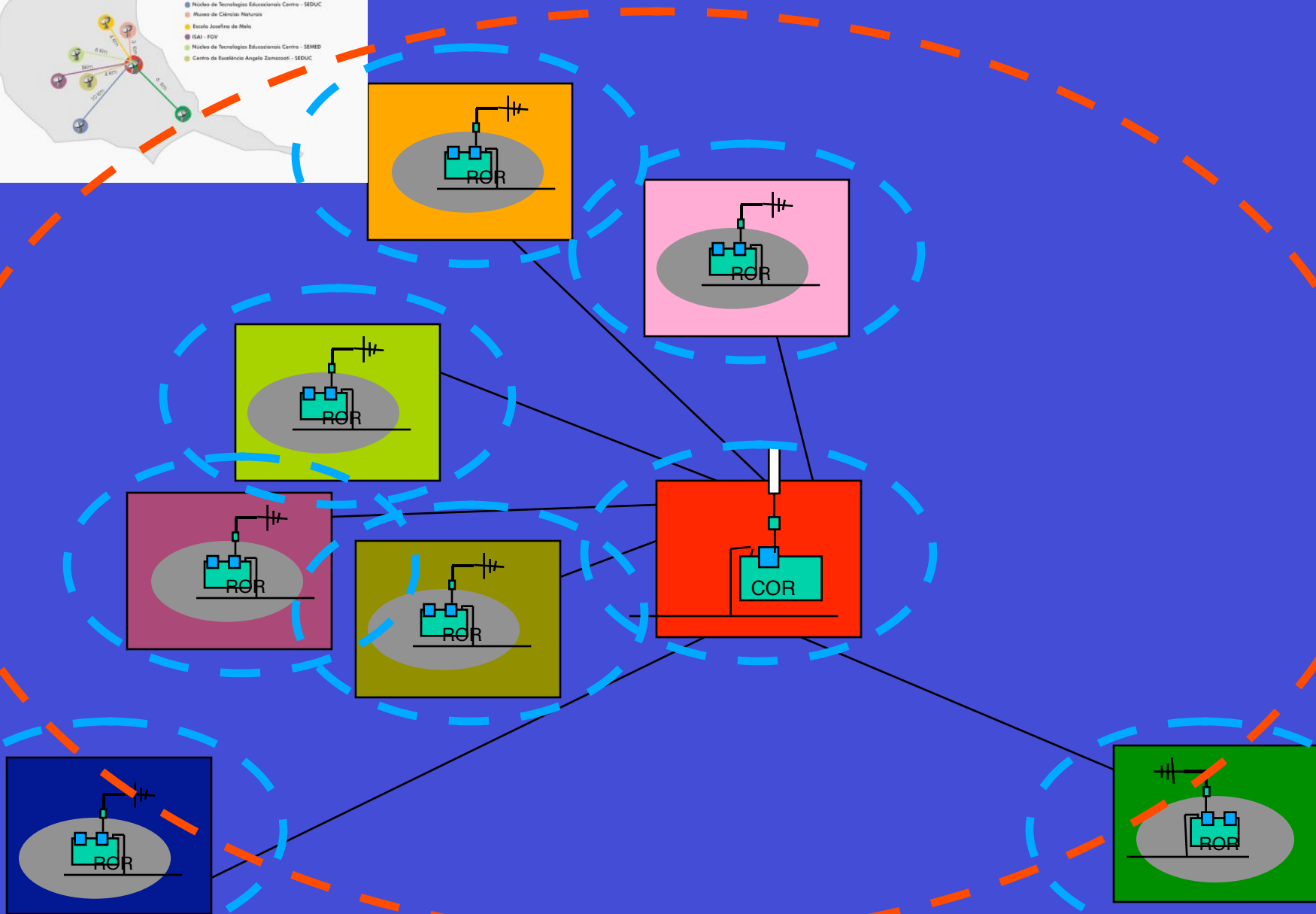




Regional Backbone



Topologia da Manaus Rede Interinstitucional Wireless



Map of Nigeria



Three Steps How to Proceed

- **Fact-finding and assessment trip**
- **Mini-workshop**
- **Large-workshop**

Step 1: Fact-finding and assessment trip

- **To meet a champion, who will pursue our joint project diligently and tenaciously,**
- **To find out current Internet capability for a demonstration during the mini-workshop, and what e-learning from the US and other countries can be extended,**
- **To plan the organization of and fund raising for the mini-workshop, etc.**

Step 2: Mini-workshop, say, three to six months after Step 1

- **With people from locality and from the US and/or other countries who will show what of their e-learning courses would be available through the currently available Internet capability,**
- **To form a coalition of higher, secondary and elementary schools, hospitals, libraries and local non-profit organizations and governmental agencies,**
- **To plan outline of the subsequent large workshop and fund raising for it, etc.**

Step 3: Large-workshop, probably a half year after Step 2

- **To brainstorm on the systems design, feasibility study and market survey of broadband Internet,**
- **To plan the content development with the use of the envisioned broadband Internet,**
- **To prepare submission of a comprehensive document to obtain the non-cultural aid grant of the Japanese government, etc.**

GLOSAS Projects

(GLObal Systems Analysis and Simulation
Association in the U.S.A.)

<http://www.friends-partners.org/GLOSAS/>

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- Laureate of Lord Perry Award for Excellence in Distance Education
- V.P. for Technology and Coordination of Global University System (GUS)

Thank you for your listening.

Tak Utsumi