

BS 4142: 2014

5. Instrumentation

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BS 4142 (2014) Consultation draft key points & comments

- ▶ Exclusion of Class 2 instruments
- ▶ Costs of Class 1 Equipment
- ▶ Preferences for Class 1 instruments
- ▶ Instrument noise floor
- ▶ Use of Type 1 instruments
- ▶ Sound calibrator standards and pairing of calibrators
- ▶ Implications for $1/3$ octave band & FFT analysis

BS 4142 (2014) Consultation draft key points & comments

- ▶ Instrumentation in current use
- ▶ Multi-function calibrators
- ▶ Uncertainty

General

5.1 BS EN 61672-1 Class 1

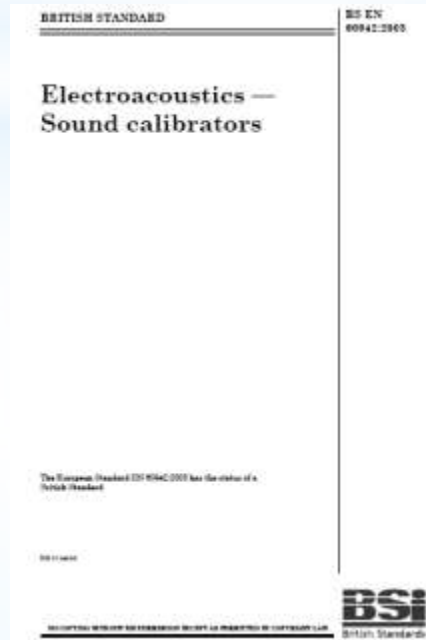
BS EN 61260 Class 1

BS EN 60942 Class 1

- SLMs etc.

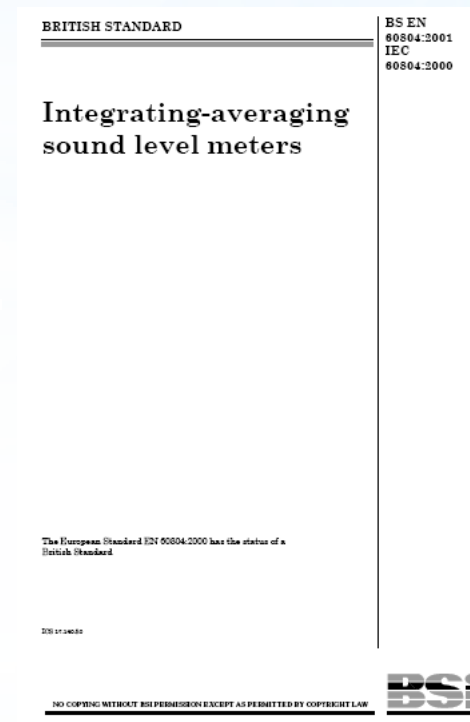
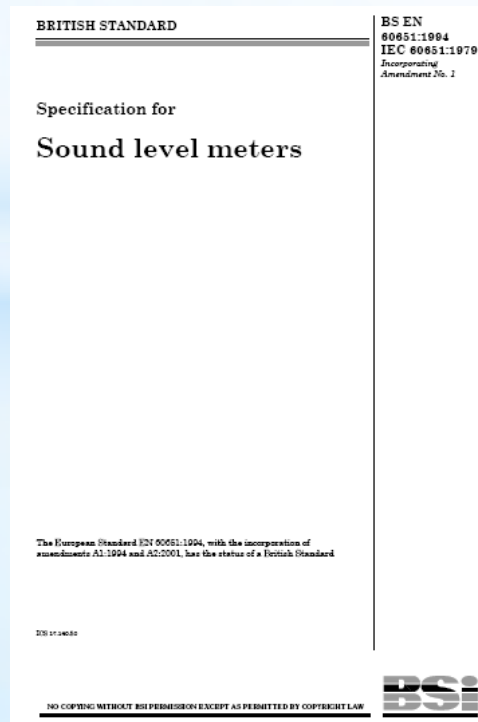
- Filters

