

## Why Refer to CTA WAVE Tests? Jon Piesing







## WAVE Web Media API Snapshot Tests HbbTV



- Testing integration of web browser onto a TV is a long standing discussion point in HbbTV
  - Basic web standards support assumed to "just work" due to code re-use from desktop browser
  - HbbTV test suite doesn't have tests for web standards
    - Obviously some accidental testing as part of tests for HbbTV APIs
- Testing porting of desktop browser code to TV / STB is a gap
  - e.g. behaviour of HTML5 video element, graphics, ...
  - Aim to fill this with carefully selected W3C tests and the CTA WMAS test runner

## WAVE Device Playback Tests



- Properly functioning media playback is critical to many HbbTV applications
  - Many believe W3C Media Source Extensions ("MSE") are the future of this
  - HbbTV's use of native DASH playback in the TV widely seen as the past
    - Massive installed base but many drawbacks
- Players that are JavaScript libraries have a number of advantages
  - App can include the right version of the right library for its requirements
  - Can support more recent version of DASH than what's in the TV
  - e.g. <u>Dash.js</u> and <u>Shaka player</u> for DASH, <u>hls.js</u> for HLS
- W3C MSE tests really only test APIs
  - Don't test system integration
  - Don't test different codecs
  - Created to meet W3C process requirements & not maintained except for new features
- CTA WAVE device playback tests give much more depth
  - Considered set of behaviours that are important for JavaScript player libraries
  - Multiple codecs
  - Better support for automation when running tests