



**IRISH NATIONAL AEROSPACE NDT BOARD**

# **National Aerospace NDT Board Ireland**

## **PROCEDURES**

**Effective Date: 10<sup>th</sup> April 2025.**

**TABLE OF CONTENTS**

<b>Part 0</b>	<b>Table of Contents &amp; List of Effective Pages</b>	<b>Page No.</b>
Title Page	Title Page	1
TOC	Table of Contents	2
LEP	List of Effective Pages	3
RORA	Record of Revision Approval	3
AR	Amendment Record	4
NANDTB-IRE 01	Procedure for Control of Examinations.	1 to 2
NANDTB-IRE 02	Accreditation Procedures for NDT Outside Agencies.	1 to 4
NANDTB-IRE 03	Accreditation Procedures for NDT Inside Agencies.	1 to 2
NANDTB-IRE 04	Guidance to Outside Agencies on Content of Certificates of Qualification (Training & Examinations).	1 to 2
NANDTB-IRE 05	Procedure for Recognition of Training/Examinations Accreditation by Other NANDT Boards.	1 to 1
NANDTB-IRE 06	Procedure for Accreditation of External RL3.	1 to 2
NANDTB-IRE 07	Audit Checklist for Accrediting Outside Agencies.	1 to 14
NANDTB-IRE 08	Non-Irish Based MRO's & NAA's.	1

**AMENDMENT RECORD**

Reference	Description	Date
Initial Rev 0	Added new procedures to comply with Aerospace NDT Board Forum Document ANDTBF/08.  NANDTB-IRE 01. NANDTB-IRE 02. NANDTB-IRE 03. NANDTB-IRE 04. NANDTB-IRE 05.  Amended Audit Checklist for NDT Outside Agencies to comply with ANDTBF_14 requirements.	20 Feb 2020
Rev 1	Amended Audit Checklist for Accrediting Outside Agencies – added requirement to check that agency has a procedure to conduct onsite training/examinations.	22 Sept 2022
Rev 2	Addition of NANDTB-IRE 06 – Procedure for Accreditation of External RL3.	30 Mar 2023
Rev 3	NANDTB-IRE 02 Para 8 - amended to state that all findings must be closed before accreditation can be granted.  Audit Checklist incorporated into Procedures Manual as NANDTB-IRE 07.	14 Jul 2023
Rev 4	Addition of NANDTB-IRE 08 – Procedure for Non-Irish Based MRO's and NAA's.	10 Apr 2025

**LIST OF EFFECTIVE PAGES**

Procedure No.	Description	Pages	Revision Date
	Cover Page, TOC, LEP, ROR, Amendment Record.	4	Apr 2025
NANDTB-IRE 01	Procedure for Control of Examinations.	2	Feb 2020
NANDTB-IRE 02	Accreditation Procedures for NDT Outside Agencies.	4	July 2023
NANDTB-IRE 03	Accreditation Procedures for NDT Inside Agencies.	2	Feb 2020
NANDTB-IRE 04	Guidance to Outside Agencies on Content of Certificates of Qualification (Training & Examinations).	2	Feb 2020
NANDTB-IRE 05	Procedure for Recognition of Training/Examinations Accreditation by Other NANDT Boards.	1	Feb 2020
NANDTB-IRE 06	Procedure for Accreditation of External RL3.	2	Mar 2023
NANDTB-IRE 07	Audit Checklist for Accrediting Outside Agencies.	13	July 2023
NANDTB-IRE 08	Non-Irish Based MRO's & NAA's.	1	Apr 2025

**RECORD OF REVISION APPROVAL**

Reference	Authorised Name	Date	Approval Reference	Date
Initial Rev 0	Pat Murray - Chairman	Feb 2020	Approved by NANDTB	20 Feb 2020
Rev 1	Pat Murray - Chairman	Sep 2022	Approved by NANDTB	22 Sep 2022
Rev 2	Pat Murray - Chairman	Mar 2023	Approved by NANDTB	30 Mar 2023
Rev 3	Pat Murray - Chairperson	Jul 2023	Approved by NANDTB	30 Nov 2023
Rev 4	Pat Murray – Chairperson	Apr 2025	Approved by NDT Board	10 Apr 2025

## NANDTB-IRE 01

### Procedure for Control of Examinations

#### 1. Purpose

The NANDTB-Ireland seeks to establish compliance with the requirement of EASA Part 145.A.30 (f) and AMC 145.A.30 (f) that all examinations undertaken by personnel of member companies performing NDT in the aerospace manufacturing, service, maintenance and overhaul industries are carried out under the general control of a nation's NANDTB.

