Internet Governance Forum 2010, Vilnius, Lithuania, 14-17 September

Workshop No. 106 (OECD/Centre for Science, Development & Media Studies, India)

Cloud computing for leaner and greener IT infrastructures in governments (and businesses)

16 September, 9.00 – 11.00, Room 5

Purpose

This workshop will discuss the potential of cloud computing to create leaner government IT infrastructures. Where possible, parallels to applications in the private sector will be drawn. "Leaner" can also lead to "greener" IT infrastructures, but there is need for further empirical analysis. The session will discuss various aspects of the potential of cloud computing and the Internet to make government processes more efficient thereby making contributions to global energy savings and greenhouse gas emissions reductions.

Background

Cloud computing over the Internet involves the use of remotely-hosted hardware and software. It is a strategy to rationalise ICTs infrastructures through computing and storage consolidation. This means reduced costs for organisations such as governments (and businesses), e.g. lower capital expenditures on server purchases and lower operating expenditures on maintenance and electricity. Benefits can be grasped by governments in more OECD countries and emerging economies alike, although context-specific challenges apply in both cases.

Scaled to the global level, cloud computing has the potential to limit the growing energy consumption of servers and data centres (in the public and private sectors). Computing and storage of information on servers requires energy for operation and cooling. Global electricity consumption from these activities has doubled between 2000 and 2005, and the pace of growth continues into 2010. These trends are putting to the test national electricity grids in OECD countries and emerging economies, especially where electricity infrastructures are less developed.

The OECD is analysing the emerging impact of cloud computing and related policy implications. The 2009 OECD Technology Foresight Forum discussed economic impacts, challenges to regulation, and potential security and privacy challenges. The OECD is also analysing the environmental benefits and burdens that arise from the use of ICTs (e.g. energy efficiency and energy use). In 2010, the OECD issued a policy recommendation on ICTs and the environment and is holding a global forum on "Smart ICTs and Green Growth" on 29 September.

<u>Preliminary speakers list:</u>

Moderators:

- **Dr Ravi Gupta**, Executive Director**,** CSDMS (*Focus on emerging country perspectives on cloud computing*)
- **Arthur Mickoleit**, Policy Analyst, OECD (*Focus on environmental aspects of cloud computing*)

Panel presenters:

- **N Ravi Shanker**, Joint Secretary, Ministry of Communication and Information Technology, Government of India: *Cloud computing opportunities in the Indian government*
- OECD government speaker (tbc): *Cloud computing for leaner government IT infrastructures in OECD countries*
- **Heather Creech**, Global Connectivity Director, International Institute for Sustainable Development (IISD), Canada: *Findings from an IISD/CANARIE project on zero-emissions data centres*
- Industry speaker (tbc): *Cloud computing as an enabling technology to limit the environmental footprint of government (and business) IT infrastructures*

Discussants:

- **Tracy Hackshaw**, Internet Society (ISOC) Ambassador, Trinidad & Tobago: *Cloud computing opportunities and barriers in developing countries*
- **Christian Reimsbach Kounatze**, Policy Analyst, OECD: *Overview of government policies on cloud computing*

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<u>Further information:</u>

Internet Governance Forum: http://www.intgovforum.org
IGF 2010 host country Lithuania website: http://www.igf2010.lt