G20 ENERGY EFFICIENCY ACTION PLAN:
Networked Devices Workshop

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CDA Voluntary Principles Project

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Reminder of how we got here

- Energy Efficiency Action Plan identifies networked devices as one of six areas of focus

- CDA develops voluntary design and policy principles, included in report welcomed by G20 ministers

- Dissemination of the principles and endorsement by industry & government
DESIGN AND OPERATION PRINCIPLES

1. Networked device design should follow standards-based communication and power management protocols to ensure compatibility and interoperability, and should take advantage of standards and protocols that actively support energy efficiency.

2. Networked devices should not impede the efficient operation of a network (for example by injecting bottlenecks or faults, or impeding power management activities in other devices).

3. Network-wide energy efficiency optimization should be a primary development consideration. Network power management should coordinate with individual device power management techniques to achieve this.

4. Connection to a network should not impede a device from implementing its internal power management activities.

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

6. Networks and networked devices should have the ability to scale power levels in response to the amount of the service (level of functionality) required by the system.

7. Edge devices without networking functionality should enter network standby, if appropriate, after a reasonable period of time when not being used. Edge devices with networking functionality should provide power management capabilities for each function consistent with that function’s role in the network.

8. Networking and networked infrastructure devices should not autonomously go to network standby mode. These devices should support power scaling.

9. Consumers should be informed about and have control over device power management, when applicable, including networked device low power modes that may affect the user experience.

10. The design and operation of networked devices should be compatible with, and promote the positive effects of, using consumer electronics and information and communication technology (ICT) to enable energy to be used more efficiently, often referred to as “Intelligent Efficiency.”

POLICY PRINCIPLES

1. Government and industry should seek harmonized policy approaches that benefit the global marketplace for consumer and commercial technology products and services, and that enhance the productivity and efficiencies achieved via networks.

2. Policy, including government procurement and best-practice sharing, should support continued device, network and intelligent efficiency innovation.

3. Energy efficiency requirements should be performance-based and technology neutral. Policy should account for the different capabilities of networked devices.

4. Policy should not impede the functionality of networked devices or the efficient operation of the network nor impair the implementation of standards for enabling device or network security.
Voluntary Design & Policy Principles

• 2 sets of Principles:
  – Guide to efficient design & operation of networks and devices
  – Provide guidance for policy development towards a common global framework

• Seeking broad endorsement in 2016
  – Endorsed by the Information Technology Industry Council (ITI)

• Seeking governments to:
  – Endorse and implement the CDA Policy Principles
  – Encourage product manufacturers, designers and standards bodies to endorse and implement the CDA Design Principles
Endorsing the Voluntary Principles

CDA Voluntary Principles for Energy Efficient Connected Devices

The CDA Voluntary Principles for Energy Efficient Connected Devices were developed by the G20 Networked Devices Task Group, consisting of industry and government representatives. The Principles have two focuses:

- The CDA Voluntary Design Principles to provide guidance on the key features of energy efficient connected devices, networks and communications protocols - for use by designers, manufacturers and protocols authors
- The CDA Policy Principles to encourage a common global framework for the development of government policies and measures - for use by policy makers

Endorsing the CDA Voluntary Principles for Energy Efficient Connected Devices

The CDA encourages leading device manufacturers and trade associations to endorse the CDA Voluntary Principles for Energy Efficient Connected Devices. As the number of connected devices expands rapidly, these Principles provide an energy efficiency blueprint for designers of products, protocols and policies. They have been developed to ensure that the high standards achieved for energy efficiency through technology advances continue in the new age of connected devices.

By completing the form below, your organisation elects to endorse the CDA Voluntary Principles, which means:

- Your organisation supports these CDA Principles and will endeavour to produce products, services or policies that conform to them
- The CDA may advertise your organisation’s endorsement of the CDA Principles publicly
- Endorsement is voluntary and can be revoked at any time

To endorse the Principles please complete the form below:

- [ ] I confirm endorsement of the CDA Voluntary Design Principles for Energy Efficient Connected Devices
- [ ] I confirm endorsement of the CDA Policy Principles for Energy Efficient Connected Devices
- [ ] I grant permission for the CDA to use our name and logo in publicly material associated with the CDA Principles
Discussion

• Any updates on endorsement?

• Any questions on process?