These requirements include examinations (excluding visual) at all levels and for all methods listed in European Standard EN 4179.

As the involvement of the Responsible Level 3 of NANDTB (Ireland) member companies is an integral part of this procedure, control of examinations per the requirements of EASA AMC 145.A.30(f) can only be considered fulfilled in relation to examinations carried out by Outside Agencies on behalf of NANDTB-Ireland member companies.

#### 2. Method

Control of examinations is accomplished by ensuring through audit by an NANDTB-Ireland team that the examination requirements of the member company are fulfilled by the Outside Agency providing the service. Prior to any candidate undertaking examinations, a copy of the contract between the member company and the Outside Agency shall be sent to the Secretary of the NANDTB. The contract may be generic to all of the member company's NDT staff if the methods and levels are common to all staff. The copy of the contract will be held in a secure folder by the Secretary and made available to the audit team conducting Outside Agency accreditation audit. The audit team shall review sample candidate's examination papers (not answer sheets) against the contract requirement based on the following requirements.

#### 3. General examinations

The general examination for all levels shall be a closed book examination covering the cross-section of the applicable method at the appropriate level. General examination shall consist of a minimum of 40 questions for L1, L2 and L3 and 10 questions for L1 Limited at the appropriate level drawn from an industry accepted question bank such as ASNT, ISO 9712, PCN or IAEA.

For candidates sitting L3 general examination for the first time, in addition to the minimum 40 questions in the NDT method for which certification is being sought, a separate "Knowledge of Other NDT Methods" examination shall be taken on a one-time only examination. The exam shall be comprised of 40 general knowledge questions at L2 covering four common methods (other than the method for which L3 qualification is being sought). The methods shall be chosen by the candidate and must include one volumetric method (UT or RT) and must be specified in the contract with the Outside Agency.

#### 4. Specific examinations

The specific examination for all levels shall be an open book examination covering the requirements and use of the specifications, codes, equipment, operating procedures and test techniques the candidate may use in the performance of his/her duties with the employer. Specific examination shall consist of a minimum of 30 questions for L1, L2 and L3 and 8 questions for L1 Limited. The NANDTB-Ireland recognises that the selection of specifications and codes on which specific examinations are based is at the absolute discretion of the RL3 for each member company. If considered necessary by the RL3, the revision status of the specification or code shall be included in the contract with the Outside Agency.

## 5. Practical examinations

Practical examinations shall demonstrate proficiency in the inspection of two test samples meeting the requirements of EN 4179:2017 Section 3.33 and typical of those inspected in the performance of a candidate's duties. The NANDTB (Ireland) recognise that the selection of test samples and the type of defects sought is at the absolute discretion of the RL3 for each member company. The contract with the Outside Agency shall specify the materials to be inspected and the type of defect sought. It shall also specify if the candidate is required to develop a work instruction for the inspection of the test samples and how the inspection results are to be documented by the candidate. The Outside Agency shall develop a written checklist to assist in the administration and grading of the practical examination. The checklist shall address the proficiency in the calibration and use of test equipment and materials, the adherence to procedural details, the accuracy and completeness of interpretation and evaluation of indications, the reporting of discontinuities and the development of an NDT work instruction (if specified by company RL3 in contract).

## 6. Requirements

As part of the Outside Agency accreditation visit (See NANDTB-IRE 02), the NANDTB-Ireland audit team shall review the general, specific and practical examination papers of a minimum of one candidate from two member companies against the contract requirements as specified by each company RL3. If only one member company is using the Outside Agency for providing examination services then the examination papers of two if its candidates shall be reviewed. In the case of recertification examinations, only specific and practical examinations are applicable. The audit report shall identify any variance between the contract requirements and the examination papers with regard to number of questions on the paper, the source from which the questions were drawn (approved industry databank, industry specifications and standards etc.), the appropriateness of the questions to the certification level sought and the method used to document inspection results. The checklist used by the Outside Agency shall also be reviewed for completeness and adequacy.

## NANDTB-IRE 02

### Accreditation Procedure for NDT Outside Agencies

#### 1. Purpose

- a) The purpose of this procedure is to ensure that the assessment and accreditation of Outside Agencies providing NDT training and examination services to member companies of NANDTB-Ireland is carried out in accordance with EN 4179, EASA Part 145, ANDTBF/08 and NANDT-IRE 01.

#### 2. Definitions

- a) Outside Agency

An independent or national body providing training and examination of NDT personnel, to the requirements of EN 4179.

- a) Accreditation of Outside Agencies.

Confirmation by the NANDTB-Ireland that the outside agency is qualified and authorized to conduct NDT training and examinations in accordance with EN 4179.

