## PCN24/GEN/APP/ET

PCN certification and examination eligibility requirements for personnel engaged in non-destructive testing using the electromagnetic testing (ET) method at Levels 1, 2 and 3

Issue 1 • July 2024



### Contents

Section	PCN24/GEN/APP/ET: Content Pa	ge
	Document title cover sheet	1
	Document contents	2
1	Scope	3
2	Associated documents	3
3	Employer responsibilities	3
4	Certification available	4
5	Examination eligibility	8
6	Examination content overview	8
7	PCN Level 1 – Initial certification	8
8	PCN Level 2 – Initial certification	9
9	PCN Level 3 – Basic examination	10
10	PCN Level 3 – Main method examination	10
11	Supplementary examinations	11
12	Certification renewal and recertification	11
13	Reference literature and essential reading	11
14	Change control record	12

The British Institute of Non-Destructive Testing is an accredited Certification Body offering personnel and quality management systems assessment and certification against criteria set out in international and European standards through the PCN Certification Scheme.

©2024 The British Institute of Non-Destructive Testing. All Rights Reserved.

This document is protected by UK and international copyright laws and remains the intellectual property of BINDT. Reproduction and distribution of the document without the written permission of BINDT is strictly prohibited.



### 1. Scope

The electromagnetic testing (ET) method and associated eddy current testing techniques can provide an NDT technician with effective real-time detailed data for interpretation, with the added benefit that inspection data can be stored in suitable digital file formats for future interpretation, remote from site, by other suitably qualified persons.

ET eddy current techniques are regularly used for a wide variety of NDT inspections across several industrial and product sectors. Some examples of ET eddy current testing applications have been included below, providing information on the scope of some typical ET eddy current testing applications:

- (a) High-frequency eddy current (HFEC) testing when testing for discontinuities/defects such as surface-breaking cracks in materials, components and structures.
- (b) ET of fastener hole bores, such as those typically found within aircraft structures or other critical engineering structures for surface-breaking discontinuities within the bore.
- (c) Establishing material conductivity to sort ferrous and non-ferrous alloys and for the verification of heat treatment processes applied and/or to confirm material property changes where materials have been exposed to extreme heat.
- (d) To detect the presence of corrosion and/or material loss within metallic structures.
- (e) Use of low-frequency eddy current (LFEC) techniques to locate corrosion and cracking within second- and third-layer structures, which might not otherwise be suitable to be tested ultrasonically, or where the use of radiography could be considered to be inappropriate.
- (f) Testing heat exchanger tubes for cracking, corrosion, structural damage and corrosion/material thickness variations.
- (g) For the testing of welds and the associated weld heat-affected zone.
- (h) Use of eddy current array (ECA) probes for coverage of larger or focused areas during a single scan.

This document prescribes specific requirements and procedures by which candidates may be examined and, where successful, certified to use the ET method and appropriate eddy current testing technique(s) when testing defined products within those industrial sectors listed within BS EN ISO 9712: Annex A for the certification sought.

Requirements contained within this document are in addition to those contained in the current edition of PCN24/GEN: General requirements for qualification and PCN certification of NDT personnel, which meets the requirements of BS EN ISO 9712:2022.

The full PCN examination format is described in PCN24/GEN. This Appendix document provides the reader with the PCN examination requirements for PCN ET certification to meet the employer's requirement at PCN certification Levels 1, 2 and 3.

Except where exemptions apply, all candidates will be required to attempt an examination comprising the appropriate examination elements listed herein, appropriate to the certification sought.

## 2. Associated documents

- 2.1 PCN24/GEN: General requirements for qualification and PCN certification of NDT personnel.
- 2.2 BS EN ISO 9712: Non-destructive testing Qualification and certification of NDT personnel.
- 2.3 PCN/GEN/Syllabus document.
- 2.4 PCN/GEN/Specimen questions compendium.

## 3. Employer responsibilities

- 3.1 IMPORTANT: PCN24/GEN details specific requirements ascribed to the employer.
- 3.2 However, both the certificate holder and certificate holder's employer shall ensure that they are conversant with the responsibilities ascribed to both, and that it is the employer's responsibility to issue PCN-certified employees with a 'written authority to operate' before the PCN certificate holder carries out NDT tasks on behalf of the employer or the employer's customers.
- 3.3 See PCN24/GEN Section 5.5.

