



INTERNATIONAL COMMITTEE FOR
NON-DESTRUCTIVE TESTING

The World Organisation for NDT

ICNDT Operating Procedure OP20: Personnel Certification Body Conformity Assessment

Executive Summary

The Members of the International Committee for Non-Destructive Testing have recognised the need for a peer review system for Conformity Assessment of NDT Personnel Certification Bodies as a supplement or alternative to the accreditation provided by national and international accreditation bodies. This is needed to support the ICNDT Multilateral Recognition Agreement for NDT personnel certification.

The work of developing the conformity assessment system is based upon the principles enshrined in ISO/IEC 17040 (*Conformity assessment – General requirements for peer assessment of conformity assessment bodies*) and was initially undertaken by ICNDT Working Group 1 on Qualification and Certification. The administration and implementation of this system is managed by the ICNDT Certification Executive Committee.

This document is a strategic level Operating Procedure as defined in Operating Procedure OP18 and is subject to approval by the ICNDT Executive Committee and the International Committee.

Disclaimer

ICNDT accepts no liability for the use of certification awarded by any Personnel Certification Body assessed under the conformity assessment system. In accordance with ISO 9712 (*Non-destructive testing – Qualification and certification of NDT personnel*) the responsibility for the quality of NDT rests with the employer of the certificated person.

Jurisdiction

The ICNDT Personnel Certification Body conformity assessment scheme is subject to the jurisdiction of Austria.

Revision and Approval Status

Issue / Draft	Date	Details	Status / Approval
Issue 1	15/05/2013	Previous issue	Approved by ICEC, IEC, PGP & GA. Issued
Issue 2	18/12/2015	Major revision consistent with OP19	Approved by ICEC, IEC, PGP & GA. Issued
Revision 3	15/02/2017	Approval by PGP replaced with approval by the International Committee. Issue 2 changed to Revision 3.	For PGP approval

1 Scope

This Operating Procedure covers the operation of the ICNDT PCB conformity assessment scheme (PCB CA). The Operating Procedure is supported by one or more lower level Work Instructions under control of the ICEC.

This document sets out the process for carrying out the PCB CA and provides guidance to applicant NDT Personnel Certification Bodies (PCB) prior to conformity assessment by an ICNDT appointed audit team. Assessments will be carried out for compliance with ISO/IEC 17024 and ISO 9712, as appropriate. It is recommended that the applicable standard(s) and this document are read carefully by applicant organisations in order to avoid unnecessary effort and delay in the assessment process.

2 References

OP 18	ICNDT Certification Executive Committee
OP 19	ICNDT Multilateral Recognition Agreement
OP 24	Procedure for Complaints and Appeals Relating to ICEC Activities
ISO 9712	Non-destructive testing – Qualification and certification of NDT personnel
ISO 17011	Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies
ISO/IEC 17040	Conformity assessment – General requirements for peer assessment of conformity assessment bodies
ISO/IEC 17024	Conformity assessment – General requirements for bodies operating certification of persons

Note 1. Any requirement for conformity with the above documents means conformity with the current edition (up to 12 months will be allowed between the issue of a revision and implementation of a referenced document).

3 Abbreviations

CA	Conformity Assessment
IAF	International Accreditation Forum, www.iaf.nu
ICEC	ICNDT Certification Executive Committee
ICNDT	International Committee for Non-Destructive Testing
GA	ICNDT General Assembly
MRA	Multilateral Recognition Agreement
OP	Operating Procedure
PCB	Personnel Certification Body
PGP	Policy & General Purposes Committee
WG1	ICNDT Working Group 1

4 Objective

The ICNDT conformity assessment (CA) system is intended to facilitate participation in the ICNDT Multilateral Recognition Agreement (MRA) by Personnel Certification Bodies (PCB) in the following cases:

- Where suitable national accreditation is not available;
- Where it is necessary to supplement national accreditation, particularly in ensuring that an NDT expert participates in the accreditation in order to ensure compliance with ISO 9712;
- If, for any other reason, the PCB prefers to undergo conformity assessment by ICNDT.