#### 3. Procedure

- a) Applications

Only NDT outside agencies which are required to provide training and examination services to member companies of the NANDTB-Ireland may apply for accreditation by the NANDTB-Ireland.

NDT outside agencies requesting accreditation shall submit a written application to the Secretary of the NANDTB-Ireland.

- b) Description

The application for accreditation shall contain the following information:

- Name and address of the Outside Agency.
- Name of Irish Board member company/companies requiring training or examination services.
- If the outside agency holds training / examination accreditation from The NANDTB of another Member State, evidence of such accreditation shall be provided.
- Course(s) / Examination(s) for which the agency is seeking accreditation.
- Responsible coordinator at the NDT Outside Agency.

#### 4. Assessment

- a) Audits of Outside Agencies to include the following items:

- Assessment of quality system, documents and procedures.
- Assessment of the training personnel.
- Assessment of written practice.
- Assessment of the applicant's facilities.
- Assessment of the training modules.
- Assessment of the sample and the security of examination questions.
- Assessment of qualification examinations against requirements of NANDTB-IRE 01

- b) Audits may not be required for Outside Agencies that hold accreditation from their own National Aerospace NDT Board.

## 5. Audit Team

The NANDTB-Ireland shall appoint an audit team to perform the audit.

## 6. Audit Checklist

Audits are performed with an audit checklist agreed by the NANDTB-Ireland.

## 7. Audit findings

On completion of the audit, a closing meeting will be held with the Outside Agency representative during which they will be informed of any findings or observations.

## 8. Report / Recommendation for Accreditation of Outside Agencies

The audit team will prepare a report for presentation to the board at the next scheduled meeting of the NANDTB-Ireland or circulated to all board members for consideration. The audit team must receive evidence of closure of all findings identified during the audit before they can recommend the issuing of an accreditation. If the audit team recommend issuing of accreditation and this is agreed by a majority of members, a certificate of accreditation will be issued by the NANDTB-Ireland. The certificate shall state that accreditation of the Outside Agency by NANDTB-Ireland is limited to the provision of training and qualification examination services for member companies of NANDTB-Ireland. In the case where an agency is refused accreditation, the NDT Board shall furnish the reasons for declining accreditation. If the reasons for refusal include any potential implications for safety or product integrity, the Outside Agency and all board members using the Outside Agency must be informed of the reasons for refusal. The Outside Agency is expected to notify any relevant agency or authority of such findings.

## 9. Repeat Audits

If accreditation is not granted because of failure to meet the minimum requirements wholly or partly, the applicant shall be requested to submit to a new audit within 6 calendar months of the original audit in order to prove that applicant has met the requirements in areas which were previously found to be inadequate. If this is not done, the applicant will have to repeat the procedure for first application.

## 10. Duration of Outside Agency Accreditation

- a) The NANDTB-Ireland may set the duration of validity of the accreditation at its own discretion, not exceeding three years. It is the responsibility of the agencies coordinator to apply for a new assessment at the proper time. If possible, the application should be made 3 months before the requested date of the audit.

## 11. Notification of Outside Agency Changes

- a) The NANDTB-Ireland shall be notified immediately if changes in the management, personnel, documentation, facilities or organizational procedures occur in an Outside Agency which may affect the validity of their accreditation. Failure to do so may result in withdrawal of their accreditation.

## 12. Management of Complaints and withdrawal of Outside Agencies Accreditation

- a) The NANDTB-Ireland, where applicable, will investigate complaints from member companies regarding training courses or examinations. Also, should it become known to the NANDTB-Ireland that the conditions on which accreditation was granted to an Outside Agency are no longer fulfilled, the accreditation shall be withdrawn in writing. In this event, the secretary of the board shall inform all member companies of the board of the withdrawal.

## 13. Extensions to Outside Agencies Accreditation

- a) Additional NDT Methods.

Validation of additional NDT Methods after the first audit may or may not require a further audit. The NANDTB-Ireland should be sent a copy of the syllabus and course documents, a list of the test equipment, test specimens and the qualifications of the instructors along with an application for validation of additional NDT Methods.

- b) Additional places of training

If the Outside Agency conducts a training course for a member company at a place other than their own audited premises, the member company inform the NANDTB-Ireland. The outside agency coordinator shall be responsible for ensuring compliance with EN 4179 at off-site locations.