### 4. Certification available

- 4.1 After demonstrating success on an approved ET training course, the Authorised Qualifying Body (AQB) shall administer the appropriate certification examination in line with the AQB's scope of approval and the candidate's requirements for the certification sought (see Table 1 for certification options available).
- 4.2 **Note:** Where Level 3 certificate holders are required to carry out testing and/or supervise tasks at all levels, it is a PCN requirement that Level 3 certificate holders shall have demonstrated their practical competence at Level 2 or hold PCN or other suitable Level 2 certification covering the required scope.

NDT weath a d	Certification options within the ET method	PCN certification	PCN certification level		
NDT method		abbreviation	1	2	3
	Eddy current testing – wrought products	ET-EC-Wp	$\checkmark$	$\checkmark$	~
	Eddy current testing – castings	ET-EC-C	$\checkmark$	$\checkmark$	
	Eddy current testing (non-ferrous tubular wrought products)	ET-EC-NFT		$\checkmark$	
	Eddy current array testing (non-ferrous tubular wrought products)	ET-ECA-NFT		$\checkmark$	~
Ele etvene en etie	Remote field eddy current testing (ferrous tubular products)	ET-RFT-FT		$\checkmark$	
testing	Eddy current array testing – multi sector (welds wrought products/corrosion mapping)	ET-ECA-W-Wp-CM		✓	,
	Alternating current field measurement (welds)	ET-ACFM-W		$\checkmark$	V
	Eddy current testing (welds)	ET-EC-W		✓	
	Pulsed eddy current testing (wrought products/corrosion mapping)	ET-PEC-Wp-CM		✓	~
	Alternating current field measurement (wrought products)	ET-ACFM-Wp	$\checkmark$	$\checkmark$	$\checkmark$

#### Table 1. PCN electromagnetic testing certification options: where listed on the ATO/AQB scope of approval

#### 4.3 PCN ET certification levels available

- 4.3.1 PCN ET certification is available at the following levels within the following industry and product sectors, as per the requirements identified in Table 1 above:
  - (a) PCN Level 1
  - (b) PCN Level 2
  - (c) PCN Level 3.
- 4.3.2 Those PCN certification levels listed at 4.3.1 may be used by persons required to test such things as general engineering materials, products, components, assemblies and/or sub-assemblies and which may include welds, using the appropriate ET testing method and an appropriate eddy current testing technique(s) that they have been trained and examined for, within the following industry and product sectors for which certification was achieved:

#### 4.4 Industry sectors

(a) Manufacturing (m)

(b) Pre- and in-service testing, which includes manufacturing (s).

#### 4.5 Product sectors (certification)

- 4.6 Certification is available for those products listed within Table 1.
- 4.7 For multi-sector certification, a minimum of one specimen shall be tested from each product sector for which certification is sought, *ie* where certification for castings and wrought products is required, a minimum of one casting and one wrought product specimen shall be tested, one specimen from each of the different product sectors for certification.
- 4.8 Where single-product-sector certification is required, the minimum number of product specimens to be tested

shall be two specimens from within the single product sector for certification. Each specimen shall be different in character, material specification, shape, size and/or discontinuity type.

- 4.8.1 Product sectors for certification include:
  - (a) Castings (c);
  - (b) Wrought products (Wp) (which includes forgings);
  - (c) Welds; and
  - (d) Tubular wrought products (ferrous and/or non-ferrous).

### 4.9 Typical ET techniques deployed may include

- (a) High-frequency eddy current testing;
- (b) Low-frequency eddy current testing;
- (c) Dynamic rotary open-hole eddy current testing;
- (d) Material conductivity measurement;
- (e) Coating thickness measurement;
- (f) Screw thread testing techniques; and
- (g) Corrosion detection and monitoring.

# 4.10 Additional information for ET of non-ferrous tubular wrought products using eddy currents

4.10.1 PCN certification is available for the testing of manufactured and/or in-service non-ferrous heat exchanger condenser tubing when testing materials such as stainless steel, copper and titanium.

*Note:* Certification is currently available at Levels 2 and 3 only.

Certification is available using single- and multi-frequency eddy current testing techniques and is available for use within the following industry sectors.

