

of IMS Infrasound Stations

Calibration is an essential process to ensure data quality and trustworthiness. As defined in the IMS Operational Manual, it encompasses two distinct processes: “initial calibration” and “on-site calibration”. When an infrasound measurement system is to be deployed at an IMS station, specification data provided by the manufacturer for each individual piece of equipment are first reviewed to ensure that the delivered equipment substantially meets theoretical specifications. The initial calibration is then performed with two objectives: (a) verifying that the system response remains within tolerances of the manufacturer supplied data once the equipment is installed in operational conditions at the station (b) establishing a baseline for future calibrations. The on-site calibration consists of measuring the system response and comparing it against the baseline response established at the time of the initial calibration. It shall be performed at least once a year or whenever it is suspected that the baseline calibration is affected (after equipment replacement for example). The objective of this presentation is to review the recent efforts made by the PTS together with infrasound expert laboratories and national metrological institutes to define and implement calibration procedures in agreement with the IMS Operational Manual requirements.

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