***National Aerospace NDT Board  
IRELAND***

***Herewith NANDTB-Ireland Confirms, that the NDT Agency***

***XXXXXXXXXXXXXXXXXXXX***

***Certificate Number IE 0XX***

***Training and examination of NDT Personnel in support of  
employer-based certification in accordance with EN4179.***

***This certificate only covers the above named NDT Outside Agency when providing services to  
member companies of NANDTB-Ireland and shall not be used for any other purposes.***

***NANDTB-Ireland approval is conditional upon the organisation continuing to provide the specified  
services to the standard witnessed during the assessment.***

***This approval is valid until 1<sup>st</sup> XXX 20XX***

***For NDT training and examinations performed by the above named  
agency the requirements of  
EASA AMC 145.A.30. (f) 4. have been fulfilled.***

***Signature  
XXXXXXXXXXXXXX***

***XXXXXXXXXX***

***Chairman of the National Aerospace NDT Board Ireland***

## NANDTB-IRE 03

### PROCEDURE FOR ACCREDITATION OF NDT INSIDE AGENCIES

#### 1 Purpose

- a) The Board recognises that member companies may require their NDT staff to be certified in the use of certain specialist inspection equipment that because of its complexity or size, it is not possible to conduct training and examination in its use by an Outside Agency. The purpose of this guideline is to ensure that the assessment and accreditation of Inside Agencies carrying out such NDT training and examination is in accordance with EN 4179 and EASA Part 145.

#### 2 Definitions

- a) Inside Agency

A person employed or contracted by a member company for providing training and examination of NDT personnel to the requirements of EN 4179 and approved for that purpose by the NANDTB-Ireland.

- b) Accreditation of Inside Agencies.

Confirmation by the NANDTB-Ireland that the Inside Agency is qualified and authorized to conduct NDT training and examinations in accordance with EN 4179 on specialized inspection equipment and/or techniques that cannot be provided by an Outside Agency.

#### 3 Procedure

- a) Applications

The member company requesting recognition as an Inside Agency shall submit a written application to NANDTB-Ireland.

- b) Description

The application for accreditation shall contain the following information:

- Name and address of the Inside Agency.
- Description of the type of training/examination to be carried out.
- Evidence that the person conducting the training / examination is qualified at Level 3 in the major method, and has received such specialised training in the use of the equipment/technique as determined by the Responsible Level 3 or Prime.
- Evidence that the person conducting the training / examination has been approved as an Examiner by the Outside Agency which provides the initial method training and examination for the employer.

#### 4 Assessment

- a) The NANDTB-Ireland will assess each application for Inside Agency accreditation based on the information supplied by the employer. The assessment should consider the validity of the requirement based on the type of inspection involved, the complexity of the inspection technique and the qualifications of the person(s) providing the training or conducting examinations. If the board agrees on the merits of the application it will accredit the applicant company as an Inside agency. If the company is refused accreditation, the NDT Board shall furnish the reasons for declining accreditation.

## **5 Duration of Inside Agency Accreditation**

- a) The NANDTB-Ireland may set the duration of validity of the accreditation at its own discretion, not exceeding three years. It is the responsibility of the employer to apply for a renewal of its accreditation at the proper time.

## **6 Notification of Inside Agency Changes**

- a) The NANDTB-Ireland shall be notified immediately if the certification of personnel providing the training/examination expires, is suspended or revoked, or if their accreditation as Examiners by the Outside Agency has ceased for any reason. Failure to do so may result in withdrawal of their accreditation.

## NANDTB-IRE 04

### Guidance to Outside Agencies on content of certificates of qualification (training and examinations)

#### Purpose

It is important that there is evidence that the training and qualification examinations carried out by an Outside Agency on behalf of an employer reflect the requirements of that employer.

This guidance document provides the information that shall appear on certificates of training and examination issued by an Outside Agency to meet this requirement.

It is the responsibility of the member company to ensure that the Outside Agency is aware of and complies with the following when issuing certificates of training and qualification:

#### Certificates of training

Certificates of training issued by the Outside Agency shall contain the following information

- Name of the OA.
- Address of the OA.
- Address where the training was carried out if different to address of OA.
- Name of Irish Board member company for whom the training was carried out.
- Statement that training was carried out in accordance with member company's written practice.
- Candidates name.
- NDT method and Level.
- Dates and duration (in Hours) of training.
- Standards/specifications used during training.
- Results of end of course tests.
- Name and qualification of tutor.
- Signature of OA co-ordinator.
- Certificate identifier number.
- Date of certificate issue.

#### Certificates of qualification examinations

Certificates of qualification examinations issued by the Outside Agency shall contain the following information:

- Name of the OA.
- Address of the OA.
- Address where the examinations were carried out if different to address of OA.
- Name of Irish Board member company for whom the examinations were carried out.
- Statement that examinations were carried out in accordance with member company's written practice.
- Candidates name.
- NDT method.

