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Synopsis of Quantitative Policy Analysis of Global Socio-Economic-Energy-Environment Development (GSEED) Project

October 28, 2008

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Secretariat, Emerging **GLOBAL UNIVERSITY SYSTEM (GUS) CONSORTIUM**
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1. Purposes:

This project is a globally collaborative gaming/simulation to help decision-makers and train would-be decision makers in conflict prevention and resolution on environmental issues <<http://tinyurl.com/k2c7a>> <<http://tinyurl.com/63hqgt>>.

Human activities are now causing global warming, which would lead to disastrous havoc in the years to come. For the sake of our future generation, it is an urgent task to start carving such global warming. However, this will inevitably encounter with conflicts of interests among various stakeholders, e.g., biofuel production vs. food shortage in poor countries, etc., to name but a few.

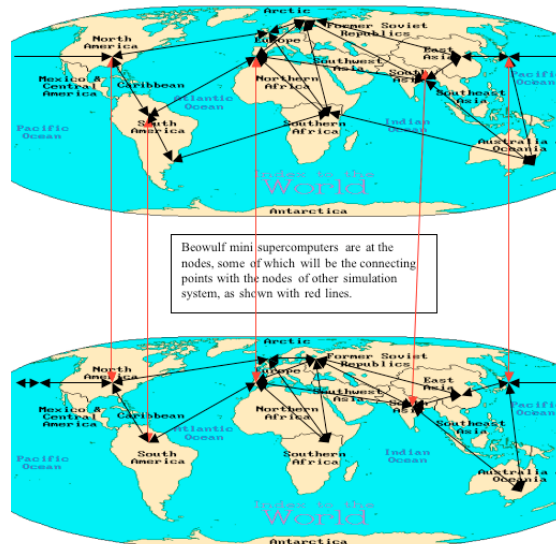
This project will train local experts for leadership development, in relation to strategic use of technologies and cooperation among stakeholders for more effective advocacy, informed policy, public understanding and participation and concrete community development.

We will create the **Globally Collaborative Network of the Centers for Conflict Prevention, Management and Resolution (GCN/CCPMRs)** on environmental issues in various countries, which will be interconnected through broadband Internet for conducting the following two-tier system;

- One for training young would-be decision makers for understanding interwoven world phenomena with rational analysis and critical thinking, and then in crisis management, conflict resolution, and negotiation techniques basing on "facts and figures" and
- The other for helping decision makers constructing a globally distributed decision-support system for positive sum/win-win alternatives to conflict and war.

With global GRID computer networking technology and Beowulf mini-super computers of cluster computing technology, we plan to develop a socio-economic-environmental simulation system and a climate simulation system in parallel fashion, both of which are to be interconnected in global scale.

Globally Distributed Climate Simulation System (GDCSS)



Globally Distributed Socio-Economic-Environmental Simulation System (GDSEESS)

Each Global University System (GUS) (which is an associating project) <<http://tinyurl.com/kofpf>> <<http://tinyurl.com/sfgm7>> of various countries will maintain the sub-models of their countries autonomously – along with construction and maintenance of its databases, modification of their sub-models, and supply of game players in cooperation with their overseas counterparts through the global Internet.

2. Needs:

Former Vice President and Nobel Peace Laureate, Mr. Al Gore proposed to replace fossil fuel with renewable one to generate electricity in the USA in ten years. Would this be a viable direction? The Nobel Peace-winning Intergovernmental Panel on Climate Change (IPCC) advocated reduction of meat-eating for mitigating climate change. How would this affect human health and social structures in the US as well as in other countries?

There would be many other conflicts on environmental issues in local, regional and global scales. They will be more severe and fierce as getting close to the 2050, which is the target year of the United Nations Millennium Development Goals (UN/MDGs), since many of its items are expected not to meet with the goals. The decision-makers in those years would be the youngsters in 10s and 20s nowadays. They must then be well prepared to cope with those conflicts with rational analysis and critical thinking basing on the facts and figures.

3. Beneficiaries:

Our first milestone of this project is to make the GCN/CCPMRs as one of the Research and Training Center (RTC) programs of the United Nations University (UNU) with the collaborative efforts of the Earth Institute (EI) of Columbia University, Millennium Institute (MI), New York University/Polytechnic Institute (NYU/PI), International Communication of Negotiation with Simulation (ICONS) of the University of Maryland, GLOSAS/USA, and Global University System (GUS)/UNESCO/UNITWIN Networking Chair Program at the University of Tampere, Finland, etc.

