



Information to Facilitate Discussion of How to Best Address Download Acquisition Mode (DAM) Under the Version 3.0 ENERGY STAR® TV Products Specification

Download Acquisition Mode (DAM)

- EPA seeks assistance in better understanding how many, and what types of TVs, the DAM mode requirements will apply to.
- The intent of the DAM requirement is to assure that TVs enter a low-power standby mode as much as possible when not in use. For example, a TV acquiring EPG information should be able to transition to standby after completion of the task. In addition, requirements for the maximum number of hours per day that a TV can be in DAM as well as a maximum power level have been proposed to ensure that energy savings are realized.
- For reference the definition in the Draft 2 Version 3.0 ENERGY STAR Program Requirements for Televisions is: *Download Acquisition Mode (DAM): The product is connected to a power source, produces neither sound nor a picture, and is downloading channel listing information according to a defined schedule for use by the electronic programming guide, monitoring for emergency messaging/communications and/or otherwise communicating with a connected device through a network protocol. The power requirement in this mode is typically greater than the power requirement in Standby Mode and less than that in On Mode. TVs without EPG functionality may not have a distinct Download Acquisition Mode.*

Questions for Industry

- In a prior stakeholder meeting, one stakeholder suggested that the proportion of TVs currently shipped that include EPG functionality is low (e.g., on the order of 5%). Do stakeholders agree with this assessment that the proportion of TVs currently having EPG functionality is low? Does this suggest that DAM in a majority of TVs will be due to something other than EPG?
- What additional functionality should explicitly be addressed by DAM? For each functionality, how would information be received or transmitted (e.g. cable service, satellite, over the air, IP, FM receiver, etc.)?
- How do stakeholders propose testing TVs in DAM?
- Point of Deployment (POD) Module: The test procedures for Standby power (IEC 62301) and On Mode power (IEC 62087) are performed with no POD module installed. If testing for DAM mode also was performed with no POD module installed:
 1. What types of downloads would no longer fall under the preview of the ENERGY STAR specification? (e.g., EPG associated with cable service, software updates associated with cable service, etc.)
 2. What types of downloads would still need to be considered (e.g., monitoring for emergency messaging/communication, software updates for the TV, EPG from PSIP scans)
 3. In a home, if a TV receives content *only* from an STB, which provides the EPG, VOD, etc., what types of downloads does the TV perform, if any?

Proposals for DAM

Two proposals to address DAM were raised at the last stakeholder meeting:

- Roll DAM into On Mode
- Daily Wattage Limit: provide a daily wattage limit for DAM so stakeholders can then determine the most appropriate wattage/time requirements for their individual products, knowing what their daily DAM ceiling is.

EPA welcome comments on these proposals and has the following questions:

- Does the proposal to roll DAM into On Mode assume that the power associated with On mode will also reflect DAM energy use, or will be able to absorb and possibly make up for power used during DAM?
- Is the daily limit envisioned to apply to all TVs that incorporate some type of DAM, regardless of the specific features they include that require information download? E.g. Would TV's without EPG functionality receive the same energy limit as TVs with EPG and VOD functionality?
- Would TVs need to have POD modules installed to allow for a fair test against the limit?