Audio Configuration			
Audio Group 1	AES 1	Audio 1	International sound, stereo left
		Audio 2	International sound, stereo right
	AES 2	Audio 3	Mono HB commentary (guide only)
		Audio 4	Mono MVB commentary (guide only)
Audio Group 2	AES 3	Audio 5 and 6 (Dolby® E 20-bit)	Dolby E audio channel layout: 1 = front sound left 2 = front sound right 3 = centre channel 4 = low frequency channel 5 = left surround channel 6 = right surround channel 7 = commentary - HB (guide only) 8 = commentary - MVB (guide only)

During any pre- and post-multi unilaterals, audio from the unilaterals will replace international sound on audios 1 and 2.

Please note: the two commentaries (channel 7 and 8) are not provided for the purposes of any transmission whatsoever by any broadcast partner (other than the host broadcaster and main visiting broadcaster who produced such commentaries), unless permission has been given to the UNL broadcast partner involved.

AUDIO LEVELS

All audio measurements shall comply with the EBU R128 recommendation. The basis for the EBU R128 recommendation is the ITU-R BS.1770 but some more details have been specified to avoid misinterpretations:

- Loudness target
- Measurement gate
- Introduction of a "Loudness range descriptor" LRA
- Introduction of absolute (LUFS) and relative (LU) Loudness Units, LUFS is equivalent to LKFS!
- Scale Range of an "EBU" type loudness meter
- Calibration and alignment tone level:
  - -18dBfs reads -18LUFS equals +5LU, valid for 1kHz stereo tone

PEAK VERSUS LOUDNESS NORMALISATION

The concept of peak normalisation with reference to a Permitted Maximum Level (PML; for example, -9 dBFS), has led to uniform peak levels of programmes, but widely varying loudness levels. The variation is dependent on the degree of dynamic compression of the signal. In contrast, loudness normalisation achieves equal average loudness of programmes with the peaks varying depending on the content as well as on the artistic and technical needs.

Patvirtinta. Registruota 2020-10-12 13:42:15 Nr. 18F-1049

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