- 4.11 INDUSTRY SECTORS: Certification is available for use within the following industry sectors:
- 4.11.1 Manufacturing.
- 4.11.2 Pre- and in-service testing, which includes manufacturing.

# 4.12 Additional information for eddy current array testing of non-ferrous tubular wrought products

4.12.1 PCN certification of persons to use eddy current array testing probes is available for the testing of manufactured, in-service, non-ferrous heat exchanger/condenser tubing using appropriate eddy current array equipment when testing materials such as low-carbon steel, stainless steel, copper and titanium.

Note: Certification is currently available at Levels 2 and 3 only.

- 4.13 INDUSTRY SECTORS: Certification is available for use within the following industry sectors:
- 4.13.1 Manufacturing.
- 4.13.2 Pre- and in-service testing, which includes manufacturing.

# 4.14 Additional information for eddy remote field testing of ferrous and non-ferrous tubular wrought products

4.15 PCN certification of persons is available for the testing of manufactured, in-service, ferrous heat exchanger/ condenser tubing using appropriate eddy current array equipment when testing materials such as stainless steel, copper, titanium and where required for condenser tubing manufactured from low-ferromagnetic or ferromagnetic tubing, such as carbon steel, using remote field eddy current testing techniques.

- 4.16 *Note:* Certification is currently available at Levels 2 and 3 only.
- 4.17 **INDUSTRY SECTORS:** Certification is available for use within the following industry sectors:
- 4.17.1 Manufacturing.
- 4.17.2 Pre- and in-service testing, which includes manufacturing.

#### 4.18 Additional information for alternating current field measurement (ACFM)

- 4.19 ACFM certification is available for the testing of ferritic welds and other industrial products listed within Table 1 within the following industrial sectors:
  - (a) Manufacturing.
  - (b) Pre- and in-service testing, which includes manufacturing.
- 4.20 A subdivision of the electromagnetic testing method ACFM utilises both standard ACFM weld testing probes and other multi-element array probes for the testing of various weld configurations and industrial products, some of which have been listed below:
  - (a) ACFM may be used to confirm and size surface-breaking discontinuities such as cracks within a weld and/or the weld's adjacent parent material. Probes will be selected according to the required application.
  - (b) The inspection of railway components.
  - (c) The inspection of gearbox gear teeth, crank shafts, cylinder heads, turbines, etc, within industry sectors such as the automotive industry.
  - (d) The detection of cracks and corrosion in vessels, storage tanks and oil & gas pipework.
  - (e) Use in the underwater environment when testing marine vessels, oil & gas platforms or other subsurface engineering installations; however, testing within these extreme environments requires an understanding between diver/probe manipulator (subsurface) and the certified ACFM technician (topside) to fully accomplish the required ACFM inspection task.
  - (f) Minimum certification requirement for ACFM data analysis topside PCN ACFM Level 2 or equivalent.
- 4.21 **INDUSTRY SECTORS:** Certification is available for use within the following industry sectors:
- 4.21.1 Manufacturing.
- 4.21.2 Pre- and in-service testing, which includes manufacturing.

#### 4.22 Additional information for ET of welds

- 4.23 Certification is available for the ET of welds using eddy current testing techniques, which includes the testing of the associated weld heat-affected zone made to welds on materials, products, components, assemblies and/or sub-assemblies within the following industry sectors:
  - (a) Manufacturing (m)
  - (b) Pre- and in-service testing, which includes manufacturing.
- 4.24 Typical industrial testing applications include the ability for persons to test welds made to plate, pipe and other variable-geometry welds, such as 'T', 'Y', cruciform and gusset plate using single-frequency eddy current testing techniques when testing for discontinuities, which may include, but not be limited to:
  - (a) Surface-breaking discontinuities, such as cracks occurring on both flat and curved surface welds within the weld, the weld's heat-affected zone and in the parent material directly adjacent to the heat-affected zone.
  - (b) Discontinuities originating within the parent material and/or weld that form as a direct result of the welding process applied could be classified as manufacturing defects; however, and for those discontinuities that manifest over an extended period of time, these could be classified as in-service defects, which may manifest due to fatigue and/or as a direct result of the welding process applied.
  - (c) Typical in-service defects, including corrosion, stress corrosion cracking, hydrogen embrittlement and fatigue cracking of the weld and/or parent material directly adjacent to the weld and the weld's heat-affected zone, are not uncommon.