See OP 19 for details of the ICNDT MRA.

5 Process

5.1 Criteria for Assessment

The criteria for compliance are:

- ISO 9712, *Non-destructive testing – qualification and certification of personnel*;
- ISO/IEC 17024, *Conformity assessment – General requirements for bodies operating certification of persons*.

A PCB may apply to be assessed for conformance with ISO 9712 for any of the industry or product sectors defined in the standard, and for those NDT methods and techniques defined in the standard, as listed in Section 1 (Scope).

The system specified in ISO 9712 can also apply to other NDT methods or to new techniques within an established NDT method, provided a comprehensive scheme of certification exists and the method or technique is covered by International, regional or national standards. A PCB wishing to include new methods or techniques in its scope of assessment shall contact the ICEC Secretary, who will seek guidance from ICNDT Working Group WG1.

Only those for which it is judged to be satisfactory will be included in the ICNDT certificate of conformance. It should be noted that, the wider the scope applied for, the more time will be required for assessment.

5.2 Application

An ICNDT CA will only be carried out to support an application for registration under Schedule 2 of the ICNDT MRA (see OP19). There are two cases where this will occur:

- It will usually occur where an application for Schedule 2 registration under OP19 has failed because ICNDT judges that some or all of its requirements have not been met. In this case, the applicant PCB will be offered a complete or partial compliance assessment under this Operating Procedure. If the applicant PCB wishes to proceed, the document package

presented for the original MRA application together with the results of the assessment by the ICNDT Certification Executive Committee (ICEC) shall form the basis for proceeding with the OP20 process.

- Alternatively, the PCB may wish to proceed directly to a compliance assessment, in particular when there is no accreditation body in the country of the applicant or their accreditation body is not a member of the International Accreditation Forum (IAF). In this case, the PCB shall provide an application for MRA Schedule 2 registration under OP19 on a form available from the ICEC Secretary. This form shall be completed as far as possible, including supporting documents, and this package shall form the basis for proceeding with the OP20 process.

In both cases the ICEC Secretary shall arrange for the applicant PCB to be invoiced for the application fee (see 6.1 below). On receipt of payment of the application fee, the ICEC Secretary shall assess the application for completeness and eligibility, consulting the ICEC Chairman if necessary. The ICEC Secretary shall also confirm with the ICEC Chairman the required scope of the assessment: whether it covers the full scope given in 5.1 above or if, depending on the assessment of an MRA application, a partial assessment is considered adequate. Where the application includes NDT Methods not covered in the scope of ISO 9712 or new techniques within an established NDT method (see 5.1), the ICEC Secretary shall seek guidance from Working Group WG1.

If there are any impediments to proceeding with the application, the ICEC Secretary shall liaise with the applicant PCB in an attempt to resolve them. Where issues cannot be resolved the application fee, which has been set to cover the costs associated with the review and processing of the application, will not be refunded.

When a certification body wishes to renew or extend the scope of its ICNDT certificate of conformity, the process to be followed is similar to that for the initial certificate of conformity. See 5.7 below for further details.

5.3 Audit Preparation

On confirmation of the eligibility the ICEC Secretary will consult with the ICEC Chairman and appoint an ICNDT Approved Lead Assessor, informing the applicant of this appointment. When selecting an assessor, account shall be taken of the first language of the applicant organisation, and any possible conflict of interest of the assessor related to the applicant.

Where warranted by the scope and extent of the assessment and in consultation with the proposed ICNDT Lead Assessor, one or more ICNDT Support Assessors may also be selected from the ICNDT register of Approved Assessors.

Note 2. The selection criteria for ICNDT Assessors are set out in Appendix A.

The applicant PCB shall have the right to reject any of the assessment team members assigned by the ICNDT, but shall provide written justification for rejection. Any second nomination shall be accepted.

