



Thursday 16th June 2011

Time: 13:30 - 14:00

Renewable Power Associated InfraStructure as a Service

Speaker: Andrew Mackarel, HEAnet Ltd

Abstract:

The objective of the Greenstar Network GSN/Mantychore liaison is to create a pilot test bed environment from which to derive best practices and guidelines when building data networks would use Infrastructure as a Service (IaaS) while minimising the carbon footprint of such a network. GSN will use the flexible routing platform provided by the Mantychore FP7 project to move virtualized data-centres towards network nodes powered by green energy sources distributed in a multi-domain network, particularly between European and North America domains. This research shows how these resource provisioning solutions can be integrated and studies the feasibility of powering e-Infrastructures in multiple domains worldwide with renewable energy sources. Management and technical policies are being developed to leverage new virtualization approaches, which will help to migrate resources from one site to another based on power availability without suffering connectivity interruptions. Another set influences being considered is the physical location factors for such relocation e.g. weather predictions, estimation of solar power generation, etc. As energy produced from renewable sources has the potential to become one of the industries in each of these countries, it is vital to see how new network provisioning technologies can be developed to maximise network connectivity to where these energy production facilities are located.