- Level of examination.
- Type of examination (Initial, recertification).
- Date of examination.
- Standards/specifications (including Revision) used for Specific examination.
- Inspection techniques used for Practical examination.
- Results of examination (General/ Specific/ Practical /Overall).
- Name and qualification of examiner.
- Signature of examiner.
- Certificate identifier number.
- Date of issue.

## NANDTB-IRE 05

### Procedure for recognition of training/examination accreditation by other NANDT boards

#### 1. Purpose

- a) The board recognise that in certain situations, a member company may wish to certify NDT personnel who hold training and qualification provided by Outside Agencies accredited by a NANDTB other than the NANDTB-Ireland. This procedure outlines how the board may recognise a training/examination accreditation granted to an Outside Agency by an NANDT board other than the Irish board.

#### 2. Definitions

- a) Outside Agency

An independent or national body providing training and examination of NDT personnel, to the requirements of EN 4179.

ANDTBF

Aerospace NDT Board Forum.

#### 3. Procedure

- a) Applications

The Responsible L3 of the member company should submit a written application to the Secretary of the NANDTB-Ireland requesting recognition of the Outside Agency that conducted the qualification examinations which the member company intend to use as a basis for certification of its NDT personnel.

- b) Description

The application for accreditation shall contain the following information:

- Name of the member company/companies requesting recognition of the Outside Agency providing examination services.
- Name and address of the Outside Agency.
- Evidence that the NANDTB which approved the Outside Agency complies with the minimum requirements of EN4179/NAS 410.
- Evidence that the NANDTB which approved the Outside Agency is a full member of the Aerospace NDT Board Forum and complies with the requirements of ANDTBF/08.

#### 4. Assessment

The NANDTB-Ireland will assess each application for recognition of an Outside Agency approved by another NANDTB based on the information supplied by the employer and by verification that the other NANDTB is a full member of the Aerospace NDT Board Forum.



## NANDTB-IRE 06

### PROCEDURE FOR ACCREDITATION OF EXTERNAL RL3

#### 1 Purpose

The Board recognises that member companies may wish to use the services of a RL3 not directly employed by the company but contracted to provide some or all of the duties of a RL3. The purpose of this guideline is to ensure that the accreditation of an External RL3 is in accordance with EN 4179.

#### 2 Definitions

Responsible Level 3

A Level 3 person designated by the employer having the responsibility to ensure that the requirements of EN 4179 are met and having the authority to act on the employer's behalf.

Outside Agency

An organization independent of the employer who provides NDT services such as training and examination of NDT personnel in accordance with EN 4179 requirements.

#### 3 Procedure

Applications

The member company who wishes to use an External RL3 shall submit in writing to the Board the name of the RL3 and include the following information:

- Name of the RL3.
- The NDT methods for which the RL3 will act on behalf of the employer.
- Evidence that the RL3 is qualified at Level 3 in the methods by an Outside Agency holding accreditation by the Irish NANDTB.

#### 4 Assessment

The NANDTB-Ireland will assess each application for RL3 accreditation based on the information supplied by the employer. If the board agrees on the merits of the application it will accredit the RL3 by letter as an External RL3. The accreditation is limited to the RL3 role for the member company and the methods specified on the application. If the RL3 is refused accreditation, the NDT Board shall furnish the reasons for declining accreditation to the member company.

#### 5 Duration of External RL3 Accreditation

The NANDTB-Ireland may set the duration of validity of the accreditation at its own discretion, but may not exceed the validity of the RL3 qualification certificate as issued by the Outside Agency. It is the responsibility of the employer to apply for a renewal of the accreditation at the proper time.

## 6 Notification of changes to RL3

The NANDTB-Ireland shall be notified immediately if the certification of the RL3 is suspended or revoked, or if their accreditation as Level 3 by the Outside Agency has ceased for any reason. Failure to do so may result in withdrawal of their accreditation.

## NANDTB-IRE 07

### AUDIT CHECKLIST for ACCREDITING OUTSIDE AGENCIES.

#### 1. PURPOSE

- a) The NANDTB-Ireland audit for accreditation of Outside Agencies engaged in the qualification and certification of personnel involved in non-destructive testing (NDT) seeks to establish compliance with the criteria of EASA Part 145 regulations and EN 4179 requirements.
- b) The audit scope and procedures shall assess the Outside Agency's quality system, documents and procedures, training personnel, facilities, training modules, samples and security of examination questions and test specimens etc.
- c) The auditor shall meet the requirements of EN 4179 and the following applicable check lists shall be used in the course of the audit:
  - Visit Programme for Outside Agencies.
  - Written Practice (WP) Checklist.
  - General Assessment Checklist.
  - Penetrant Testing (PT) Checklist.
  - Magnetic Testing (MT) Checklist.
  - Eddy Current Testing (ET) Checklist.
  - Ultrasonic Testing (UT) Checklist.
  - Radiography Testing (RT) Checklist
  - Thermography Testing (IRT) Checklist
  - Audit Report
  - NANDTB Ireland Certificate of Accreditation. (Sample)
- d) Please record evidence of compliance for each question and take samples of documents where necessary. A copy of all documents sampled should be retained and listed at the end of this report.