If accepted, as the mandate of the UN/RTC, this project will help decision-makers at the various agencies of the United Nations. At each center of GCN/CCPMRs in various countries, this project will also train local experts and young would-be decision-makers among grassroots, government, university, etc., for leadership development in relation to strategic use of technologies and cooperation among stakeholders for more effective advocacy, informed policy, public understanding and participation and concrete community development.

4. Action Plan:

With a series of workshops for this multi-lateral, multi-year project, we will devise asynchronous, interactive coordination of globally dispersed, dissimilar simulation models of socio-economic-energy-environmental system through broadband Internet as focusing on the sustainable development of participating countries. We will utilize the existing models as much as possible; otherwise, researchers will construct their country models. Those models will form an Open Model Network (OMN) with appropriate tables of variables which will be interconnected each other. The organization and management structures of the proposed GCN/CCPMRs with time and task schedules will also be formed, which will build fund raising plans for further development.

As using most sophisticated university-based mathematical modelling techniques and social sciences skills of experts, graphic info modelling/mapping and potential "gaming" on key issues and solutions will assist each group's ability for standardized data gathering and situational analyses, projecting out possible outcomes for more informed decision making and activities.

5. Dissemination:

The results of this project will be disseminated throughout the community of UN/RTCs to add to the general body of knowledge or methodology in dealing with the global warming by the following procedures; (a) Through the design of socio-economic-energy-environment problem and solutions framework, into the nation's education curricula and system, (b) Through the electronic media, and (c) Presentations at relevant conferences and in journals. The success of the workshops mentioned above will also be publicized over the Internet and with press release to attract further support from other contributors.

6. Conclusions:

The ultimate goal of our project is to attain global peace as promoting mutual understanding among young would-be decision-makers, as having them engage in Peace Gaming for conflict resolution of various environmental issues in local, regional and global scale with the extensive use of most advanced Information and Communication Technologies (ICTs). Education of youngsters/adults on a global scale is the **best** future investment for global peace

and progress. Senator Fulbright once said that *learning together and working together are the first steps toward world peace*.

We will also foster creativity of youngsters around the world as enabling them in developing countries co-work with colleagues in advanced countries to perform joint collaborative research with use of virtual laboratories for hands-on experiential/constructive learning and creation of knowledge through the global GRID technology, thus forming Globally Collaborative Innovation Network (GCIN) <<http://tinyurl.com/fuwg6>>.

7. References:

Takeshi Utsumi, P. Tapio Varis, and W. R. Klemm, (2003)
"Creating Global University System"
<http://tinyurl.com/sfgm7>

Tapio Varis - Takeshi Utsumi - William Klemm (Eds.), (2003)
Global Peace Through The Global University System
 University of Tampere, Finland
 ISBN 951-44-5695-5
 The entire contents of this book can be retrieved at;
<http://tinyurl.com/kofpf>

Takeshi Utsumi, GLOSAS/USA (2003)
"Globally Collaborative Environmental Peace Gaming"
<http://tinyurl.com/k2c7a>

Takeshi Utsumi, GLOSAS/USA (2006)
"Globally Collaborative Innovation Network with Global University System," Paper for Learning Technology,
 IEEE Computer Society, Vol. 8, Issue 3, July
<http://tinyurl.com/fuwg6>

Takeshi Utsumi, GLOSAS/USA (2008)
"Development History of Peace Gaming and Global University System"
<http://tinyurl.com/63hqgt>

8. Participating Institutions:

Japan

1. Soka University

Netherlands

1. International Research Society on Methodology of Societal Complexity

Nigeria

1. Igbinedion University, Okada (IUO)

Russia

1. Novosibirsk State University
2. Republic of Altai, Ministry of Education, Science and Youth Policy
3. Russian Academy of Sciences

Turkey

1. Bogazici University

United States of America

1. Columbia University
2. GLOBal Systems Analysis and Simulation Association in the U.S.A. (GLOSAS/USA)
3. McLeod Institute of Simulation Sciences (MISS) at California State University at Chico
4. Millennium Institute
5. Polytechnic Institute of New York University
6. University of Maryland
7. University of Vermont