NESSI review comments on the Future Internet Assembly Research Roadmap (Version 1.2 – 21 May 2012)

The FIA Roadmap identifies the following research priorities:

1. Beyond converged infrastructure – highlighting polymorphic networks combined out of different networks; expanding the cloud to the network edges and beyond as execution environment for new applications and services, smart network edge systems comprising a collection of smart devices as execution environment linking physical and cyber world.
2. Network data – highlighting the organization, exploitation, and governance of big data in the Internet.
3. Security – emphasizing that securing the Internet requires continued attention.
4. Network interaction – new ways of interacting with complex data, new modalities, new combination of devices and new perspectives.
5. Augmented worlds – harnessing the Internet of Things and providing added-value support in our daily life (information, decision support, risk analysis, options delivered through interactions and interfaces that are intuitive and un-intrusive
6. Internet style innovations - emphasizing innovation that happens at the network edges.

NESSI is the European Technology Platform on Software and Services and therefore it is clear that NESSI looks at upcoming research priorities from software and service point of view whereas the Future Internet Assembly put the emphasis on a network centric view. However, both views have a common ground in the sense that networked infrastructures are required for delivering and accessing services and software and on the other side services and software are needed to implement and run a network infrastructure.

adfa, p. 1, 2011.

Based on this common ground NESSI is clearly supporting the research priorities in the area of security and big data. NESSI also supports the importance of the Internet of Things as one of the emerging key drivers for enabling services.

Furthermore NESSI subscribes to the priority on innovations and to emphasize the eco-systems needed to generate those innovations. However, what should be highlighted is the innovative power of software and services and the cloud as platform enabling innovations not only in the software and service sector, but in all software intensive sectors.

Perhaps the cloud could be compared with the Internet three decades ago. At that time people approached the Internet in an open-minded way and generated a plethora of innovations including the world wide web as one of the most influential one. In this sense, people approach the software and service cloud today to explore its potential and possibly generate the next big wave of innovation for the coming decade.

Consequently, NESSI agrees that there is a major trend “towards a service economy, where everything is provided as a service” and that “the future internet is cloud – blending network, computing, and storage into a seamless service platform”. Cost savings have been a major driver for adopting cloud technology, but improved business agility and the support for faster innovation and improved business collaboration are becoming even more important than cost. This shift from cost to value underlines again the innovative power of software and service clouds and that should be reflected in a revision of the FIA roadmap.