Roundtable - Sessions 2, 3 & 4
Issues from Session 3

- Implications of satellite transmission on MPLS
- implications of satellite transmission on NGN capabilities (QoS etc)
- impact of NGN approach on future satellite services

Issues from Session 3 (continued)

- How do we bridge the gap between the (legitimate) requirements in current terrestrial QoS standards and the physical limitations of GSO satellites (i.e. delay and bandwidth)
- which architectures should future satellite standards address; IP over ATM, IP over MPLS or None (direct native IP support)
- Is the satellite community getting fair representation in IETF (e.g. pilc and mpls) and how can the standards bodies help

Issues from Session 3 (continued)

- End to end Quality of Service: What does this mean really and how to asses and standardize the impacts of different layers on the E2E QoS? How to achieve an application specific QoS objectives meeting the requirements (future demands) for satellite transport?
- QoS Architectures. What is the right architecture for satellite IP for real satellite networks at Ka or, Ku/Ka etc with and without on board processing and switching? How do they satisfy the needs for the access networks currently planned bent pipe

Issues from Session 3 (continued)

- Security: Security is an important component of the QoS. How to achieve E2E security with the current IP sec etc What are the options and how to work with IETF in achieving this?

- Transport Protocols: It might be a good idea to address new transport protocol addressing the extra burden imposed by the satellite links that experience fading, errors, noise, Doppler shifts, nomadic behaviour etc to result in an end to end QoS. A lot of enhancements to TCP have been proposed by the IETF however a new look might be warranted.

Issues from Session 3 (continued)

- How should applications running on an external device request services from a mobile network?
- Tight versus loose coupled architectures?

Issues from Session 3 (continued)

- How to have PEP (protocol extension protocol) in TCP/IP for satellite latency and still have IP Sec over the entire path
- Development of a low cost Indoor Unit with strong routing capabilities for remote terminals