

#### International Telecommunication Union

# NGN Technical Workshop Session VI - NGN Technology II

15 March 2005

ITU-T NGN Technical Workshop 14-15 March 2005, Jeju Island, Korea



# **Topics and Speakers**

- Quality of Service
  - -- Hui-Lan Lu, Lucent Technologies
- Naming, Addressing, and Identification
  - -- Khalid Ahmad, TTA
- Accounting, Charging, and Billing
  - -- Tae Sang Choi, ETRI



## **Session Context**

#### NGN vision

Synthesis of PSTN and Internet technologies in an innovative packetbased infrastructure that overcomes the limitations and retains the strengths of both

#### NGN features

- Multiple broadband QoS-enabled transport technologies
- Service functions independent of transport technologies
- Unfettered user access to competing providers/services
- Generalized mobility → consistent/ubiquitous services
- The issues addressed in this session may be among the most difficult we will face in achieving a global NGN!



## **Technology Attributes Compared**

Attribute Technology	Quality of Service	Naming, Addressing, Identification	Accounting, Charging, Billing
PSTN	<ul><li> Quality assured</li><li> Resource reservation required</li></ul>	<ul> <li>Manual name/number association</li> <li>DNS not required</li> </ul>	<ul> <li>Usage and distance based</li> <li>Session accounting required</li> </ul>
Internet	<ul><li> "Best effort" service</li><li> Resource reservation not required</li></ul>	<ul> <li>Automated         name/address         association</li> <li>DNS required</li> </ul>	<ul> <li>Usage and distance independent</li> <li>Session accounting not required</li> </ul>



NGN must provide unifying technology solutions.



## **Objectives and Session Plan**

### o Objectives

- Review NGN requirements (what's needed?)
- Survey enabling technologies/standards (what's available?)
- Identify gaps, required new standards (what's missing?)

#### Session Plan

•	Introduction and overview 5 m.
•	Panelist presentations 1-375 m.
•	Summary and next steps10 m.

90 m.



Identify salient technical issues for more detailed interactive small group discussion (Session VII-2).



## **Possible Discussion Topics**

#### o QoS

- How should the Q-Series Supplement 51 requirements be implemented in detailed NGN signalling protocol standards?
- How will end-to-end QoS signalling support apportionment of delay, jitter, and loss in a multi-technology, multi-provider NGN?
- Will standardization of traffic control and resource control be needed?
- o Naming, numbering, addressing
  - How will telephony (E.164) and Internet (IP, DNS) user identification mechanisms be reconciled or interworked in IP-based NGNs?
  - How will NGN user identification and location systems support PSTN/ISDN emulation?
  - What performance requirements should such systems meet?
- o Accounting, charging and billing
  - What NGN services will require new accounting, charging, and billing capabilities?
  - What specific new technical capabilities will these services require?

Focus on NGN *technology* (not policy or regulation) and on *Stage 1-3 solutions* for NGN Release 1.