



The standard for  
**Home Entertainment Networking.**

## MoCA Home Networking Makes Sense for Cable Operators Everywhere

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At  
ANGA

[www.mocalliance.org](http://www.mocalliance.org)



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**MoCA**  
Multimedia over Coax Alliance

### MoCA Board of Directors

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## MoCA Associate Members


























































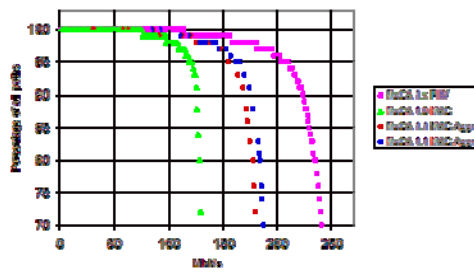


## MoCA Technology

- Runs on coax without interference with other services.
- Complementary to wireless—extends wireless backbone in home.
- Net throughput : 175 Mb/s
- Flexible spectrum usage – 50 MHz coexisting with cable or satellite
- Support for 16 nodes
- PHY is Bitloaded OFDM – optimizes PHY rate for any channel
- Fully coordinated and synchronized network
- Quality of Service (QoS) support

### MoCA 1 and 1.1 Coverage

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MHz	MoCA 1.0 PHY (%)	MoCA 1.0 BIC (%)	MoCA 1.1 BIC Aggr (%)	MoCA 1.1 BIC Aggr (%)
0	100	100	100	100
50	100	100	100	100
100	100	100	100	100
125	100	100	100	100
150	0	100	100	100
175	0	100	100	100
200	0	100	100	100
225	0	100	100	100
250	0	100	100	100
275	0	100	100	100
300	0	100	100	100



## Home Net Comparison

	Value Proposition	Drawbacks
Wireless (WiFi)	Mobility	Reliability is a challenge Prone to interference Unlicensed band
Powerline (HomePlug, HDPLC, UPA)	Ubiquity of outlets	Performance not on par with MoCA Prone to high interference Low outlet coverage performance
Coax (MoCA)	Proven performance and reliability Market momentum	Requires backbone of coax in home.

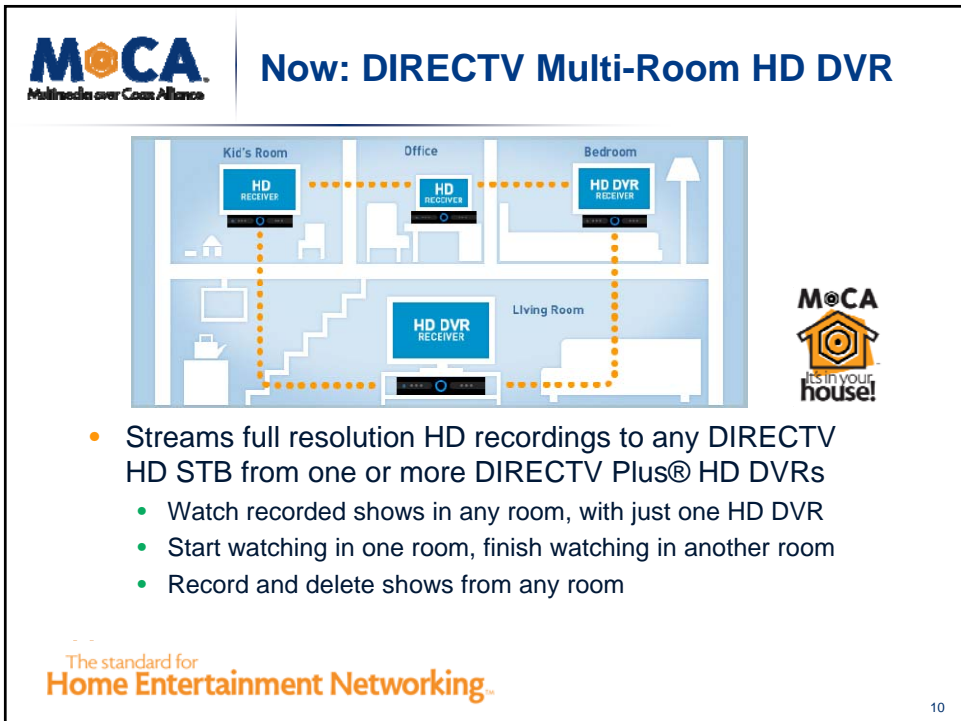
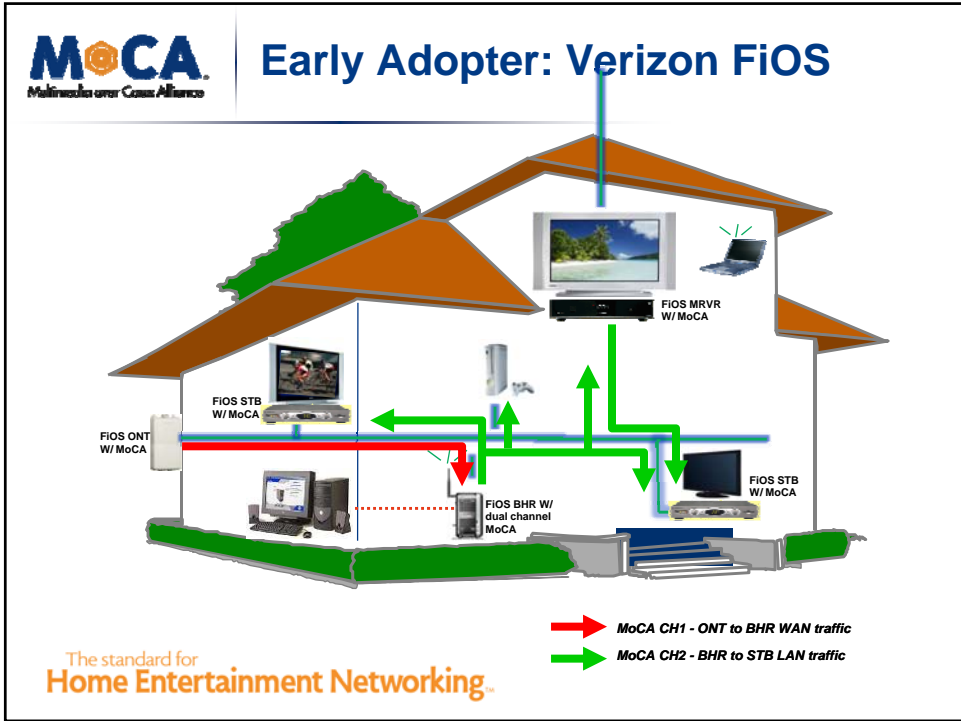
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## MoCA 2.0 in Development

