METPN

Workshop of the Consultative Committee for Acoustics, Ultrasound and Vibration -Measurement of imperceptive matters-

Takashi USUDA
CCAUV President and CIPM member
(NMIJ/AIST Japan)

11th CCAUV and related meetings

Bureau
International des
Poids et
Mesures

Objectives of CC

To progress the state of the art

 providing a global forum for NMIs to exchange information about the state of the art and best practices in the field

To reach out to new and established stakeholders

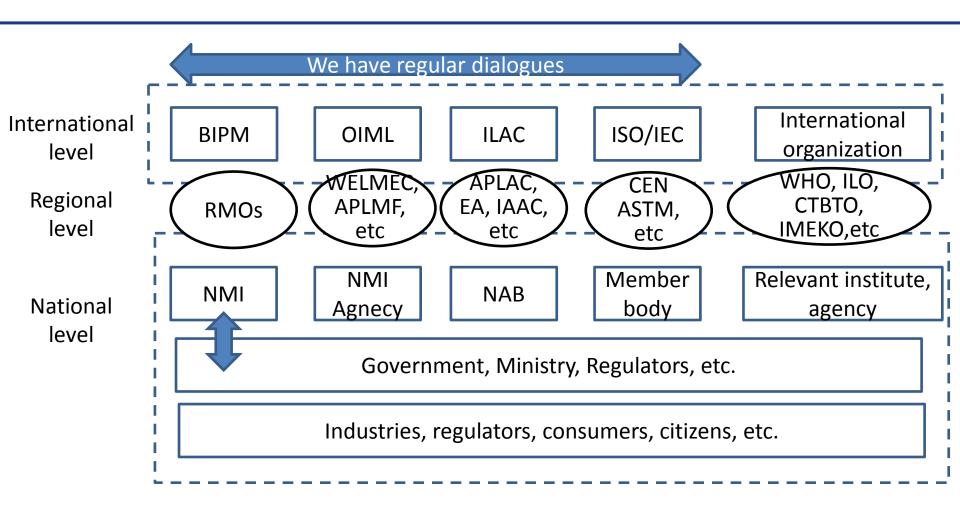
 facilitating dialogue between the NMIs and global stakeholders in order to define new possibilities for metrology impact.

To demonstrate the global comparability of measurements

- working with the RMOs to:
 - plan, execute and monitor KCs.
 - support the process of CMC review.

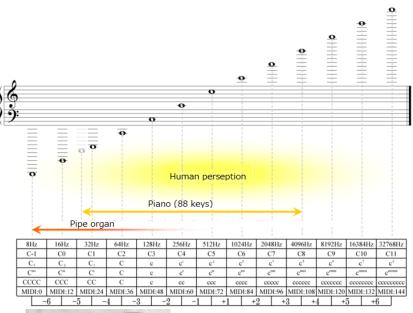
Bureau
International des
Poids et
Mesures

Stakeholders





AUV as physiological quantity, perceptive or not



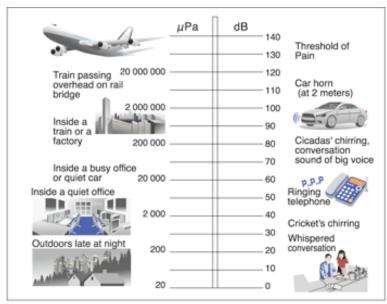


Fig. 1 Sound pressure and sound pressure level

http://rion-sv.com/support/st_sound_en.aspx



Bureau
International des
Poids et
Mesures





Contents

The IMS network: Overview, Measurement Systems and Calibration
Julien Marty – Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO) (Vienna, Austria)

Report on CCAUV.V-K3 Qiao Sun, NIM (China)

Hearing below the low-frequency-limit: Measurement, perception and impact of infrasound noise

Christian Koch, PTB (Germany)

Realization of acoustic primary standards for airborne ultrasound and applications Ryuzo Horiuchi, NMIJ (Japan)

A Primary Method for the Complex Calibration of a Hydrophone from 1 Hz to 2 kHz S.E. Crocker, NIST-USRD (United States)



Contents

Metrology issues with long-term monitoring of very low frequency deep-water ocean noise Stephen Robinson, NPL (United Kingdom)

Free-field calibration of underwater sound receiver in a laboratory water tank at very low frequencies

A.E. Isaev, A.S. Nikolaenko, FSUE VNIIFTRI (Russia)

A 6DOF micro-vibration measurement and generation test facility Charlie Jarvis, NPL (United Kingdom)

