

Session 2 :

NGN Architecture and Requirements Highlights & Conclusions

**Service requirements and capabilities /
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**NGN: Basic Architecture and Interesting Issues /
Keith KNIGHTSON (Canada)**

**IMS based NGN Architecture and its application /
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**Mobile Applications and Services for NGN networks /
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Highlights from Presentation 1 Service requirements and capabilities

- NGN Release 1 environment objectives, services, and capabilities were introduced with brief comparison with ETSI TISPAN Release 1 work with respect to services, access network, QoS, and evolution towards NGN.
- Study subjects for interconnection between NGN domains and user networks and equipment were summarized.
- Future work items includes consideration about multiple service scenarios, customer and enterprise networks, more services, service delivery platforms, profiling, interconnection etc.

Highlights from Presentation 2 Basic Architecture and Interesting Issues

- NGN definition, general reference model, and mediated/non-mediated service concept were introduced.
- Effects of separation into service and transport strata were examined and resource and admission control was identified as the bridging function.
- Architectural aspects on fixed to mobile convergence and home gateway architecture/functionality were emphasized for more work.
- Areas for further study are streaming services (IPTV), identity based systems (RFID), and home networks.

Highlights from Presentation 3 IMS based NGN Architecture and its application

- o IP Multimedia Subsystem (IMS) were introduced with key components; CSCFs and HSS.
- o How to adapt IMS to NGN was summarized and application to PSTN emulation service (PES) was examined.
- o Advantages of IMS PES are 1) preserves common interface to RACF & transport network, 2) common service control functions, 3) common Routing and configuration data between emulated PSTN/ISDN Users and NGN Users (Important), and 4) economy of scale.

Highlights from Presentation 4

Mobile Applications and Services for NGN networks

- Trends for service revenue are headed for multimedia, contextual/personal awareness, and social and community focused.
- Open Mobile Alliance (OMA) organization and its Service Environment (OSE) was introduced.
- Developed service architectures under OMA are presence, group management, and Push-to-Talk over cellular.
- Ongoing service developments include messaging, content-related services (content screening, dynamic content delivery, and digital rights management), and delivery mechanism such as mobile broadcast

- Service enablers/capabilities and their coordination with other organizations need further work in ITU-T.
- How to accommodate expected new services such as streaming (IPTV) needs action with regard to the NGN capabilities and architecture.
- The approach would be in fact identifying basic capabilities and comparing with already-defined architecture elements.
- To what extent the NGN architecture should be common is for further study. Existing specification/equipment should be taken into account. Interworking may be the first step from the practical view point.