

## **Principles of Internet Governance of Open Knowledge Environment in Bridging Digital Divide**

LIU Chuang

Institute of Geography and Natural Resources, Chinese Academy of Sciences  
Beijing 100101 China (lchuang@igsnrr.ac.cn)

Digital knowledge becomes one of the most important resources and engines for innovative research and development in the Information and Knowledge Society (UNESCO WSIS Geneva-Tunis, 2003-2005). Open Knowledge Environment (OKE) with the internet is recognized as the Integrating openly available scientific data and information resources with open-source collaborative tools online for the creation of new knowledge and targeted problem solving, as well as for various forms of post-publication follow up (IAP 2008). Internet governance dimension becomes a critical issue for OKE in bridging digital divide. The gaps of OKE in bridging digital divide were identified at the 4<sup>th</sup> IGF (Internet Governance Forum), November 2009, Egypt, and the principles of internet governance of OKE in bridging digital divide were discussed at the 5<sup>th</sup> IGF, September 2010, Lithuania. The objectives of emphasis the issue are to call worldwide awareness for establishing an open knowledge environment in bridging the digital divide for discovery, innovative research and development, to provide recommendations to the governmental and inter-governmental decision makers on OKE and to provide a framework for establishing and improving an integrated and coherence internet governance system from local, national, regional and inter-community scale to global scales of OKE in bridging digital divide for innovative research and development. The principles include: establishing strategy to improve e-Science infrastructure in the developing world; enhance North-South and South-South cooperation with multiple channels; end users priority and end users driven of OKE, by which all students, researchers, teachers, professors could equally access to the updated e-knowledge; long term archive and services should be the role of data centers, information archive and services centers; Government Role should be identified and implemented for OKE in two different models (model 1: full and open e-knowledge by internet, model 2: Open e-knowledge with charge by licenses); openness, security, quality and protection of intellectual property and interoperability and sustainability; towards to an Integrated and coherence policy system and capacity building.