

WHY G.HN IS NEEDED IN MDUS

- Retrofitting buildings with structured wiring using Ethernet cables is expensive, messy and time-consuming. In buildings with concrete walls, it's not even feasible.
- Wi-Fi – all aside from speed and security issues – doesn't provide the quality of service needed for video or voice communication. Momentary interruptions may not be noticeable when you're downloading e-mail, but video and voice require continuity.
- Power lines and twisted pair don't usually work well in MDUs, at least in the United States, because of interference and cross talk. That leaves coaxial cable as the physical medium of choice for home networks.
- HomePNA, the standard most telcos use to deliver signals over coax, is limited to throughput of about 200 Mbps – not enough to support new applications coming down the pike – and it uses frequencies that conflict with the RF return signal used by DOCSIS. That's why it isn't used by cable companies or by telcos, such as Verizon, that use RF video.
- MoCA, the standard used by cable companies (and Verizon) to deliver signals over coax, has a maximum throughput of about 175 Mbps. A more important concern for MDUs is that MoCA's DOCSIS-compatible frequencies limit the distances signals can travel.
- G.hn replaces all of this "alphabet soup" with a single next-generation standard. G.hn will deliver signals over coax at speeds and distances that will allow providers to deliver next-generation services in MDUs.

Source: Michael Weissman, vice president of North American marketing for CopperGate Communications and a member of the board of the HomeGrid Forum. CopperGate produces HomePNA chipsets, including a chipset for MDUs, and expects to be one of the first companies to deliver G.hn chipsets.