



GLOSAS/USA

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COLUMBIA UNIVERSITY CICR ORGANIZED FALL '09 CONFERENCE

Global University System (GUS) proposal for collaboration

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Background and introduction

The Global University Systems (GUS), a non-profit educational service organization since 1988, aims to mobilize the socio-political-economic-technological resources of all countries of the world through international collaborative research on the most urgent and complex problems of our time. GUS leverages modern digital telecommunications to spread global-scale education designed to bring about development. Although each discipline (e.g., economics, political science, sociology, and systems planning), supplies its own definition of development, GUS places all definitions in a broad dynamic systems framework wherein development ultimately means the quality of life and the progress of societies toward values capable of expression in various cultures. Along with the pioneers of dynamic systems thinking, GUS views development as a complex series of interrelated change processes, both abrupt and gradual, by which a population move from patterns of life perceived in some significant ways as “less human” toward alternative patterns perceived as “more human.” How development is gained is no less important than the benefits obtained at the end of the development road. In the process, new solidarities, extending to the entire world, must be created. Cultural, ecological, and religious diversity must be nurtured. Esteem and freedom for all individuals and societies must be optimized. Although development can be studied as an economic, political, educational, or social phenomenon, its ultimate goals are those of existence itself: to provide all men with the opportunity to live full human lives. Thus understood, development is the ascent of all humankind and societies in their total humanity. With that philosophy in mind, GUS follows an elaborate networking in which a combination of factors has led GUS to:

- The international institutions (The International Development Arms of several national governments, such the US AID, Japanese International Aid Agencies, etc) for identifying and advancing best practices through implementation of Priority Action Plans for the National Development Plans;
- Creating, developing and enhancing opportunities where key players in converging industries can communicate and cooperate and show what they are doing and intend to do to stay ahead and be profitable in the future;
- Identifying and introducing topics where further discussion is still needed to better understand the key issues involved so that ministries of finance, power, water, telecommunications, transportation, energy, environment and other ministerial level executives have information to formulate policies for achieving their needs and objectives;
- Coordinating and managing the general preparation, conception of the program, and organization of world and regional special events sponsored by the international development organizations;

Secretariat, Emerging **GLOBAL UNIVERSITY SYSTEM (GUS) CONSORTIUM**

Chairman: Takeshi Utsumi, Ph.D.; Vice Chairman: Louis Padulo, Ph.D.;

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- Establishing and maintaining contacts with the Cabinet Ministers and other senior public-private sector representatives, including academia, engineering societies, the media and international or regional organizations, in an effort to involve them in the above-mentioned events.

During twenty years of thought and activity, GUS has witnessed the technological progression and societal transformation through the emergence of new satellite and wireless solutions, fiber optics, the rapid expansion of mobile telephony, the growing trends toward convergence, and the transition that has influenced the shifting of the digital divide from basic to advanced information and communications technologies (ICT). Through an experience of this nature, two beliefs have emerged in the minds of GUS researchers, activists, and pioneers:

- a. Telecommunications is a key factor of higher productivity and growth and it can play a crucial role in national strategies for development
- b. There is a “window of opportunity” for developing countries to “leapfrog” and plug into the emerging networked economy before any new business and technological models are put in place and a global policy framework is evolved.

GUS collaborates with several country programs, which are fostering the development of major electronic knowledge networks that link together policy and technical consultants in headquarters and regional centers around the country and the world, thereby creating “communities of practice” that foster learning throughout the organization. The GUS pioneers have always been and plan to remain at the forefront of applying science and technology for development. This particular topic dominates the relationship of major regions of the world and everyone in international institutions is concerned about it, but these regions and countries have to bring the spirit and the flesh into creative harmony.

GUS’ vision is to:

- a. Provide thought leadership in international and regional forums that inform different countries and/or various public-private sector members of the best practices and procedures on integrating telecommunications into development programs
- b. Promote partnerships of public, private, non-profit, civil society, and multilateral stakeholders (i.e., finance groups, commercial lending institutions, multilateral agencies, and technical groups such as legal advisors, accountancy advisors, regulatory experts, consulting engineers and consultants) by helping develop new models of leadership and collaboration to advance significantly the global effort to bridge the digital divide and foster digital opportunity.

