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North American Broadcasters Association (NABA)

NABA POSITION ON LOUDNESS MEASUREMENT AND CONTROL

The North American Broadcasters Association (NABA, www.nabanet.com) is an association of broadcasters in Canada, Mexico, and the United States, and the NABA Technical Committee is its standing technical body. NABA is thus in a position to present the technical viewpoints of the most authoritative association of professional North American Broadcasters in television and sound programme production, post-production, and distribution for terrestrial, satellite, and cable broadcasting.

NABA is a Sector Member of ITU-R and a long-time participant in ITU-R Study Groups, Working Parties, Task Groups, Rapporteur Groups, etc. NABA numbers among its members Chairmen, Vice-Chairmen and members of the above groups. NABA also participates widely in the ITU work on radio, television and multimedia services and has a strong interest in Radiocommunication audio, video and spectrum studies including spectrum engineering techniques, spectrum management fundamentals, spectrum monitoring, and inter-service sharing, interference and compatibility.

1. The role of ITU-R Study Group 6 on matters related to program loudness is to collect proposals from ITU-R Members, provide a worldwide forum to discuss those proposals and develop consensus on a single solution for international program exchange, that can find worldwide application (see Section 6.1.2 of Resolution ITU-R 1-5, that clarifies that the ITU-R is engaged in the development or endorsement of international, rather than national or regional standards).
2. NABA believes that in the case of program loudness, it is particularly important that a single worldwide solution should be developed, since North America distributes countless television programs to broadcasters worldwide, and acquires programs from broadcasters and program producers in a large number of foreign countries.
3. NABA has been an active participant in the work of Study Group 6 that has led to the creation of the current ITU-R Recommendations on program loudness measurement and control, namely Recommendations ITU-R BS.1770, ITU-R BS.1771 and ITU-R BS.1845, which represent the consensus that Study Group 6 reached at the time of their adoption and subsequent approval. Those Recommendations, however, mention the need to perform further studies in order to complete them under some important aspects.

4. NABA strongly recommends that making changes to the aforementioned ITU Recommendations on loudness be carefully considered as program loudness measurement and control is crucial to the international exchange of programs and to the enjoyment of that programming by broadcast listeners everywhere.

5. NABA notes that in April 2010, the EBU, an authoritative Union of European public broadcasters and a sister Union of NABA, submitted several proposals and recommendations to Study Group 6 Working Party 6C trying to improve or complete the ITU-R Recommendations mentioned above.

6. In that spirit, NABA has studied the various proposals & recommendations and offers the following comments:

Document 6C/321 proposes to establish a Rapporteur Group (RG) to consider the inclusion of the Low Frequency Effects (LFE) channel. Working Party 6C currently has tasked an RG with this issue (Annex 19 to Document 6C/287). Although the Report from the Rapporteur at the last WP 6C meeting (Document 6C/249) has provided little evidence for the inclusion of the LFE channel, NABA welcomes the continuation of the Rapporteur Group and further study of this issue.

Document 6C/322 proposes a method of gating for inclusion in Recommendation ITU-R BS.1770. NABA is supportive of including a gating function to mitigate the effects of extended periods of silence. NABA would, however, encourage the completion and reporting of definitive studies that demonstrate the effectiveness of various gating algorithms.

Document 6C/323 proposes to change the target loudness in Recommendation ITU-R BS.1864 from $-24 \text{ LKFS} \pm 2 \text{ LU}$ to -23 LKFS with a measurement error tolerance of $\pm 0.2 \text{ LU}$. NABA notes that many broadcasters in North America have adopted Recommendation ITU-R BS.1864 and any change in the target level and tolerance as currently specified in Recommendation ITU-R BS.1864 would adversely affect programme production and international programme exchange.

Document 6C/324 proposes to change the unit designation for loudness from "LKFS" to "LUFS" in Recommendation ITU-R BS.1770. NABA believes that making these changes will be highly disruptive to the broadcasting industry.

7. NABA has considered the available documentation and specifications developed by the US Advanced Television Systems Committee (ATSC), the EBU, and other ITU-R submissions. NABA strongly encourages WP 6C that whatever new contributions on program loudness will be submitted, along with the loudness contributions already submitted to the forthcoming October 2010 meeting, be presented and processed with priority in a serious and cooperative effort that will finally result in the adoption of a single set of comprehensive Recommendations on program loudness measurement and control for worldwide application, at the October 2010 meetings of Working Party 6C and Study Group 6.

8. Consistent with ITU Recommendations ITU-R BS.1770, ITU-R BS.1771 and ITU-R BS.1864, operating implementations have been deployed across North America to mitigate loudness issues in digital television. These multi-year efforts have improved loudness control to millions of viewers across North America, and on other continents as well. NABA urges great caution in considering possible changes to Recommendations ITU-R BS.1770, ITU-R BS.1771 and ITU-R BS.1864. Any proposed changes to these recommendations must be well supported by technical studies and agreed to by all stakeholders due to the potential disruption to program providers, broadcasters and the manufacturing sectors, in addition to millions of audience members currently benefiting from the arduous work that went into the current ITU-R Recommendations.