

**7 Project Description: (20 lines max.)**

GSEED Project with a globally distributed computer simulation system will focus on the sustainable development of socio-economic-energy-environment system in Japan, the US, China, Russia, Kazakhstan, and the other relevant countries. Researchers in those countries will construct their simulation models, which will be interconnected through broadband Internet to form Globally Distributed Socio-Economic-Energy-Environmental Simulation System.

The initial focus on energy security will be on the quantitative policy analysis of global interrelations and interdependencies among those countries with the deployment of gas pipeline from Tomsk, Siberia to China, and the construction of hydroelectric dam in the Republic of Altai, Siberia where there are five UNESCO World Heritage sites which draw increasing number of tourists (400,000) into small town of Gorno-Altai with only 9,000 residents. This gas pipeline will certainly affect socio-economic developments of China, and hence the ones of Japan, the US, Europe and others. Japan will also increasingly depend on the energy (oil and gas) supply from Russia, and uranium from Kazakhstan.

This project will then demonstrate integrated and synergistic approach among grassroots, government, university, stakeholder, etc. Use of graphic info modeling/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. It brings together most sophisticated university-based mathematical modeling techniques and experts and regular people who can then more easily see--at a glance--how issues and outcomes can impact and interact each other.

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.

**8 Collaborating or Participating Organizations and Individuals: (14 lines max.)**

Please indicate the country of origin of each and what form participation/collaboration will take.

(a) Polytechnic University [USA], to provide a database through which pertinent data are to be inter-exchanged among simulation models, and to provide administrative function,

(b) Prof. Akira Onishi [Japan], to provide Futures of Global Interdependence (FUGI) model, the world largest econometric model,

(c) The Millennium Institute [USA], to provide System Dynamic models of the United States, China, Bangladesh, Ghana, Guyana, Italy, Malawi, Somaliland, Tunisia and others,

(d) Novosibirsk and Tomsk State Technical Universities and Russina Academy of Sciences [Russia], to provide models of Altai region, Novosibirsk, Siberia and Russia,

(e) Fedosov Dmitriy Borisovich, Deputy Director of the State Establishment, Ministry of Education, Science and Youth Policy, Republic of Altai [Russia], to provide local data,

(f) Delft University of Technology [Netherlands], to provide models of Europe,

(g) TOBB Economics and Technologies University [Turkey], to provide models of Turkey,

(h) McLeod Institute of Simulation Sciences (MISS) at California State University at Chico [USA], to provide assistance on simulation programming.

**9 Previous CGP or Japan Foundation Grants:**

If applicant has received a grant from CGP or the Japan Foundation in the past, please indicate the name of the project(s), the project reference number(s), the amount of the award(s), and the date(s) that the grant was received.

None