- Sound
Calibrators



Alternative instrumentation

- ▶ Compliant with BS EN 60651 & BS EN 60804

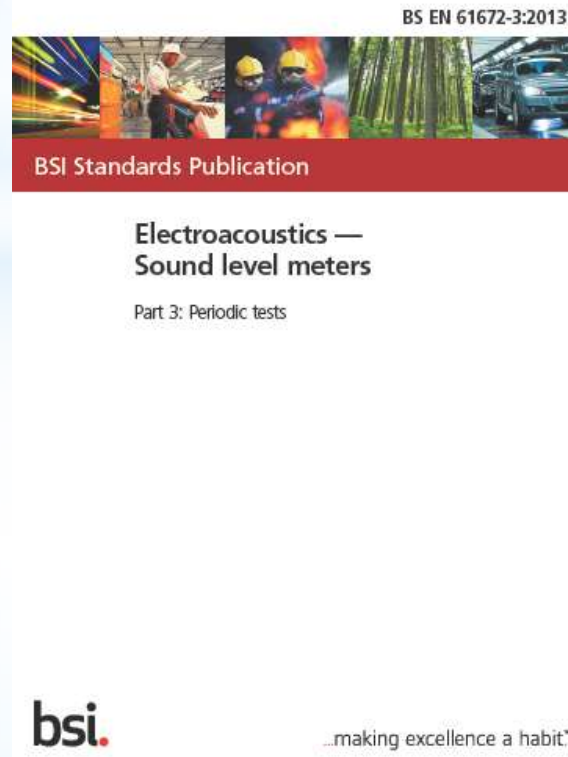


Verification

- ▶ “Valid certificates of conformity .. measuring systems...calibrators ..”
- ▶ Sound calibrators - intervals of 1 year (recommended)
- ▶ Measuring systems (inc. filters) – intervals not exceeding 2 years
- ▶ Verification = limited series of periodic tests

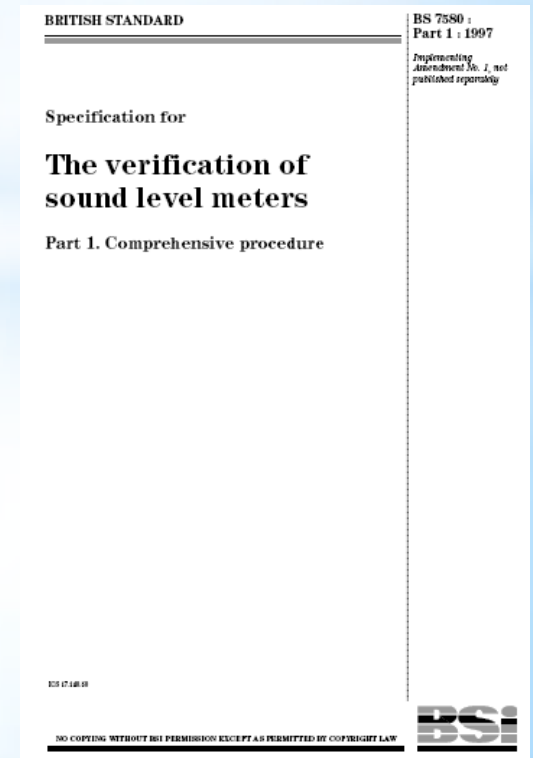
Verification *cont'd*

- ▶ Conformity to BS EN 61672-1 Class 1 (see BS EN 61672-3)



BS EN 60651 / 60804 Instruments

- ▶ Verify to BS 7580-1
- ▶ BS 7580-1 States every 2 years
- ▶ Calibrator to have been tested within previous year
- ▶ Verify after any repairs ...



Laboratory testing

- ▶ Does not explicitly state UKAS / NAMAS accredited laboratories... (see also good practice)
- ▶ Conformity and calibration – to national standards (traceable to national standards)

Questions ..

