# An introduction to the updated ICNDT Guide on NDT Personnel Qualification and Certification

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If NDT is important and will be carried out all around the world we need to be sure it is reliable wherever it is carried out

Key challenge is how to ensure quality all along the supply chain Remember we depend critically on the motivation of the individual NDT personnel, Avoid multiple duplicate personnel certification which must demotivate













The prime purpose of this Guide, which has been prepared under the auspices of the International Committee for Non-Destructive Testing (ICNDT), is to promote best practice in the qualification and certification of NDT personnel according to the international standard EN ISO 9712.

- The competence of NDT personnel is a key element in achieving reliability in non-destructive testing (NDT) and is vital to ensure the quality and safety of products and installations.
- The ICNDT Guide is of importance to all tiers in the management of NDT operations: regulators, inspection bodies, certification bodies, industry, NDT service companies and supervisors of NDT personnel.



Third-party qualification and certification is widely recognised as conferring a number of advantages:

- It complies with an internationally agreed ISO standard that is increasingly being adopted worldwide;
- It utilises an internationally developed training syllabus;
  IExaminations (theory and practical) are provided directly by certification bodies or through authorised qualifying bodies and authorised examination centres under the control of certification bodies (many of which are linked to national NDT societies);
- It provides a harmonised standard for training, qualification and certification of NDT personnel and can be used as the base level for more specific employer-based or third-party certification relevant to particular products or installations.

The central role of EN ISO 9712 among standards for thirdparty certification, the historical development of NDT personnel certification and ICNDT's role is explained within this Guide.



## 2. Recommendations on qualification and certification

### Recommendations to users of central third-party certification

When central third-party certification is appropriate, it is recommended that regulators and industry define the levels of competency of NDT personnel who are certified in accordance with EN ISO 9712 by a certification body accredited to ISO IEC 17024.

Regulators, users and auditors of NDT operations should recognise the importance of employers of NDT personnel properly fulfilling their responsibilities to authorise personnel to work after first confirming that their employees are adequately trained, experienced and qualified.

### **Recommendations to certification bodies**

Certification bodies are urged to provide certification to EN ISO 9712 in order to maximise the value of their certification. In anticipation of future harmonisation, their training syllabuses should encompass the requirements of ISO/TR 25107.

#### **Recommendations to national standards bodies**

In adopting the international standard EN ISO 9712, the ISO member body is strongly urged to apply it without deviation from the original text in order to ensure that it acts as a harmonising influence. Failure to do so could result in a refusal to recognise or accept NDT personnel certification issued by certification bodies operating to national standards with deviations created under ISO guide 21.



# 3. Responsibilities of the employer

An employer of NDT personnel carries important responsibilities for the overall quality of NDT operations. These should be reflected in the employer's quality procedure for NDT (which may be known as the written practice<sup>1</sup>). The employer retains these responsibilities whether he uses in-company certification, third-party certification or a combination of both.

This section of the ICNDT Guide clarifies the employer's responsibilities within the framework of using personnel qualified to EN ISO 9712 and gives guidance on how the employer should fulfil these responsibilities. In this context, the employer (or responsible agency) is defined as 'the organisation for which the candidate works on a regular basis'. If the individual is self-employed, he shall assume all responsibilities specified for the employer or responsible agency.

It is a central tenet of the standard that the employer has overall responsibility for the results of NDT operations and is fully responsible for the authorisation of his staff to work. In practice, this must include checking that the NDT tasks to be carried out are within the scope of the individual's certification (sector, method and level) and, if they are not, organising additional job-specific training and/or examinations (see Figure 1).

The employer is responsible for introducing candidates to the certification body and for documenting the candidate's education and prior experience. (If the candidate is unemployed or self-employed, the declaration of education, training and experience shall be attested to by at least one independent party.)

The employer must ensure annually that employees meet the visual acuity requirements of the certification body and must keep records of work experience that will be needed to demonstrate continuity of satisfactory work activity without significant interruption. This is important both for his own quality assurance and to support renewal/recertification.

To fulfil these responsibilities the employer should prepare and implement a quality procedure (or written practice) covering at least the above responsibilities and maintain adequate records.

<sup>1</sup>See, for example, SNT-TC-1A published by ASNT.



# 4. Requirements for NDT personnel certification bodies

### Specific requirements for NDT personnel certification bodies (NDT PCB)

EN ISO 9712<sup>[1]</sup> is the latest internationally recognised and widely accepted standard for qualification and third-party certification of NDT personnel, replacing ISO 9712 and EN 473.

### General requirements for personnel certification bodies (PCB)

EN ISO 9712 requires that the certification system shall be controlled and administered by a certification body that conforms to the requirements of the standard EN ISO/IEC 17024<sup>[3]</sup>. A PCB in compliance with EN ISO/IEC 17024 will be impartial in its decisions on certification and will ensure that assessments leading to certification are fair, valid and reliable.

### Quality management system (QMS)

EN ISO/IEC 17024 requires a QMS that is capable of supporting and demonstrating the consistent fulfilment of the requirements of 'this international standard' (clause 11.2 in DIS 17024: 2011). The standard states that an ISO 9001 compliant management system would fulfil the requirement.

### Accreditation

Accreditation is third-party attestation, by an authoritative body, conveyed in a formal document of the competence of PCBs to carry out specific conformity assessment tasks and to give confidence in their activities and their outcomes. The accreditation process is intended to increase the confidence of users in the status of a certification body. Accreditation reduces the risk for users of certification by ensuring that accredited certification bodies are competent to carry out the work they undertake within their scope of accreditation. Requirements for accreditation bodies are detailed in EN ISO/IEC 17011<sup>[2]</sup>.



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ICNDT will update this document periodically and will provide the latest version online via the website (www.icndt.org). Users are strongly advised to check that they have the latest version of this document as well as the associated referenced Standards. Comments and suggestions are welcome and should be sent to the ICNDT Secretariat.

Acknowledge work of WG1 under Chairmanship of John Thompson, the Editorial Committee and publisher David Gilbert

