GUIDING PRINCIPLES FOR ENERGY EFFICIENCY IN NETWORKED CONSUMER ELECTRONICS

The energy consumption and efficiency of consumer electronics is continually evolving with advances in technology, product features and service. A key part of this evolution is network connectivity, which delivers new capabilities to products. Network connectivity can increase power consumption in two ways: operation of the hardware that enables communication; and time spent in higher power-consuming modes due to network activity and simply maintaining network connectivity. Also relevant to the power consumption of networked consumer electronics are the underlying technology standards for network interfaces, network protocols, and user expectations for device behavior.

As leading organizations representing the consumer electronics industry around the world, we support the following guiding principles with respect to advancing energy efficiency in networked consumer electronics:

1. Government and industry should support voluntary, market-oriented programs and initiatives, including industry-led standard test procedures. Emphasis should be on initiatives that support continued innovation, expanded consumer choice, and enhanced product functionality.

2. Government and industry should pursue harmonized policy approaches that benefit the global marketplace for consumer electronics.

3. Network technologies should actively support power management and follow generally accepted international power management principles and designs.

4. Consumers should be informed about and have reasonable control over power management, including but not limited to understanding power states and how network-connected sleep modes affect the user experience.

5. To the extent possible, industry should embrace open networking standards, such as Internet Protocol, so that future audio-visual devices can interoperate with other networked devices in buildings, such as computers and lights, for functionality and energy savings.

6. New and revised standards for data and network interfaces should be efficient in active modes and when lightly or not utilized, and they should convey power states to connected devices while enabling efficient maintenance of network connectivity in sleep modes.

7. Connection to a network should not impede a device from implementing its own power management activities.

8. Networked devices should not impede power management activities in other devices connected to the network.

9. Networks should be designed such that legacy or incompatible devices do not prevent other equipment on the network from effective power management.

10. Network links should have the ability to modulate their own energy use in response to the amount of the service or level of function required.

11. Innovation should move the market to a future of automatic power control of audio and video devices in support of product utility and energy efficiency.