## Visit Programme

**Location:**

**Date/Time:**

**Audit Type:** Initial / Follow – Up / Reassessment

**Audit Team:**

**Audit Criteria:** NANDT Board (Ireland) EN4179 Accreditation

**Audit Procedure:** As per requirements of NANDT Board Ireland Document – Revision 10.

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1. Opening Meeting.
2. Confirmation of visit scope (Training / Examination / Consultancy Service) and appointment of guide.
3. Review of Documentation.
  - a) Outside Agency Quality System Documentation and Procedures.
  - b) Availability of Codes, Standards and Specifications:
  - c) Review of Outside Agency Written Practice. (Review to cover scope, content and implementation of a client's request against the requirements of EN 4179, latest revision).
4. Contract review per NANDTB-IRE 01 requirements (ensuring client requirements are fully specified, recorded, understood and delivered).
5. Control of customer supplied product (documentation, specifications, procedures, equipment, examination facilities and appropriate practical specimens).
6. Training and examination resources (ensuring that they are relevant and appropriate to the client's NDT equipment, processes and products)
  - a) Training Curriculum
  - b) NDT Equipment
  - c) Specimens
  - d) Specific Examination Questions.
7. Appointment of appropriately qualified and experienced training and examination staff.
8. Confidentiality, Impartiality and Security.
9. Compilation of written specific and practical examinations appropriate to scope.
10. Examination marking and grading.
11. Records (of registration, training and examination)
12. Issue of training and examination reports and certificates.
13. Contract delivery (review of training and examination provided against the contract).
14. Closing Meeting.

## WRITTEN PRACTICE AND GENERAL ASSESSMENT.

Review of the Outside Agencies Quality System Documents and Procedures as defined by the NANDTB.

**Remarks:**

Review the Outside Agencies Written Practice based on EN4179 Latest Revision and verify approval by the Outside Agencies Responsible Level 3.

**Remarks:**

Does the Written Practice identify standard (s) to which it is compliant?

**Remarks:**

Does the Written Practice identify each method and each specific technique within the method(s) for which the Outside Agency provides training and examination services?

**Remarks:**

Does the Written Practice address the levels of Qualification and Certification of instructors and examiners used by the Outside Agency?

**Remarks:**

Does the Written Practice address personnel duties and responsibilities of instructors and examiners in the applicable levels / methods for which the Outside Agency provides training and examination services?

**Remarks:**

Does the Written Practice address the training requirements of instructors and examiners used by Outside Agency for training and examination services?

**Remarks:**

Does the Written Practice address the experience requirements of instructors and examiners used by Outside Agency for training and examination services?

**Remarks:**

Does the Written Practice address the examination requirements of instructors and examiners used by Outside Agency for training and examination services?

**Remarks:**

Does the Written Practice address the required records to be maintained ?

**Remarks:**

Does the Written Practice address the expiration, suspension and revocation of approvals of instructors and examiners used by Outside Agency for training and examination services?

**Remarks:**

Does the Written Practice address the certification and recertification requirements of instructors and examiners used by the Outside Agency for training and examination services?

**Remarks:**

Does the Written Practice address the re-certification option to be used for the Level 3, whether it was by examination and/or by a credit system?

**Remarks:**

Does the Outside/Inside Agency have a designated Responsible Level 3?

**Remarks:**

Are all instructors and/or examiners employed by the Outside Agency designated and approved by the Responsible Level 3?

**Remarks:**

Are all Examiners used by the Outside Agency Level 3 approved in the method(s)?

**Remarks:**

Does the Outside Agency have sufficient instructors and/or examiners to cover all methods for which the Outside Agency provides training and examination services?

**Remarks:**

Are the Instructors and/or Examiners approved in writing by the Responsible Level 3?

**Remarks:**

Does the Outside Agency have the relevant codes, standards and specifications available?

**Remarks:**

Does the Outside Agency have a procedure for evaluation of contract review to ensure that clients' requirements are fully specified, recorded and understood by the examination body?

**Remarks:**

Does the Outside Agency have appropriately qualified and experienced examination staff?

**Remarks:**

Does the Outside Agency have procedures in place to ensure confidentiality, impartiality and security?

