Workshop

The role of metrology in improving confidence in IMS data
Linking IMS measurements to the international System of Units (SI)

Prinz Eugen Saal 09:00 - 11:30

-------------------------------------- Day 1: Wednesday 21 June 2023 -------------------------------------

Introduction

1. *Linking IMS measurements to the International System of Units (SI) – The Infra-AUV project*
   Richard Barham

Background

2. *Traceability to the SI – what does it mean, what are the benefits and how does it work on the global scale?*
   Thomas Bruns

Fundamental realization of quantities at National Metrology Institutes (NMIs)

3. *Methods of absolute calibration of microphones and microbarometers at low frequencies*
   Dominique Rodrigues

4. *Measurement standards for hydroacoustics*
   Stephen Robinson

5. *Calibration of seismometers by laser-interferometry*
   Thomas Bruns

-- Discussion Break –

Comparison calibration methods for working standard sensors

6. *Secondary methods of microphone and microbarometer calibration*
   Marvin Rust

7. *Hydrophone calibration in the laboratory and at simulated ocean conditions*
   Stephen Robinson

8. *Laboratory calibration of seismometers at low frequencies by comparison*
   Jacob Winther

Round up and outlook for the second day

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------------------------------------- Day 2: Thursday 22 June 2023 -------------------------------------

Delivering the SI to IMS stations through on-site calibration*

9. *Practical implementation of traceable initial calibration and ongoing on-site calibration at infrasound stations using the CalxPy software.*
   Benoit Doury, CTBTO and Samuel Kristoffersen

10. *Concepts of traceable on-site calibration of deployed hydroacoustic sensors.*
    Stephen Robinson

-- Discussion Break --

11. *Considerations for installing and utilizing traceable reference sensors for seismic monitoring*
    Michaela Schwardt

*some talks include a live interactive demonstrations of capability

Open discussion - a chance to put your questions to the *Infra-AUV* project team

Workshop summary and close