The ICNDT Lead Assessor, who is fully responsible for liaison with the applicant PCB and for generating all documents relating to the assessment procedure, shall carry out an initial desk-top review of the applicant's quality management system documentation. In carrying out this review, and for the remainder of the assessment, the ICNDT Lead Assessor and any ICNDT Support Assessors shall make use of an audit check list provided by the ICEC Secretary.

On the basis of this document review (which shall be recorded), the ICNDT Lead Assessor will form an initial opinion as to the extent that the proposed systems and procedures meet the applicable scope. The ICNDT Lead Assessor shall notify the applicant PCB of any ambiguities or required elements that are not addressed, or that are addressed incorrectly. The application will not be processed further until these matters have been addressed to the satisfaction of the ICNDT Lead Assessor.

Note 3. The ICEC Secretary shall advise the ICNDT Lead Assessor of the time allowed for this review. If the ICNDT Lead Assessor cannot complete the review within that time they shall advise the ICEC Secretary either giving an estimate of the additional time required or stating that the applicant's quality systems are not an adequate basis for carrying out a conformity assessment. The ICEC Secretary will then contact the applicant giving them the option of either paying an additional fee or of withdrawing the application.

If it is agreed that the assessment should continue, the ICNDT Lead Assessor shall provide the ICEC Secretary with an estimate of the time required (in man-days or man-hours, and including the time taken for the desk-top review) and the travelling and subsistence costs in order to carry out the compliance assessment. This should include recommendations for and the costs of any Support Assessors. Guidance on the time required for assessment is given in Appendix B.

Note 4. The estimate of time and expenses will not be binding but should be sufficiently accurate to allow the ICEC Secretary to advise the PCB of the likely cost of the assessment.

At this point the ICEC Secretary shall arrange for the applicant PCB to be invoiced for the assessment charge (see 6.2 below). When this has been paid the ICEC Secretary shall authorise the ICNDT Lead Assessor to continue with the process.

The ICNDT Lead Assessor shall then contact the applicant to establish a mutually agreeable date for the mandatory on-site assessment, ensuring that the current quality documentation is on-hand, and shall publish an audit programme not later than 14 days prior to the agreed date (to be sent to the applicant PCB, the ICNDT Support Assessor(s) and the ICEC Secretary).

Note 5. Where possible, the Applicant Certification Body shall assist the ICNDT Lead Assessor by providing advice on suitable arrangements for travel and accommodation. But this shall in no way compromise the independence of the Assessor(s).

5.4 Audit Procedure

Within in the agreed scope, the purpose of the assessment covers, but is not limited to, two main areas:

- To determine the suitability of the general administration of the organisation in respect of the quality management system, procedures, records, security arrangements, facilities, infrastructure, impartiality and management structure;
- To carry out a technical assessment of the organisation with regard to procedures for examination, decision making and certification, and examination specimens, equipment and examination staff qualifications in the particular qualification examination(s) which are the subject(s) of the application.

5.4.1 Introductory Meeting

The assessment will begin with an introductory meeting between the assessment team and representatives of the Certification Body. At this meeting the ICNDT Lead Assessor will stress that any and all materials and facilities reviewed will remain confidential to ICNDT and the applicant. The assessor will then introduce the assessment team (where there are one or more ICNDT Support Assessors) and confirm pre-arranged details of the audit programme, including the details of reporting and emphasizing the fact that findings are only categorised as non-conformances where there is a clear non-conformity with the applicable criteria. Arrangements will be made for a member of the PCB staff to accompany the assessor(s) during the assessment in order to confirm the correctness of written findings.

The assessment shall include witnessing the conduct of written and practical qualification examination(s).

5.4.2 Recording Findings of the Assessment

Each assessor will review the activities and/or areas of operations to which they are assigned. Findings of apparent failure of arrangements to comply with the PCB's quality management system or with the requirements of applicable criteria shall be recorded on Detail Report forms. These shall be the objective evidence upon which the ICNDT Lead Assessor bases their recommendations to the ICNDT.

A Detail Report Form shall be completed by the assessor at the time of the finding and witnessed by the accompanying PCB representative. The signature by the PCB representative is required to verify the factual nature of the finding. There is no attempt to designate the category of any finding at this time.