**Remarks:**

Does the Outside Agency have procedures in place to conduct training and examination services for member companies of the Irish NANDTB at the premises of the member company?

**Remarks:**

## FORMAL TRAINING

Do the training facilities and classrooms provide an environment that is conducive to learning?

**Remarks:**

Are the training facility and classrooms sufficiently well equipped with equipment and training aids, models, samples etc?

**Remarks:**

Is there a sufficient number of representative test samples containing natural or artificial features and / or flaws available to cover the range of testing to be conducted by the candidate?

**Remarks:**

Is the equipment used for practical training purposes sufficiently compatible to that which the candidate would use in the performance of their job?

**Remarks:**

Is appropriate safety related training provided?

**Remarks:**

Are all the required records of training, qualification and certification available for the audit?

**Remarks:**

## ADMINISTRATION OF EXAMINATIONS

The following section is based on a review per NANDTB-IRE 01 of a sample of candidate's examination question papers from two member companies of the Irish board against the requirements of the contract between the member company Level 3 and the Outside Agency. If the Outside Agency is only being used by one member company, the papers of two candidates should be reviewed.

Were the specific and practical examinations appropriate to scope?

**Remarks:**

Were the examinations checked and verified against the client's requirements?

**Remarks:**

Was the content of the examinations balanced and appropriate to the approval level?

**Remarks:**

Were the marks awarded to a successful candidate achieved a minimum of 70% for each examination and 80% overall for each method?

**Remarks:**

Are the latest results for written and practical examinations on file?

**Remarks:**

**GENERAL EXAMINATIONS**

Is there evidence that the general examinations were closed book?

**Remarks:**

Is there evidence that the required minimum numbers of questions were administered?

**Remarks:**

**SPECIFIC EXAMINATIONS**

Is there evidence that specific examinations were open book?

**Remarks:**

Is there evidence that the minimum numbers of questions were administered?

**Remarks:**

Is there evidence to show that reference material was made available to the candidate?

**Remarks:**

Is there evidence to show that the answers to specific examination questions demonstrated the candidates understanding of information contained within the reference documents rather than merely its location?

**Remarks:**

## PRATICAL EXAMINATIONS

Is there evidence to show that a minimum of two test samples used for the practical examination contained known discontinuities or conditions as per EN 4179

Is there evidence that a written checklist had been developed for the practical examination?

**Remarks:**

In addition to a written checklist, is there evidence the Outside Agency had determined how the examination results obtained by the candidate were to be documented?

**Remarks:**

Is there evidence to show that all discontinuities, flaws or conditions as specified were detected?

**Remarks:**

Is there evidence to show that all test pieces, used for practical examinations are identified, documented and held securely?

**Remarks:**

Is there evidence that for level 3 candidates the practical examination involved the preparation of a NDT procedure or work instruction appropriate to the client's current requirements for the method?

**Remarks:**

Is there evidence to show that the L3 NDT procedure or work instruction was developed in conjunction with the general and/or specific examination(s)?

**Remarks:**

## TRAINING OUTLINES and MATERIAL

Is there evidence to show that all training was conducted in accordance with a detailed course outline?

**Remarks:**

Is there evidence to show that, as a minimum, training included:

- Basic theory
- Test principles, including choice of NDT methods, relevance to different materials and part and test variables
- Product forms and materials: defect formation and characterization
- Equipment operation and standardization
- The importance of appropriate processing steps and parameters
- Safety
- Applicable techniques and the advantages and disadvantages of each method and technique
- Limitations and capabilities of each method and technique
- Applicable specifications, codes, operating procedures and work instructions
- If applicable, evaluation, interpretation and documentation of inspection results

**Remarks:**

Is there evidence to show that the Outside Agencies Responsible Level 3 had verified that all training met the client's requirements?

**Remarks:**

	Penetrant Testing (PT)	Comments
1.	Is there a penetrant line available for different penetrant systems / methods?	
2.	Are the penetrant lines correctly labelled?	
3.	What performance checks are carried out on penetrant system?	
4.	Are there penetrant test panels available?	
5.	Is the drying oven temperature controlled?	
6.	Is there a visible light meter available?	
7.	Is there a black light and black light meter available?	
8.	Is there a refractometer available?	
9.	Is there a satisfactory range of aerospace training parts available?	
10.	Is the inspection area adequate for training / inspection?	
11.	Is there ancillary equipment available, (e.g. microscope/magnifying glass)?	
12.	Is the storage of the penetrant materials in accordance with the relevant safety recommendations?	