- 4.25 INDUSTRY SECTORS: Certification is available for use within the following industry sectors:
- 4.25.1 Manufacturing.
- 4.25.2 Pre- and in-service testing, which includes manufacturing.

## 4.26 Additional information for eddy current array testing of welds and wrought products

- 4.27 PCN certification for the testing of welds and wrought products using eddy current array testing techniques when testing welds and the associated weld heat-affected zone made to materials, products, components, assemblies and/or sub-assemblies and for mapping corrosion in plate materials is available within the following industry sectors:
  - (a) Manufacturing (m)
  - (b) Pre- and in-service testing, which includes manufacturing.
- 4.28 Typical industrial testing applications include the ability to test welds made to plate, pipe and other variablegeometry welds such as 'T' and 'Y' configurations using multi-frequency eddy current testing techniques when testing for discontinuities, which may include, but not be limited to:
  - (a) Surface-breaking discontinuities, such as cracks occurring on both flat and curved surface welds within the weld, the weld heat-affected zone and in parent material directly adjacent to the heat-affected zone.
  - (b) Discontinuities originating within the parent material and/or weld that form as a direct result of the welding process applied could be classified as manufacturing defects. However, for those discontinuities that manifest over an extended period of time, these could be classified as in-service defects, which may manifest both due to fatigue and/or as a direct result of the welding process applied.
  - (c) Typical in-service defects, including corrosion, stress corrosion cracking, hydrogen embrittlement and fatigue cracking of the weld and/or parent material directly adjacent to the weld and the weld heat-affected zone are not uncommon.
- 4.29 **INDUSTRY SECTORS:** Certification is available for use within the following industry sectors:
- 4.29.1 Manufacturing.
- 4.29.2 Pre- and in-service testing, which includes manufacturing.

# 4.30 Additional information for ET of wrought products using eddy current testing techniques

- 4.31 Certification is available for the ET of wrought products using eddy current testing techniques for those persons required to test various configurations of wrought products, components, assemblies and/or subassemblies within the following industry sectors:
  - (a) Manufacturing (m); and
  - (b) Pre- and in-service testing, which includes manufacturing.
- 4.32 Typical industrial testing applications include the ability to test forgings, rolled plate, bolt holes and layered structures using single-frequency eddy current testing techniques when testing for typical defects, which may include, but not be limited to:
  - (a) Surface-breaking and subsurface defects, such as cracks.
- 4.33 INDUSTRY SECTORS: Certification is available for use within the following industry sectors:
- 4.33.1 Manufacturing.
- 4.33.2 Pre- and in-service testing, which includes manufacturing.

### 5. Examination eligibility

- 5.1 All initial PCN candidates shall provide documentary evidence of having prior knowledge for product technology/ materials and processes prior to their attending NDT method training at one of BINDT's Approved Training Organisations (ATOs).
- 5.1.1 Where prior knowledge cannot be demonstrated, candidates will be required to complete the PCN online/blended learning module for product technology prior to being accepted by the ATO for NDT method training.
- 5.2 Candidates shall provide documentary evidence of acceptable near-vision acuity and colour vision perception in accordance with PCN24/GEN and PCN24/PSL44 requirements.
- 5.3 Candidates shall provide documentary evidence of having satisfactorily completed an approved course of NDT training within the general ET method and for the specific certification option required from within Table 1 herein to meet the full PCN training requirements contained within PCN24/GEN.
- 5.4 Candidates shall, in addition, provide documentary evidence of having achieved the required amount of practical industrial experience in accordance with PCN24/GEN requirements, prior to the release and award of certification by BINDT's PCN Certification Records Office.