- Two performance modes:
  - 400 and 800 Mb/s actual throughputs
  - 700 and 1.4 Gb/s PHY rates
- Two low power modes:
  - Sleep and standby
  - Address power consumption in entire network
- Backward compatible with previous versions without degradation in performance.
  - Protects investment in current equipment. No firmware or swap out necessary.
- *MoCA 1.0/1.1 meet needs of operators now. MoCA 2.0 meets needs of operators tomorrow.*

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## Next: Comcast on HN in Gateway-Client

### Important criteria for home networks

- ✓ Throughput, ability to reliably and securely transfer video
- ✓ QoS
- ✓ Number of nodes supported within the home
- ✓ Leverage existing wiring
- ✓ Open Standards
- ✓ Maintainability and support
- ✓ Cost -Ubiquity

Technologies	Value Proposition	Drawbacks
Wireless (WiFi) 802.11n	➤ Mobility	➤ Good for browsing and "best efforts" media
Coax (MoCA) MoCA1.1	➤ Consistent performance and reliability	➤ Reliant on coaxial penetration

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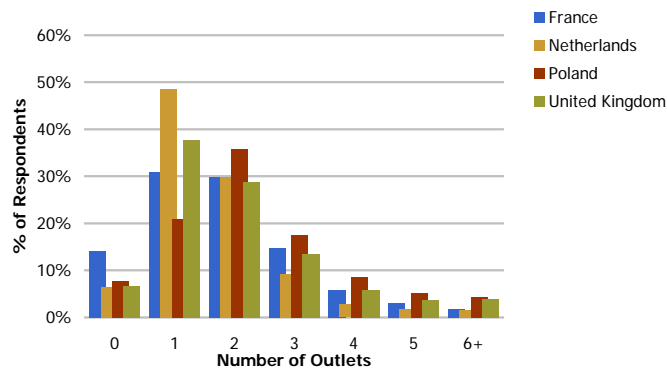
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## How Much Coax is Enough?

Figure 1

Coaxial Cable Outlets Per Household



Source: IMS Research

Feb-10

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## Bottom Line

- Coax is wherever TV's are.
- TV locations are the most demanding places to deliver bits – quantity and quality.
- MoCA is ideal for cable companies to connect cable modems and TV equipped rooms.
- MoCA is often the best choice for satellite and telephone companies too.
- The ideal solution – globally – is a MoCA home network that also serves as a wireless backbone.

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