	Magnetic Testing (MT)	Comments
1.	What type of magnetisation units are available e.g. bench type, portable or electromagnets.	
2.	Is there a demagnetising unit available?	
3.	Is there a gauss meter / field strength meter available?	
4.	Is there a visible light meter available?	
5.	Is there a black light and black light meter available?	
6.	Are periodical checks of the suspension carried out?	
7.	What performance checks are carried out on the equipment?	
8.	Is there a satisfactory range of aerospace training parts available?	
9.	Is the inspection area adequate for training / inspection?	
10.	Is there ancillary equipment available, (e.g. microscope/magnifying glass)?	

## National Aerospace NDT Board Ireland

Revision: 0  
Page: 11 of 14  
Effective Date Jul 2023

	<b>Eddy Current Testing (ET)</b>	<b>Comments</b>
1.	Are there adequate eddy current test instruments available?	
2.	Is there a test instrument for conductivity measurements?	
3.	Is there an adequate range of eddy current probes?	
4.	Is there an adequate range of calibration standards available?	
5.	Is there a satisfactory range of aerospace training parts available?	
6.	What performance checks are carried out on Eddy Current Instruments / Probes?	

	<b>Ultrasonic Testing (UT)</b>	<b>Comments</b>
1.	Are there adequate ultrasonic / bond instruments available?	
2.	Is there an adequate range of ultrasonic transducers available?	
3.	Is there an adequate range of calibration standards available?	
4.	Is there a satisfactory range of aerospace training parts available?	
5.	What performance checks are carried out on Ultrasonic Instruments and transducers?	

	<b>Radiographic Testing (RT)</b>	<b>Comments</b>
1.	Is the radiographic facility in accordance with a national regulation?	
2.	Is there a monitor available for measuring ionising radiation?	
3.	Is the film processor (automatic / manual) controlled?	
4.	Is there adequate support tooling such as film, screens, lead letters, step wedges, shielding etc. available?	
5.	Is there a densitometer available?	
6.	Are there IQI's available?	
7.	Are there appropriate viewers available?	
8.	Is the dark room appropriately equipped?	
9.	Is there a satisfactory range of aerospace training parts available?	
10.	What performance checks are carried out on the x-ray units / film processor / densitometer / radiation monitors etc.	

Thermography Testing (TT)		Comments
1	Does the facility have adequate space for practical inspections during training courses?	
2	Is there adequate thermography equipment available?	
3	Is there an adequate range of aerospace test samples available?	

**NOTE:**

Due to the fact that the Thermography training may be outsourced to a third party, contact with the training school is required prior to the Audit to discuss the timing of the Audit to facilitate both the school and the auditors.

## AUDIT REPORT

Company:

Date/Time:

Location:

Audit Type:

Audit Team:

Audit Criteria:

Audit Report:

1. Overall assessment of Outside Agency.
2. Description of non-conformances (if applicable)
3. Corrective Action required and agreed by the Outside Agency (if applicable)
4. Preventative action taken by the Outside Agency (if applicable)
5. Action completed and accepted by the auditor (if applicable)
6. Please list here and retain a copy of all documents sampled during the audit.

Auditor:

Date:

Signature: \_\_\_\_\_.

Auditor:

Date:

Signature: \_\_\_\_\_.

## National Aerospace NDT Board Ireland

Revision: 0  
Page: 14 of 14  
Effective Date Jul 2023

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## NANDTB-IRE 08

### NON-IRISH BASED MRO's & NAA's.

#### 1 Purpose

The Board has a number of non-Irish based member MRO's and NAA's. The purpose of this procedure is to ensure that these members can participate fully in the boards activities and to describe how the board interfaces with these members.

#### 2 General

In addition to the Irish based MRO's, the board membership is made up of MRO's from Cyprus, Iceland and Malta, and non-voting observer representatives from the Icelandic Transport Authority and Department of Civil Aviation Cyprus. A full list of board members is available on the board's webpage at [www.iaa.ie/ndt](http://www.iaa.ie/ndt)

#### 3 Application for Membership

An MRO wishing to become a member of the board shall apply in writing to the board secretary. The application should include the contact details of the RL3 for the organisation. The application will be considered and voted on at the next board meeting, with the outcome being recorded in the meeting minutes.

#### 4 Membership

The MRO will be asked to lyase with its NAA. The NAA may appoint an observer member to the board. A successful applicant MRO will be notified in writing by the board secretary and included in the boards e-mail list.

#### 5 Interface with member MRO's and NAA's.

All board meetings will be notified in advance to member MRO's and NAA's by e-mail. An agenda and any documents to be presented at the meeting will also be included. Members may attend the meetings in person or by Microsoft TEAMS. Meeting minutes are circulated to all members in the days following a meeting. In general, there are 2 meetings per year.

