

ENERGY STAR® Small Network Equipment (SNE):
Online Stakeholder Meeting
11/19/2009 12-2pm

Discussion Summary

- **Discussion- Definitions**
 - Set-top boxes covered is a separate specification
 - *Stakeholder comment:* will the EU study for Network Standby be applied as a mode in the SNE specification
 - The intent of the EU study is to focus on low-power modes that include network connectivity Accommodations for that kind of feature
 - Need to allow for continued network presence
 - Being reviewed, too early to tell how it might fit specification
 - *Stakeholder comment:* Is focus on home equipment? Doesn't seem like it
 - Effort intended to capture devices used in homes and in small offices
 - Early discussions were on calling this a home category, but some small products are used in both homes and commercial buildings; easier to define with respect to characteristics, not location
 - The scope of the program will be defined by the SNE definition from the Framework
 - EPA welcomes additional comments as drafts develop to determine details of "upper boundaries" of the category
 - *Stakeholder comment:* Will demand response systems be covered?
 - Because this is a first version of the spec, key focus is on identifying products that are more main stream where there are early savings opportunities
 - Also, the scope is designed to cover products that pass IP traffic as their primary function. Demand response devices do not cleanly fit this scope
 - Product may not be qualified under more than one ENERGY STAR specification – qualified external power supplies sometimes used to identify efficiency at this time
 - Point that will be clarified in future drafts
 - Power supply itself is qualified for ENERGY STAR program: status recognized by the End-Use Product program
 - In the End-Use Product program, if there are product specific criteria available for the product, needs to be able to meet those to be recognized by end-use products
 - *Stakeholder comment:* Would this apply to Internet connections sharing connections with a PC?
 - WiMax Gateway may be covered
 - Application of a PC as a network device not covered in the spec

- *Stakeholder comment:* EPA should consider thinking of “Small” in SNE as a products design for operation in a small network rather than for the size of the device itself
 - Home gateways
 - *Stakeholder comment:* is a router with endpoint functionality (similar to a broadband router; e.g. a “gateway” device) in scope? If a device is both an end-point device and a routing device, will it be covered?
 - EPA will focus on “primary functions” to make related determinations
- **Discussion- Scope and Product Areas**
 - Access Points (APs)
 - *Stakeholder comment:* Clarification on APs – will all APs be covered, including those designed for enterprise use?
 - Yes, assuming they are able to meet the SNE definition
 - *Stakeholder comment:* An AP only has a single wired Ethernet cord. Is EPA trying to save power on the wired interface?
 - Yes, and wireless side as well
 - *Stakeholder comment:* EPA should consider how devices capable of accepting power from both the mains and PoE will be addressed
 - EPA plans to consider this issue in development of test procedures and criteria. The issue has arisen as part of the ENERGY STAR Imaging Specification in the past
 - *Stakeholder comment:* Consider mesh networking
 - EPA will review and encourages feedback from industry and stakeholders
 - *Stakeholder comment:* Will EPA consider things like a USB or FireWire hubs within the scope?
 - Likely not since these devices are intended to pass local data rather than IP traffic as a primary function
 - As initially conceived, focus on more high-bandwidth products with significant presence in the market
 - *Stakeholder comment:* Are IP cameras under consideration?
 - No - falls under end-point device
 - *Stakeholder comment:* Why are IP phones part of discussion? They appear to be end-point devices
 - Brought up because limited Ethernet switch capability within the device
 - *Stakeholder comment:* primary function is as a phone, however, not a switch
 - EPA will take a look at these products and foster technical discussion on efficiency. Where the product ultimately is covered in the program remains open at this time

- *Stakeholder comment:* It is suggested that EPA open discussions with manufacturers to review fringe products to develop a matrix of products inside and outside the scope of the SNE program
 - ****EPA ACTION ITEM**
- *Stakeholder comment:* Distinguish between network ports and data ports
- Need to refine where the balance stands in terms of primary functions and secondary functions. This will be a point of clarification in future documents for the program
- **Discussion- Features and Testing Approach**
 - EPA will be developing a draft test procedure for stakeholder input in the coming weeks. Presentation materials from this meeting intended to provide an early overview of considerations entering this effort
 - *Stakeholder comment:* Interested in seeing a throughput vs. power ratio as opposed to pure power measurement
 - Both capacity and power are important parts, but EPA seeks first to develop testing methodology and let data drive development/adoption of metrics
 - Under consideration
 - Is maximum throughput something EPA needs to explicitly measure? Or can manufacturers simply report? Does this enter the efficiency equation in the smaller device classes?
 - EPA is estimating that SNE links in general are used in the 1-2% utilization range, or less
 - Increasingly in the future, there will always be some low level of traffic on SNE
 - EPA plans to develop a test procedure that tests at various utilization levels
 - *Stakeholder comment:* Would not AC adaptors become a part of the efficiency equation?
 - EPA intends to adopt EPS efficiency requirements from the ENERGY STAR program that governs these devices; devices with more efficient adaptors will benefit from that in power measurements
 - *Stakeholder comment:* The EC's Low Power state from the Code of Conduct is very similar to the framework's defined idle state: no traffic
 - "Performance" – throughput needs to be defined
 - *Stakeholder comment:* How will the data collection and test process work? Who will be doing the testing?
 - Stakeholders themselves (or 3rd party on behalf of stakeholders) collect data using the test procedure developed as part of the specification development process
 - Data provided to EPA for analysis
 - EPA will develop and further refine test methodology and framework for how data should be supplied to EPA
 - If data is sent in that is "fake", what happens?

- Data comes in to EPA, gets analyzed, EPA reviews, sets levels based upon it
 - Data set is used to set levels and is released publicly
 - Manufacturers and model names will be masked
 - At the end of analysis, EPA releases the data set, with manufacturer and model names masked. Stakeholders can review and identify any problematic results
 - The ENERGY STAR PD site has many examples of this established process:
 - www.energystar.gov/productdevelopment
 - *Stakeholder comment:* Will EPA target specific manufacturers to send in data? How is that managed? How will EPA make sure there is adequate coverage?
 - The data collection process is open to all interested stakeholders
 - Stakeholders are welcomed to submit as much data to EPA as they would like
 - EPA data set is made public in a masked form
 - Opportunity to take a look and comment allows stakeholders to identify gaps in what was tested
 - EPA seeks always to have data to drive the process in terms of deciding what product categories are appropriate to include
 - Test procedure will specify conditions necessary to enable repeatable, comparable results
- **Discussion- Closing and Action Items**
 - *Stakeholder comment:* When does EPA plan to release the final specification for SNE?
 - No exact date yet for release yet set
 - Typical development process allows time for multiple drafts to be released for comment and stakeholder input and time to develop testing procedures.
 - 1st draft test procedure
 - EPA will develop and send to stakeholders a first draft test procedure in early December.
 - The procedure will be developed to allow testing of different “sized” products across the scope of the program
 - Goal is to allow stakeholders to point out any holes and refine the test procedure as necessary prior to collecting initial data
 - Send any comments to Networking@energystar.gov