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Audio for Broadcast

Loudness status in Europe

Thomas Valter, HD business manager at TC Electronic, offers a Guest Opinion on loudness monitoring and true-peak technology

LOUDNESS HAS been a muchdebated topic for years. No doubt, it is a major focal point for broadcasters throughout the world, but what is the current status? Some countries have already passed legislation to regulate loudness in television, while others are currently considering it and finally some have no plans regarding loudness legislation.

At this point, only Italy (2010) and France (2012) have passed loudness legislation in Europe, and in both cases the standard to comply with is EBU's R 128. In Spain, initial steps towards loudness legislation have been taken, but since the latest change of government, the project has been on standby without any concrete plans to proceed. However, the local government in Catalonia recommends public TV stations to follow R 128.

In Holland, Germany, Austria, Switzerland and the UK, broadcasters are recommended to comply with R128, but there are no laws or future plans regarding this in these countries. In some cases, such as Holland, this only applies to commercials, while other countries recommend it on a general level.

In Denmark, the situation is similar, but the parliament has initiated research to determine whether legislation should be considered. In Norway, all digital radio distribution is loudness normalised and plans are to



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implement this across public television as well over the next year, but on a voluntary basis.

If we take a brief look outside Europe, the US and Brazil have recommendations towards R128, but should this be an indication that loudness is not a big issue in broadcast after all? Probably not. Surely, there are challenges for lawmakers in this field. For instance, how should broadcasters be monitored? How should they document compliance? What are the sanctions? Is stereo more important than 5.1 or vice versa (the same programme material reads out differently)?

But more importantly, even in the countries that have no loudness legislation in place, loudness metering and control is still a major concern to broadcasters. They actually want to deliver loudness-normalised content, care about audio quality and at the same time wish to lower the number of viewer complaints due to systematic loudness jumps



Loudness radar: how should broadcasters be monitored? How should they document compliance?

dedicated to deliver a better listening experience, which is a positive sign.

Also important is the fact that virtually all European countries have decided to either recommend or legislate based on EBU's R128 standard. Without going into all of the details, R128 builds on the ITU BS.1770 as a quick fix at the point of transmission. If loudness normalisation is measured during production and mastering, there is no need to loudness correct the content during ingest or transmission.

Using this approach, the end-listener should be able to perceive the audio the way the producer of the content meant it to. However, broadcasters will still need transmission processors as a last line of defence, and for live productions, automatic loudness processing is a necessity.

At the end of the day, the current loudness status in Europe is that even with limited legislation in place, loudness remains a hot topic and broadcasters seem interested in taking advantage of this technology and approach even if they are not forced to by law.

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legislated on loudness and Japan and Australia recommend following local broadcast standards building on ITU BS.1770 (as does R128).

Overall, it seems as if many European countries have decided to mainly rely on across various types of programme material. The fact that this desire is motivated by the broadcasters themselves and not by the risk of being fined or forced temporarily off-air (which is actually a sanction in Brazil!) indicates that they are standard just like the ATSC A/85 standard that applies to US broadcasters.

However, EBU's philosophy is that loudness should be considered right from the start — from production over mastering to ingest rather than