The information recorded on the detail report form will contain the following:

- Date and type of assessment;
- Name and location of assessed organisation;
- Reference to the criterion against which the report is raised;
- The particular activity or area of operation concerned;

- Any documents or records involved, including serial numbers etc.;
- A record of the finding (usually phrased in the precise words used in the applicable criteria);
- The name of the person with whom the matter was discussed;
- The signatures of the assessor and the PCB representative.

5.4.3 Preparation of Summary Report

After the ICNDT Assessors have completed their individual assignments they will hold a private meeting to co-ordinate the assessment findings. Prior to presenting findings to the PCB management, the Assessment Team (ICNDT Lead and Support Assessors) shall categorise findings as **Non-conformance** or **Observation**. These are defined thus:

- **Non-conformances** require mandatory improvement action within a defined timescale (which could be immediate or prior to the issue of an ICNDT certificate of conformity). *Examples* would be:
 - Lack of a documented internal audit or management review procedure;
 - Inadequate stock of suitable practical test specimens or serviceable NDT equipment;
 - Absence of a satisfactory system for security of examination material(s) or records.
- **Observations** may be raised for an isolated failure to comply with requirements, and would normally require non-urgent corrective or preventive action to be taken. *Examples* would be:
 - A single occurrence of the examination questions set for a candidate not recorded;
 - Failure to correct a non-conformance within the timescale set by the PCB's internal audit.

The ICNDT Lead Assessor will prepare a Summary Report with the agreement and bearing the signatures of all Assessors showing the categorisation of the findings into **Non-conformances** or **Observations**. The Summary Report will not reiterate statements on the detail reports but should present an overall impression of the PCB.

5.4.4 Final Meeting

A Final Meeting shall be held at which the ICNDT Lead Assessor and the assessment team will present the Summary Report to the PCB representatives. The ICNDT Lead Assessor shall emphasise that the assessment has not necessarily covered every aspect of the requirements and, therefore, where no non-conformances were reported it does not follow that none exist.

The PCB authorised representative shall indicate the intended corrective actions for each non-conformance and propose the latest date for completion of such actions.

The ICNDT Lead Assessor and the PCB authorised representative shall agree on a time scale for correction of all non-conformances, if applicable. The PCB shall be provided with copies of the detail reports and the Summary Report.

5.5 Final Report and Recommendation

The ICNDT Lead Assessor shall submit a Final Report to the ICEC Secretary. This shall comprise the Summary Report (see 5.4.3), a list of the intended corrective actions and timescales agreed at the final meeting (see 5.4.4) and a recommendation on the issue or otherwise of a certificate of conformity.

In general, there are four possible cases:

- A. No corrective actions are required, or any necessary corrective actions were taken at the time of the assessment.

The ICNDT Lead Assessor shall submit Detail and Summary reports, plus audit programme and checklists to the ICEC Secretary, with a recommendation to issue a Certificate of Conformity.

- B. A time scale has been agreed for all corrective actions to be completed and it will be acceptable for the evidence of such completion to be provided to the ICNDT Lead Assessor by email.

The ICNDT Lead Assessor shall submit a copy of the Summary report to the ICEC Secretary and provide an estimate of the time required (in man-days or man-hours) to review the evidence for completion of corrective actions (see Note 6 below). The original Detail Reports and checklists will be retained until the PCB provides satisfactory evidence of correction of the non-conformances, upon receipt of which the ICNDT Lead Assessor shall submit the signed-off Detail Reports and checklists to the ICEC Secretary, with a recommendation to issue a Certificate of Conformity.

- C. A time scale has been agreed for all corrective actions to be completed and some or all of the non-conformances are of a level where a follow-up assessment visit will be required to provide evidence of completion.

