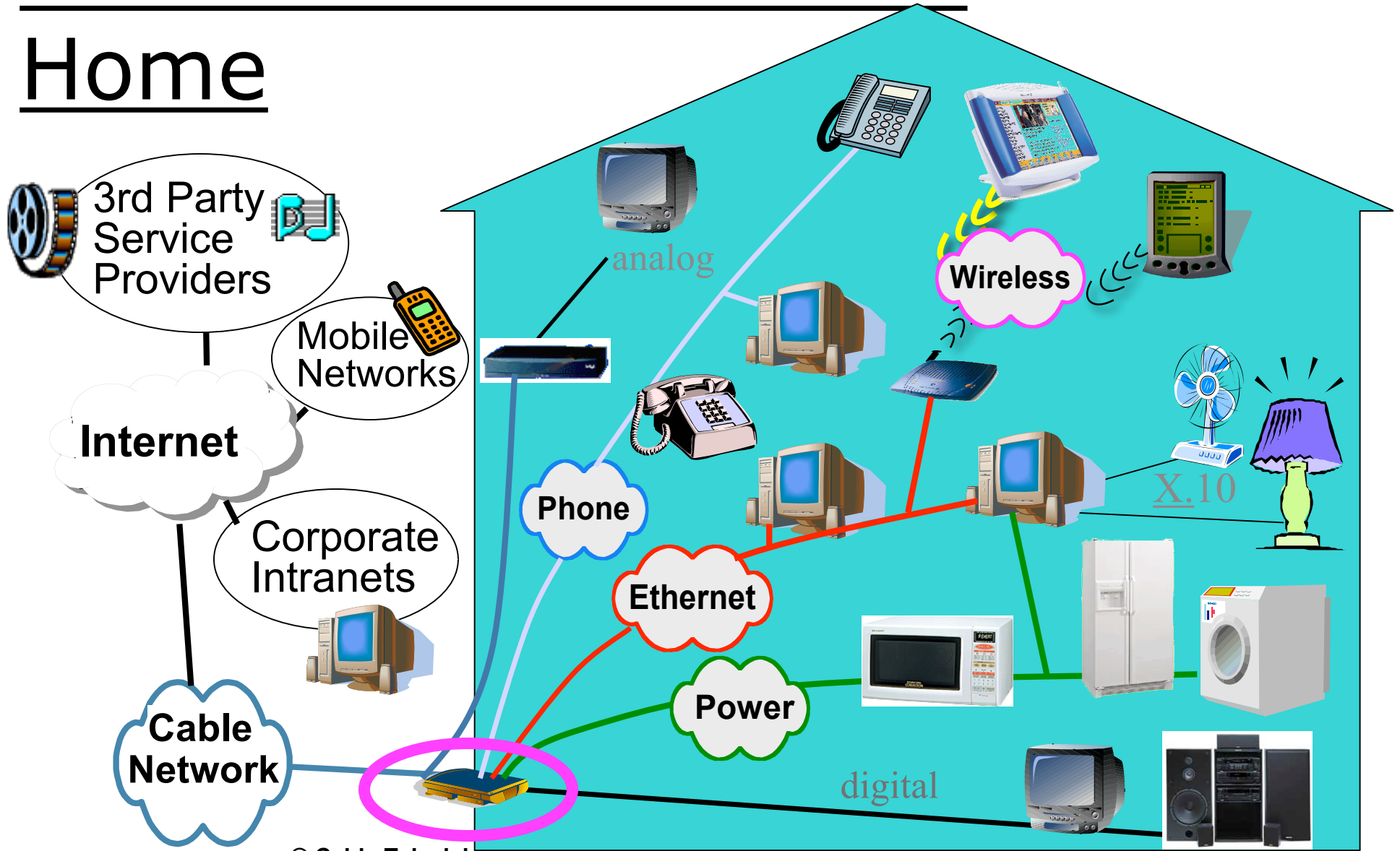# Who Owns the Home Network?

IEEE CCNC
Las Vegas, Nevada
January 9, 2006

Kevin Luehrs
Project Director, Technology Development
Broadband Access Department
CableLabs

Broadband-Connected Home

CableLabs®

3rd Party Service Providers

Mobile Networks

Internet

Corporate Intranets

Cable Network

analog

Wireless

Phone

Ethernet

Power

X.10

digital

1

Who "Owns" the Home Network?

The Consumer Of Course!

An important function of a home network is to bring greater convenience and better/broader services to the consumer.

Interoperability from multiple suppliers should be focused on the consumer and expanding the consumer market.

Cable Services

Cable companies offer many services to their subscribers today:

- Broadcast Analog Television
- Broadcast Digital Television (HD and SD)
- Video-on-Demand (VOD)
- Personal Video Recorder (PVR) and multi-room PVR
- High-speed Internet Access (DOCSIS® cable modem)
- Circuit-Switched Telephony
- Voice over IP (VoIP) Telephony (PacketCable™)
- Digital Music Services (commercial-free music)
- Parental Controls
- Electronic Programming Guide (EPG)
- Home Networking Services (CableHome® residential gateway)

Three Important Service Features

To deliver these services cable operators consider the following to be critical for home networking:

1. ## Quality of Service
   Services must be delivered with the level of quality appropriate to that service (no difference between the gateway and networked devices)

2. ## Content Protection
   High-value entertainment content must be protected from unlawful reproduction and distribution

3. ## Navigation
   Subscribers must be able to find and select the programming they desire easily

Assuring Service Features

- To assure these critical service features, the cable operator requires management capabilities for the home network

- However, not all consumers require the cable operator's service management

- The consumer must be free to opt-in to cable operator provided/managed services

- CableHome® residential gateway products provide this opt-in model today

Support of Consumer Opt-In Model

- A clear point of demarcation between the cable operator's network and a consumer's home network is crucial

- Different service providers have different access network technologies (Cable, DSL, FTTP, DBS, etc.)

- To achieve multi-supplier interoperability, devices on the home network should be independent of access network technology

- The service provider is responsible for bridging service between their network and the consumer's home network

Current Initiatives

- Current initiatives are either home network focused (DLNA, UPnP Forum) or access network focused (CableHome, DSLHome, HGI, etc.)

- To maximize consumer satisfaction and choice, there is a need to focus on where the two networks meet
  - This is an area of ongoing work

Questions?