

## Interview with Prof S. V. Raghavan

*Scientific Secretary, Office of PSA to Government of India and Chief Architect and Chairman, Technical Advisory Committee of NKN*

EUIG2 has been instrumental in ensuring that India is represented at key European e-Infrastructure meetings. Through direct contact with EUIG2 Professor S V Raghavan (Scientific Secretary, Office of Principal Scientific Adviser to Government of India and Chief Architect and Chairman, Technical Advisory Committee of NKN) was invited to the e-IRG meeting and workshop in Brussels, October 2010, as an observer.

A number of projects funded within the EU Sixth and Seventh Framework Programs for Research and Technological Development of the European Commission have been instrumental in ensuring that India is represented at key European e-Infrastructure meetings. One of the direct links the European initiatives have had with the Indian e-Infrastructure landscape is Professor S V Raghavan.



Professor Raghavan has made significant contributions to the creation of the Education and Research Network in India and was the founder of ERNET and the Principal Investigator of the Programme at IIT Madras. He is currently the senior most member of the programme and is a fellow of the Institution of Electronics & Telecommunication Engineers and the Computer Society of India, a member of the STNET Sub-committee of the Scientific Advisory Committee to the Cabinet (SAC-C), and expert member of many project review boards of MIT, AICTE, MHRD, and DRDO.

We caught up with Professor Raghavan during the e-IRG event in order to find out more about the Indian National Knowledge Network.

### **What is main aim of the Indian National Knowledge Network? And what is its expected impact inside the country and beyond?**

*NKN is an instrument of Social Change. NKN integrates all institutions that are engaged in knowledge creation and dissemination. NKN focuses on Education, Health, and Agriculture from a research perspective. The results benefit the nation.*

### **What is the current status of NKN? Are you already observing a significant impact to both the Research and Academic community and beyond (e.g. eHealth, eGovernment)?**

*NKN is crossing 100 Nodes at this point (October 2010). The plan is to complete at least 550 Nodes by March 2011 and the rest of ~1500 nodes by December 2011 or March 2012. A Node is an institution such as a University or a Research Laboratory. Health education and research is very much an integral part of NKN. The implementation agency National Informatics Centre (NIC) specializes in handling Government information all over India. They are in the process of migrating to NKN already.*

**Is NKN able to scale with the huge numbers of research and academic institutions and users in India? And how?**

*By design NKN scales! NKN has a Super-Core, Core, Distribution, and Edges as an inside out concentric circle design. NKN has the ability to be configured as Speciality E-Infrastructure, Community E-Infrastructure, and Commodity - Infrastructure.*

**What horizons does NKN open to the citizens of India? Economist predicts that India's growth will outpace China in the next 3-5 years (<http://www.economist.com/node/17145035>) Is NKN contributing to India's growth?**

*NKN definitely helps in the field of Education for sure. There a spread of Universities across the country that reaches every student. India is expanding the education system as well. NKN believes that an Educated Nation will be a Creative Nation, thereby leading naturally to Wealth Creation.*

**What is the business plan and funding for NKN? Is there a sustainability plan?**

*NKN is funded by the Central Government of India for a period of TEN years starting from 2010.*

**Are there measures taken at the governmental level for Green IT? Is NKN going to be using Green Energy?**

*NKN makes all attempts to do optimal use of energy wherever feasible.*

**As science becomes increasingly global and so do the great societal challenges of our ages such as climate change, how important is it for India to collaborate with the European e-Infrastructure initiatives for the development of a global collaborative e-Infrastructure? Which mechanisms do you suggest to enforce to improve this collaboration?**

*NKN is India's E-Infrastructure that enables Science in India and empowers it to integrate with Global Science as appropriate. Learning from each other in communities such as Climate Change across the globe is important. As Science is done by Scientists and not by e-infrastructure or committees, the body of Scientists are the best judges to define how it can be done. NKN will enable by creating the ambience.*

**What would you recommend to other regions around the world (such as the Mediterranean basin) with regards to collaboration with Europe?**

*I am not an expert on matters of International nature. However, based on common sense, I would expect that such decisions will depend heavily on the impact assessment of the relevant communities. All I know is that technology of the day is extremely amenable to very imaginative cooperation, nationally and internationally.*

**How important is alignment between Indian and European e-Infrastructure policies for the development of e-Infrastructure in India?**

*E-Infrastructure is a moving target, in my opinion. If there is a need and a will to work together, one can configure the technology platforms to be flexible to meet the common objectives, if they exist. A process to define the eco-system for interaction on an on-going basis is perhaps the way to go. Such a process should obviously be adjustable to policy requirements dynamically.*