

The practicalities of noise measurements and the role of calibration

G A Parry ⁽¹⁾ & M Barrett ⁽²⁾, (1) Temple Environmental Consultants Limited (2) Babtie Group
Email: gparry@tecl.fslife.co.uk

It is increasingly apparent to all acoustic practitioners the importance of calibrating equipment, not least, in order to avoid challenge in Court, Public Inquiry etc as to the validity of any measured data. However, whilst calibration at some pre-determined interval clearly has its place in the audit trail of measurement validity, there are many other factors which are at least as important in ensuring that measurement data is both 'fit for purpose' and accurate.

Accordingly, this paper examines some of the many difficulties encountered by acousticians including the following aspects:

- When to measure
- Where to measure
- How long should I measure for?
- Do field calibrators calibrate accurately?
- How often should equipment be calibrated and is frequency of use an important issue?
- What are the uncertainties in measurement?
- User errors

We conclude that slavishly adhering to the calibration of equipment is no guarantee that the results will be of any use to the practitioner, rather that a full checklist of measures to be taken by those carrying out acoustic surveys will be of particular use in ensuring the usefulness and accuracy of the results.