

# **Proceedings of the Institute of Acoustics**

## **ACCREDITATION - THE NAMAS VIEWPOINT**

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### **NAMAS Accreditation**

NAMAS accreditation provides assurance that a testing or calibration laboratory is operating a fully documented quality assurance system and has the technical competence to work to exacting requirements, including requirements that are specific to acoustic testing or calibration.

NAMAS accreditation is granted on behalf of the Secretary of State for Trade and Industry. Laboratories are accredited to the requirements of EN45001 and ISO Guide 25 as published in the NAMAS Accreditation Standard. These are the standards increasingly expected in European and International markets by clients.

### **Categories of Accreditation**

When testing is performed away from the laboratory this is defined as site testing and is subject to separate accreditation. The definitions of the different categories of accreditation for site are contained in the NAMAS document M18.

### **NAMAS in relation to BS 5750/EN 29000/ISO 9000**

Differentiating between the requirements and benefits of NAMAS accreditation and BS 5750 registration sometimes causes confusion.

As a general rule-of-thumb NAMAS is for calibration and testing laboratories whilst ISO 9000 and its equivalents (BS 5750 and EN 29000) relate specifically to design, product manufacture and repair. In general, ISO 9000 covers only those aspects of testing associated with the manufacture of a company's own products. Assessment against BS 5750 and the NAMAS criteria both require that management quality systems are fully implemented. In addition, NAMAS accreditation includes assessment of technical competence.

As stated in ISO Guide 25:

**Laboratories meeting the requirements of this guide comply, for calibration and testing activities, with the relevant requirements of the ISO 9000 series of standards, including those of the model described in ISO 9002 when acting as suppliers producing calibration and test results.**

The two schemes are not alternatives but work together to enhance the quality of the goods and services being supplied.

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### **NAMAS Accredited Laboratories**

Each NAMAS accredited laboratory is issued with a schedule, for each category of accreditation, detailing the types of test for which it holds accreditation. Potential customers are advised to confirm with the laboratory that the accreditation covers the particular test needed and is also applicable to the location, eg in the laboratory or out on site.

NAMAS accreditation is voluntary and the decision to become NAMAS accredited and submit itself to the accreditation process is made by the company, presumably on commercial grounds. For the laboratory a quality system means less wasted effort dealing with errors and omissions whilst at the same time providing the customer with assurance of the quality of the work being carried out.

At present there are some 268 accredited calibration laboratories and 799 accredited testing laboratories; of this total just 15 are accredited specifically for acoustic testing or calibration.

### **NAMAS Accreditation Criteria**

The assessment process involves not only examining the testing activities but also ensuring that these activities are backed by a fully documented quality assurance system. Thus the NAMAS document M10 is laid out in sections which include:

- Organisation and management
- Quality system including the quality manual
- Audit and review
- Personnel and staff training
- Laboratory equipment and its maintenance
- Measurement traceability and calibration
- Methods and procedures
- Accommodation and environment
- Handling of test items
- Recording of data
- Test Reports
- Complaints
- Sub-contracting
- Support services and supplies.

The quality system is fundamental; it is the system by which the laboratory carries out its quality functions and ensures that the requirements of the accreditation standard are met. The quality system must be formalised into a quality manual which incorporates the policies and responsibilities for maintaining the quality of the testing. All staff need to be aware of the system and to comply with it.

Whilst all sections are important, laboratories seeking NAMAS accreditation would be well advised to pay particular attention to the sections dealing with audit and review, measurement traceability and calibration and also methods and procedures.

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### **NAMAS Committees**

NAMAS is advised by a number of technical committees. On the advice of these groups specific technical documents may be prepared to advise both assessors and laboratories of specific technical requirements and ensure uniformity of technical competence and assessment. An acoustics working group has just been set up to look at NAMAS documentation specific to acoustics and to advise on industry needs for accreditation in acoustics.

### **Overseas**

NAMAS reports and certificates are widely accepted throughout the world. In particular, agreements exist recognising the equivalence of accreditation and therefore reports and certificates in the following countries:

#### **Testing**

Australia, Denmark, France, Hong Kong, The Netherlands, New Zealand, Spain, Sweden.

#### **Calibration**

Australia, Denmark, Finland, France, Hong Kong, Germany, Italy, The Netherlands, New Zealand, Norway, Sweden, Switzerland.

Other countries are expected to join these agreements as they reach the required standard.

### **Conclusions**

The NAMAS requirements may seem to be endless, but most accredited laboratories will agree that, approached with the right attitude, the path to accreditation has considerably sharpened their awareness of quality and the need to continually monitor the performance of the testing being undertaken.

