

## **Building and Operating Grid Infrastructures for e-Science - Lessons learned and Recommendations -**

Wolfgang GENTZSCH

D-Grid, Duke, and RENCI

wgentzsch@d-grid.de

After almost a decade of research and development in the field of grid technology, it is still challenging to design, build, and operate large-scale grid infrastructures for science and industry. Therefore, we have analyzed several major grid infrastructure projects around the world, such as TeraGrid in the US, NAREGI in Japan, the eScience Initiative in the UK, and DEISA and EGEE in Europe, for the purpose of extracting lessons learned and valuable recommendations which have been useful for us while designing, building, and operating the German DGrid infrastructure and user and provider communities. This lecture will present the findings combined with our own lessons learned. A list of recommendations for those interested in building similar e-infrastructures will conclude the presentation.