## 6. Examination content overview

- 6.1 The full PCN examination format linked to the candidate's personal certification requirements shall be as described in PCN24/GEN. This PCN examination requirements Appendix document serves to highlight to candidates the potential examination elements that might be attempted during a PCN examination, dependent upon whether the examination attempted is for initial, recertification, retest or for supplementary certification.
- 6.2 All allowable examination time shall be confirmed to the candidate in writing on the front of each individual PCN examination paper. Additional examination time may be allowed at the discretion of the AQB for those circumstances detailed below at 6.3.1 and 6.3.2.
- 6.3 Extensions shall be recorded by the AQB prior to examination commencement.
- 6.3.1 Where the candidate's primary language is not English and they may require additional reading time, a 25% time extension may be permitted.
- 6.3.2 Where the candidate has a disability, such as dyslexia, and may require additional reading time, a 25% time extension may permitted.
- 6.3.3 With reference to 6.3.2 above, the candidate should, so far as possible, make the AQB aware of any condition that they have prior to their attendance at the AQB for examination. Based upon the candidate providing this additional information, the AQB may also put in place additional measures to assist the candidate during the examination experience in line with local government, educational and health department direction.
- 6.3.4 Candidates should, where possible, supply the AQB with details of their condition from a suitably qualified medical professional in order for suitable measures to be put in place.
- 6.3.5 A copy of the medical attestation and measures put in place shall be retained within the candidate's examination records file.

## 7. PCN Level 1 – Initial certification

#### 7.1 General theory written examination element for ET

- 7.1.1 Written examination element on the general theory of the electromagnetic testing method.
- 7.1.2 40 multiple-choice questions.
- 7.1.3 Time allowed per question: 2 minutes.
- 7.1.4 Pass mark: 70%.

#### 7.2 Sector-specific written theory examination element for ET

7.2.1 Specific theory written examination element on the application and use of the ET eddy current testing technique(s) required for certification from the available certification options listed in Table 1 herein.

- 7.2.2 25 multiple-choice-answer-type questions for single-sector certification, 35 for multi-sector:
- 7.2.3 Where the specific theory examination element covers two or more sectors, the specific theory written examination shall take into account the industrial or product sectors concerned and questions should, where possible, be spread evenly across the product sectors for examination.
- 7.2.4 Time allowed per question: 3 minutes.
- 7.2.5 Pass mark: 70%.

### 7.3 Sector-specific practical examination element

7.3.1 The practical examination element requires candidates to test practical specimens, record the resulting information to the degree required and report the results in the AQB's desired format. Specimens shall be sector (one or more) specific, representing field geometries, and shall contain discontinuities representative of those likely to occur during manufacturing or in-service life; defects may be natural or manufactured (implanted/seeded). The examination shall be as follows:

#### 7.4 Practical examination control checks

- 7.4.1 Candidates shall demonstrate knowledge and correct use of NDT equipment, including system control and validity of verification checks, as per Annex D Table D.1 Item 1 within BS EN ISO 9712 (control checks).
- 7.4.2 Time allowed: 30 minutes.

#### 7.5 Practical testing – Level 1

- 7.5.1 Level 1 candidates shall follow the written NDT instructions provided to them by the examiner to test a minimum of two product-sector-specific practical specimens.
- 7.5.2 Where the certification examination covers two or more product sectors, practical specimens tested shall include a **MINIMUM** of one practical specimen from each product sector for certification. This shall result in candidates demonstrating their practical ability to deploy a number of different NDT techniques within the NDT method.
- 7.5.3 Level 1 candidates shall test a **MINIMUM** of two specimens in total. Each specimen shall be different in character, *ie* in product form, material specification, shape, size or discontinuity type.
- 7.5.4 Single-product-sector practical examination candidates shall be required to test a minimum of two specimens from within the product sector for certification sought.
- 7.5.5 Multiple-product-sector candidates shall be required to test a minimum of one specimen from each product sector for certification.
- 7.5.6 Candidates shall report results obtained during testing in the AQB's required format.
- 7.5.7 The recommended time allowed per specimen tested is one hour; however, the Certification Body (BINDT) allows the AQB to extend this time period where required based upon the complexity of the component tested and the NDT test technique(s) applied to complete the test.
- 7.5.8 Pass mark:  $\geq$ 70% for each specimen tested.

