Home Networking
IEEE CCNC06

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• Residential Gateway (RG)
  – Integrated VDSL2 Modem
  – QoS Classification & Policy Engine
  – SIP ALG, VoIP-ready ATAs
  – IGMP proxy

• System-on-Chip (SoC) Set Top Box (STB)
  – VC-1 & H.264 decoding, DRM
  – HD/SD, DVR
  – IPTVe client middleware
  – Applications
    • Interactive TV
    • Simple Games
Physical Layer Complications

- Coaxial cable (MoCA, HPNA v3, others)
- Twisted pair phone wiring (HPNA v3)

- Power line (HomePlug AV)
- Future alternatives (Wireless)
Future Vision

From sharing internet access...

Portable Media Player enables users to transfer content from STB for anytime, anywhere playback

...to sharing video content!
Installation and QoS Management

• Skill sets required for installers are changing
  – Current focus is on outside plant
  – New area of home networking is full of surprises!

• Consumers willing to install home networking for sharing internet access or access to a printer

• Network management of QoS for video service must be transparent to user

• Connection of CE devices raises issues
  – Investigating our options on business model
IEEE CCNC06 Panel

• Today, consumers are enjoying the benefits of home networking to share internet access among several computers and devices in their home. In many cases the consumer self-installed the network equipment, but in some cases the operator provided or installed the equipment. As movies and television (AV) content is on the verge of being distributed on home networks, who will support the new equipment and provide the user experience (e.g. navigating between content sources and programs). With consumer’s high quality expectations from traditional AV delivery, operators contend they must own and control the home networks for AV distribution. On the other hand, consumer electronics manufacturers wish to appeal directly to consumers with products allowing a high confidence of self installation. The panelists represent a number of industry positions to answer “who owns the home network?”
Suggested Outline

• Lightspeed “triple play” services
• Tomorrow’s home network
• Installation of the home network
• Customer options
• Customer care
• Q & A