The ICNDT Lead Assessor shall submit a copy of the Summary Report to the ICEC Secretary and provide an estimate of the time required (in man-days or man-hours) and the travelling and subsistence costs in order to carry out the follow-up assessment visit (see Note 6 below). A follow-up assessment will be arranged by the ICNDT Lead Assessor, with the help of the ICNDT Support Assessor(s) when required. Upon satisfactory completion of this assessment, the ICNDT Lead Assessor shall submit a further Summary Report together with completed Detail Reports and checklists to the ICEC Secretary, with a recommendation to issue a Certificate of Conformity.

- D. It has not been possible to agree a corrective action programme.

The ICNDT Lead Assessor shall submit all documents to the ICEC Secretary with a recommendation not to issue a Certificate of Conformity.

For cases B and C above, the ICNDT Lead Assessor will immediately advise the ICEC Secretary if it appears that the agreed programme of corrective action is not likely to achieve its aims. The ICEC Secretary, in consultation with the ICEC, will advise on the further course of action.

Note 6. The estimates of time and expenses in cases B and C will not be binding but should be sufficiently accurate to allow the ICEC Secretary to advise the PCB of any additional costs needed to complete the assessment.

5.6 Issue of Certificate of Conformity

Upon receipt of the ICNDT Lead Assessor's report and recommendation, the ICEC Secretary shall review the documentation for compliance with the applicable requirements. If all is in order, the final report and recommendation (together with the full audit documentation) shall be submitted to the ICEC. After due examination of these documents, the ICEC shall decide on the issue of an ICNDT certificate of conformity to the PCB concerned (cases A, B and C) or advise the PCB that it has been decided not to issue a certificate of conformity (case D). Where a certificate of conformity is issued, ICNDT may reserve the right to carry out surveillance audits at the cost of the applicant during the period of validity.

The formal notification of conformity, which is subject to payment in full of any fees due, will be in the form of an ICNDT Certificate of Conformity with details of the scope of conformity and any limitations. The certificate will detail the standards and criteria complied with, the issue and expiry dates, and bear the signature of an authorised representative of the ICNDT. The Certificate of Conformity will be issued when all fees are paid (see 6 below). An example certificate is shown in Figure 1.

All audit documentation will be retained by the ICNDT for a minimum period of seven years.

5.7 Renewal and/or Extension of Scope

The ICNDT certificate of conformity is valid for 3 years from the date of issue or until (a) an application is received for an extension of scope or (b) issues are identified during a surveillance audit. Validity of the certificate is subject to continuing compliance with the applicable standards and specifications and the ICNDT Code of Practice for NDT Personnel Certification Bodies – see OP19.

Approximately 90 days prior to the expiry of the ICNDT certificate of conformity, the PCB seeking renewal will apply to the ICEC Secretary using the same form as for initial applications. The process of reviewing the application and supporting materials, selection and appointment of assessors and the conduct of the renewal assessment will be identical to that for initial assessment.

PCBs wishing to extend the scope of their certificate of conformity will be assessed to ensure that they have appropriately qualified examiners, sufficient specimens containing relevant defects, sufficient appropriate NDT equipment and examination questions to conduct examinations for the expected throughput of candidates. The quality system will not be re-assessed except insofar as control of personnel, specimen security, master specimen reports, equipment maintenance and calibration and generation and security of questions is concerned. All aspects of the additional certificate of conformity must comply with the requirements of the applicable standard(s).

6 Fees

Fees are set by the ICNDT Executive Committee and confirmed at the annual meeting of ICNDT. The current fees for the Compliance Assessment service are available on the ICNDT website at <http://bit.ly/1G1Ye4q>. Fees and charges published on the website are shown in **bold** in the following sub-sections.

Note 7. Certain of the fees are necessarily based on estimates, as described below. The ICEC Secretary will keep the PCB informed in the event of any significant departures from the estimated costs.

6.1 Application Fee

The **Application Fee** is payable initially, at three yearly reassessment and for applications to extend scope. This covers the costs associated with the review and processing of the application (See 5.2 above) and is not refundable in the event that eligibility for a PCB compliance assessment cannot be established. Note that ICNDT reserve the right to request an addition to the application fee if an excessive time is required for the review (see 5.3 above).

