

26th November 2015

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The Manager
Broadcasting Carriage Policy Section
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Dear Manager,

Free TV Australia is responding on behalf of its members to the ACMA's call for comment on its proposal to revoke the Broadcasting Services (Digital Television Format – Audio Component – Transmissions in SDTV Digital Mode) Technical Standard 2007 (the mandatory TV sound standard).

The mandatory TV sound standard required that during the transition to digital television cheaper receivers, capable of decoding only MPEG-1 Layer II audio, were supported.

We draw to the ACMA's attention that the following audio coding specifications standards have been adopted in the recently published standards, as follows:

AS 4933:2015 Digital television—Requirements for receivers for VHF/UHF DVB-T television broadcasts including ancillary services

- (a) This Standard has been revised to provide manufacturers with additional essential requirements, including the need to decode MPEG-4 video and HE AAC audio.
 - (b) Receivers shall be capable of decoding audio streams in MPEG-1 Layer II, AC-3 and HE-AAC v2 formats at the respective bit rates given in Clause 3.9.
 - (c) If a program service has more than one associated audio stream, the receiver shall provide a method for the user to be able to select which audio stream is presented.
 - (d) Audio Formats of types - MPEG-1 Layer II, AC 3; and MPEG-4 HE-AAC up to and including v2. AS 4599.1:2015 Digital television - Terrestrial broadcasting: Characteristics of digital terrestrial television transmissions
- (a) Television services transmitted in MPEG-2 standard-definition television will include, at a minimum, a MPEG-1 Layer II audio stream.¹
 - (b) Australian terrestrial television broadcasters' transmissions of Audio Coding-3 are as specified in Recommendation ITU-R BS.1196-3, Appendix 3.
 - (c) The following audio coding systems—MPEG-1/MPEG-2 Layer II, AC 3, MPEG-4 HE-AAC (v1), simple AAC as per ISO/IEC 14496-3 and MP
 - (d) EG-4 HE-AAC v2 are included as the Australian requirements for DVB-T transmissions.

Therefore, we concur with the ACMA that digital television broadcasting services have migrated to more efficient video compression standards.

¹ For reception of all free-to-air digital TV broadcast formats in Australia, receivers need to have the capability of decoding both MPEG-1 Layer II and AC-3 audio streams. For more information, refer to AS 4933.

And if the mandatory TV sound standard is not repealed, broadcasters will still be required to provide two audio streams, one using the newer suite of advanced audio coding standards as well as a second mandatory MPEG-1 Layer II audio stream.

We therefore support the revocation of the Broadcasting Services (Digital Television Format – Audio Component – Transmissions in SDTV Digital Mode) Technical Standard 2007 (the mandatory TV sound standard).

Yours sincerely,



ROGER BUNCH

Director of Engineering.