

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



OFFICE OF
AIR AND RADIATION

January 23, 2014

Dear Set-top Box Equipment Manufacturer, Service Provider or Other Interested Party:

The U.S. Environmental Protection Agency (EPA) welcomes your feedback on the attached Final Draft ENERGY STAR® Version 4.1 specification for set-top boxes (STBs). Comments on this document are due no later than **Wednesday, February 12, 2014 to stbs@energystar.gov**. EPA will host a webinar on **January 31, 2014 from 12 to 2** Eastern Time to discuss this Final Draft specification with stakeholders. To register, please use this link: <https://www4.gotomeeting.com/register/233051511>. This specification will take effect December 1, 2014.

EPA would like to acknowledge the ENERGY STAR stakeholders who have invested time and effort to ensure the successful completion of the Version 4.1 specification. The Final Draft reflects comments received on the Agency's Draft 2 specification and August 29 supplemental proposal. Highlights are provided below. This draft reflects the collaboration of a wide range of stakeholders, serves as a foundational element of complimentary national efforts aimed at driving efficiency in STBs, and will deliver meaningful near term savings to consumers and the nation.

ENERGY STAR STB Test Procedure

In response to feedback from a wide range of stakeholders, this draft includes a number of changes that establish a single test for both ENERGY STAR and the Voluntary Agreement for Ongoing Improvement to the Energy Efficiency of Set-top Boxes (VA). The Department of Energy (DOE), lead for ENERGY STAR test procedures, and EPA have included additional testing procedures beyond those in the VA, including a procedure for STBs supporting UltraHD streams; Deep Sleep State refinements (such as duration of testing, state prior to the test, and wait time prior to power measurement); and steps applicable in the event of network interruptions. These additions are not in conflict with the VA, and any testing performed for ENERGY STAR purposes will be compatible with the VA test procedure.

Other changes of note:

- In general, stakeholders supported the Agency's most recent proposal to modestly increase base allowances, as well as select functional adders. These values are reflected in the Final Draft.
- EPA received requests for additional increases for DOCSIS 3 due to the anticipated timeline for achieving efficiency gains. Recognizing these market realities, EPA proposes a time limited adder for DOCSIS 3.0.
- In light of additional data shared with EPA, the Agency also proposes to expand the definition of multi-room to include Service Provider IP STBs that have a functionality somewhere between true multi-room and a shared-DVR but deliver savings comparable to or even beyond those offered by multi-room, as previously defined.
- EPA received conflicting feedback on the incentive for Deep Sleep, with some requesting greater flexibility and others calling for more defined requirements. In response, this draft aligns with the VA approach of scaling the incentive with the savings delivered by sleep modes, while retaining

additional requirements related to Deep Sleep to ensure that Deep Sleep is automatic or easily activated, does not prevent the operation of other functions, and its value is explained prior to disabling. As a result, even though the same test measurements will be performed for purposes of ENERGY STAR and the VA, the Deep Sleep testing results may not be used for purposes of ENERGY STAR certification unless additional deep sleep requirements are met.

Please [register here](#) prior to the stakeholder webinar on January 31, 2014 from 12 to 2. The exchange of ideas and information among EPA, industry, and other interested parties is critical to the success of ENERGY STAR. Any further stakeholder comment on this draft may be submitted to stbs@energystar.gov by **February 12, 2014**. EPA anticipates finalizing the specification in March 2014. To view past documents, please visit www.energystar.gov/revisedspecs and follow the link to Version 4.1 update under "Set-top Boxes & Cable Boxes".

Lastly, please direct any specific questions regarding this draft to Katharine Kaplan, at kaplan.katharine@epa.gov, or 202-343-9120, or Matt Malinowski, ICF International, at matt.malinowski@icfi.com or 202-862-2693. Please direct any questions regarding ENERGY STAR testing of set-top boxes to Jeremy Domm, DOE, at jeremy.domm@ee.doe.gov or 202-586-9870.

On behalf of EPA, I appreciate your continued participation as we work to finalize this specification.

Sincerely,

A handwritten signature in cursive script that reads "Katharine Kaplan".

Katharine Kaplan
Manager, ENERGY STAR Product Development and Program Administration

Enclosure:
Final Draft ENERGY STAR Version 4.1 Specification for Set-top Boxes (STBs)
Draft 2 Version 4.1 Set-top Box Comment-response Document