6.2 Assessment Charge

The assessment charge is payable before the assessment. This is estimated following the preliminary desk-top review. The charge is based on the **Assessment Charge per Man-day** and the ICNDT Lead Assessor's estimate of the time required for the assessment (including the desk-top review) – see Appendix B for guidance. The assessment charge will also include an estimate of the assessor's travel, subsistence and accommodation expenses.

A further assessment charge may be necessary to cover the time required by the ICNDT Lead Assessor in reviewing the resolution of corrective actions. The PCB will be provided with an estimate of the cost and the final cost will be recovered as part of the balancing payment (see 6.3 below).

6.3 Balancing Payment

A balancing payment is payable at the end of the assessment and before issue of the Certificate of Conformity. This will reconcile any differences between estimates of assessors' time and expenses and the actual values.

6.4 Certification Fee

The **Certification Fee** is payable on successful completion of the assessment and before the Certificate of Conformity is awarded.

7 Completion of MRA Schedule 2 Process

As noted above, a conformity assessment will only be carried out in support of an application for registration under Schedule 2 of the ICNDT MRA. If the OP20 process set out here is successful, this will result also in registration under the MRA, as set out in OP19.

8 Complaints and Appeals

The procedure to be followed in the event of complaints or appeals is set out in OP24, available on the ICNDT website or from the ICEC Secretary.

Appendix A: Selection Criteria for Approving ICNDT Assessors

ICNDT assessment teams shall comprise a Lead Assessor supported, where necessary, by one or more Support Assessors such that the team qualifications are appropriate to the audit in hand. At least one member of the ICNDT Assessment Team shall hold valid ISO 9712 Level 3 certification relevant to the scope of the audit in hand.

The register of available Assessors shall be confirmed by the ICNDT Certification Executive Committee (ICEC) and shall be maintained by the ICEC Secretary. The Register shall state for each individual whether he or she may be appointed Lead Assessor or Support Assessor.

All ICNDT registered Assessors shall have satisfactorily completed ICNDT recognised management system assessor training, and shall have verifiable experience in the conduct of quality management systems and NDT technical audits. ICNDT appointed Lead Assessors shall be familiar with the ICNDT documentation related to the assessment and PCB approval process. This may be achieved by:

- Lead Assessor workshops or briefing sessions conducted by an approved ICNDT Lead Assessor;
- A Support Assessor assisting an ICNDT Lead Assessor during an assessment.

The Lead Assessor will be appointed directly by the ICEC Secretary for the specific assessment, while Support Assessors may be selected by the Lead Assessor and confirmed by the ICEC Secretary from the register of qualified Assessors maintained by the ICNDT.

It is highly desirable that at least one member of the ICNDT Assessment Team be fluent in the first language of the assessed NDT PCB.

All ICNDT Assessors are bound by conditions of confidentiality, having signed statements of acceptance of conditions of appointment, including the preservation of impartiality and the freedom from vested interests.

Any contract between ICNDT and an Assessor, whether verbal or in writing, shall be a contract subject to the jurisdiction of Austria.

Appendix B: Guidance on the Time Required for Assessment

Man days spent on initial and renewal assessment will vary, as will the audit team strength, according to the scope of certificate of conformity held or applied for, and the size, complexity and geographical dispersal of the certification scheme. The assessment team will be selected to combine quality system experience with commensurate levels of NDT and industry sector expertise, as well as fluency in the first language used by the PCB.

The following is an EXAMPLE of typical time on assessment for an ICNDT PCB Certificate of conformity audit.

Task	Man days
Preparation (documented system familiarisation)	1
Travel (depending on origin and destination)	1-2
Time on assessment (depends on scope)	4-5
Reporting	1
Total	7-9

The following is an EXAMPLE of the estimated time for extension to scope or triennial re-assessment.

Task	Man days
Preparation (familiarisation)	½
Travel (depending on origin and destination)	1-2
Time on assessment	1-2
Reporting	½
Total	3-5



Figure 1 Example of a Certificate of Conformity