It has pioneered several global collaboration projects, including:

1. **Globally Collaborative Environmental Peace Gaming (GCEPG):** A globally distributed computer simulation system modeling, which focuses on the issues of environment and sustainable development in developing countries. Through this modeling and simulation exercise, GUS experts from several countries collaborate via the Internet to discover and explore new:
 - a. Solutions for world crises, such as the deteriorating ecology of our globe
 - b. Alternatives for addressing the problems and opportunities of an interdependent globe.
2. **Global Socio-Economic-Energy-Environment Development (GSEED):** A quantitative policy analysis tool to focus on the sustainable development in Japan, the US, China, Russia, Kazakhstan, and many other countries. It brings together mathematical modeling techniques, experts, scholars, planners and researchers who can quickly analyze and evaluate how issues and outcomes impact and interact each other.

Funding for these and several other GUS projects is an ongoing developmental activity. It initially plans to combine Japanese Government's Official Development Assistance (ODA) funds and Japanese

electronic equipment with the Internet technology and content development of North America and Europe. Additionally, it has the potential of receiving sponsorship of its projects from several African countries.

Our proposal

GUS has pioneered a holistic approach to building networked communities in developing countries for e-learning and e-healthcare/telemedicine. Initiatives are underway to create the necessary infrastructure and educational liaisons, and some near-term educational access. These programs cannot be achieved by any one group, university, or national government. The programs require collaboration of ideas, expertise, technology and financial resources from multiple sources. It is fortuitous that the Columbia University's School of International and Public Affairs Center for International Conflict Resolution (CICR) and the Ministry for Environment, Land and Sea of the Italian Government are organizing a Fall '09 Conference to discuss and review mega models dealing with:

1. The prevention and control of potential conflict in the use of natural resources with particular reference to China, Middle East, and North Africa
2. Environmental solutions and sustainable development policies in conflict and post conflict areas, based on the ongoing activities of the Italian Ministry in the Balkans, Iraq, Afghanistan, Peru, and Colombia as case studies, which would look into illicit land use for drug trade and terrorist efforts
3. Climate change and its relationship to international security as a whole with regards to water scarcity and food security.

Given GUS' strength in detailed quantitative presentation of relationships to view regions broadly and define nations as regions bounded by political, cultural, and similar institutional barriers and lines, we should like to bring the **quantitative support** to Columbia University's CICR-sponsored mega models and their developers and investigators. The GUS-led **quantitative** model would help furnish a sound statistical base for studying problems identified in items 1, 2, and 3, which the conference proposes to investigate through regional analysis at various levels, paying special attention to technology, and programming development.

Additionally, we advocate the adoption of a fused framework for full inclusion of all types of modeling each of our members is currently involved in. During the conference, the GUS researchers would welcome an opportunity to brief the conference attendees how GUS leverages a group of tools or techniques, which relates to a particular subsystem of the system of regions or to the structure of a region as a system, to build a fused framework. This framework, GUS believes, would produce a comprehensive synthesis of all modeling tools, thereby allowing:

- a. All conference participants to plug in their individual modeling efforts.
- b. Each modeling effort to remain autonomous, small, and manageable.
- c. Each participant to observe diverse phases of the spatial organization of society in a manner that points up the possibilities of their integration conceptually and, where possible, quantitatively and operationally.

GUS' willingness to play a positive and constructive role in the Fall '09 Conference jointly sponsored by the Columbia University's CICR and the Italian Government stems from the fact that GUS views this conference to be timely, relevant, and constructive. Accordingly, GUS is fully committed to the successful orchestration and completion of the conference.

For further information on GUS and how it can support the conference, please contact GUS' founder, Dr. Takeshi Utsumi and/or any other representative designated by Dr. Utsumi.

GUS FOUNDER

Dr. Takeshi Utsumi is the Founder and Vice President for Technology & Coordination of Global University System (GUS) and the Chairman of the Global Systems Analysis and Simulation Association in the U.S.A. (GLOSAS/USA). He is the 1994 Laureate of the Lord Perry Award for Excellence in Distance Education. His public services include political work for deregulation of global telecommunications and the use of e-mail and voice over Internet Protocol (VoIP) through ARPANET, Telenet and Internet; developmental work to extend American university courses to developing countries; innovative distance teaching experiment with "Global Lecture Hall (GLH)TM" multipoint-to-multipoint multimedia interactive videoconferences using hybrid technologies; as well as lectures, consultation, and research in process control, management science, systems science and engineering at the Polytechnic Institute of New York University, the University of Michigan, the University of Pennsylvania, M.I.T. and many other universities, governmental agencies, and large firms in Japan and other countries.