Current status of WHO-ITU standards and next steps

Masahito KAWAMORI
International Telecommunication Union
T-sector SG16 Question 28 (e-health), Rapporteur
Keio University
ITU-T Q28/16

- focuses on standardization of multimedia systems to support e-health applications.
- achieve interoperability among systems and to reduce the cost of devices through economies of scale.
- provide the environment for harmonization and coordination of the development of a set of open global standards for e-health applications.
WHO and ITU on Safe Listening

- WHO and ITU organized Joint Stakeholders’ Consultation on Safe Listening Devices on 1 October 2015
- Based on the discussion, a new draft Recommendation F.SLD “Guidelines for safe listening devices/systems” was initiated at ITU-T Q28/16
ITU-T Rec. F.SLD: “Guidelines for safe listening devices/systems”

- Still in its embryonic stage
- Comments from other SDOs are expected
- Some contributions have been made to add text
- “Standards situation analysis” is added as Appendix
Situation Analysis

• Describes standards for safe listening devices and provides an overview of current practices on safe listening among standardization bodies and manufacturers.

• It shows that while there are standards for occupational noise safety, there are not many for PMPs. Except by CENELEC and IEC which measure sound pressure levels in personal music players (PMPs).

• There is no uniformity in implementation of safe listening standards across the world.
ITU Safe-Listening WS (6/6/2016)

• ITU-T (SG16,12), CELENEC, IEC, ISO as well as WHO joined this workshop on 6/6/2016 to share their ideas about current state of their standards and see if there are any gaps.

• Comments have been included in F.SLD as notes. But more text is needed.
Dosage

• Simply put, “dose” is (the sum of) Sound Pressure Level multiplied by the duration of the exposure to that sound level (official definition needed)

• Often used in occupational setting to measure occupational noise exposure

• For PMP, different measurement may be needed
Dosage and Safe Listening

- Exposure to PMP at a high SPL for long duration (per day) is unsafe
Some (new) Requirements on Dosage for PMP

- Consideration of recovery phase
  - Differentiate continuous dosage vs. intermittent, with resting state, listening

- “Good sound (e.g., music)” vs. “Bad sound (noise)”
  - (Current “dosage” treats music and noise in the same way.

- Measurement of sound in the ear, rather than the surrounding (current dosage often measured at the source of sound)
  - Criteria where resonance in the ear is taken into account

- Acceptable level of risk

- Consideration of Age
Other Aspects

• Healthcare communication aspect of Safe listening
• Messaging
  – Standard text?
  – Semantics

Listening at a high volume for a long time may damage your hearing. Tap OK to allow the volume to be increased above safe levels.
Next (immediate) Steps

• Include text from this consultation meeting
  – E.g. DETERMINATION OF RISK OF NOISE-INDUCED HEARING LOSS DUE TO RECREATIONAL SOUND can provide the basis of the glossary, etc.
• Include the results of the discussion of this meeting
• Provide newly edited version at Q28/16 meeting on 8-12 May.
• If the text is ready, it will be proposed for Consent at ITU-T SG16 meeting in October 2017
Guideline on
WHO Safe Listening App

• Appendix to F.SLD
• Explains its usage, objective, etc.
• Some Questions need to be addressed:
  – Is this a Reference App?
  – Is the App “conformant to” F.SLD?
  – Need for Conformance testing?
  – How to promote and propagate?
Further Work

• Profiling (more expensive ones vs. commodity)
• Reference App for Dosimetry (WHO APP?)
• Standards for messaging?
• Promotion (e.g., WHO Web portal for “Safe listening devices”)
• Consideration of Noise Cancelling and other technologies
• Use of “Smart” devices and services for preventing hearing loss
• Inputs from Music industry? (on “good” sound)
For more info.

• If you are interested,
• Please visit ITU-T SG16 website:
• Or contact:
  – tsbsg16@itu.int

Thank you