## 8. PCN Level 2 – Initial certification

- 8.1 Candidates shall follow the examination process requirements as described for Level 1 certification but at the required theoretical (general and specific) knowledge level for Level 2 certification and, in addition, they shall demonstrate the following enhanced practical testing requirements:
- 8.2 Level 2 candidates shall **SELECT** the appropriate NDT technique and determine the operating conditions required related to a given code, standard or specification.
- 8.3 Candidates shall test prescribed specimens, recording and **INTERPRETING** the resulting information to the degree required, reporting the results obtained in the AQB's desired format.
- 8.4 The recommended testing time allowed per specimen tested is one hour; however, BINDT allows the AQB to extend this time period if required based upon component complexity and test techniques deployed.
- 8.5 Pass mark:  $\geq$ 70% for each practical specimen tested.

#### 8.6 Written NDT instruction writing element – Level 2

- 8.6.1 Candidates shall draft a detailed written NDT instruction suitable for use by a Level 1 certificate holder for one of the specimens to be tested during the practical examination element. The specimen for which the written instruction shall be drafted shall be selected by the AQB.
- 8.6.2 Time allowed per written instruction: 1 hour.
- 8.6.3 Pass mark: 70%.

## 9. PCN Level 3 – Basic examination

- 9.1 Initial PCN Level 3 candidates will be required to pass a basic examination before attempting PCN Level 3 main method examinations.
- 9.2 The basic examination shall assess the candidate's knowledge of the basic examination subjects using multiple-choice questions, selected in an unpredictable way from PCN's current collection of Level 3 basic questions valid on the day of the examination. See PCN24/GEN for further information.
- 9.3 PCN basic examination items/parts are as follows:

#### Table 2. PCN Level 3 basic examination requirements

ltem/part	Subject	Number of questions	
A	Technical knowledge in materials science and process technology. Time allowed: 2 minutes per question. Total examination time: 60 minutes.	30	
В	Knowledge of the Certification Body's qualification and certification system based on PCN24/GEN. This may be an open-book examination. Time allowed: 3 minutes per question. Total examination time: 30 minutes.	10	
С	General knowledge of at least four methods as required for Level 2 and chosen by the candidate from the methods given in BS EN ISO:9712 Table 1. These four methods for each test method shall include at least one volumetric method (UT or RT). Time allowed: 2 minutes per question. Examination time: 120 minutes.	15 for each test method (total 60)	
For item C: BINDT and PCN may adjust the number of questions per method for methods impacted by evolving technology, increasing methods and techniques being added.			

9.4 Successful PCN Level 3 basic examination candidates may progress to PCN Level 3 main method training; however, candidates who do not hold appropriate Level 2 certification will be required to complete with a grade of ≥70% the practical examination requirements for Level 2 certification, except they will not be required to draft a written NDT instruction.

9.5 A candidate who holds current valid Level 2 certification shall be exempt from the need to pass the PCN Level 2 practical examination.

## 10. PCN Level 3 – Main method examination

10.1 Written examination to assess the candidate's knowledge of the main method subjects using multiple-choice questions selected in an unpredictable way from the current collection of questions approved by BINDT at the time of the examination.

ltem/part	Subject	Number of questions
D	Level 3 knowledge relating to the test method applied. Closed-book written examination covering the general theory of the method for certification sought. Time allowed: 2 minutes per question. Examination time: 80 minutes.	40
E	<ul> <li>Application of the NDT method in the sector concerned, including the applicable codes, standards, specifications and procedures. This may be an open-book examination in relation to codes, standards and specifications provided by the AQB's examiner.</li> <li>Time allowed: 3 minutes per question.</li> <li>Examination time: 90 minutes.</li> </ul>	30
F	Drafting of one or more NDT procedures in the relevant sector. The applicable codes, standards, specifications and other procedures shall be available to the candidate. For a candidate who has already drafted an NDT procedure in a successfully passed Level 3 examination, BINDT may replace the drafting of a procedure with the critical analysis of an existing NDT procedure covering the relevant method and sector and containing errors and/or omissions. Time allowed: 4 hours arbitrary per procedure. Pass mark: 70%.	N/A

#### Table 3. Minimum required number of main method examination element questions

## 11. Supplementary examinations

- 11.1 After completing additional specific training for all additional required supplementary certification, already certified Level 1 or Level 2 individuals who would like to change sectors or add another product sector for the same NDT method shall be required to attempt additional sector-specific and practical examination elements for the new sector/certification sought in accordance with those requirements contained within PCN24/GEN.
- 11.2 However, the following shall be noted.
- 11.3 PCN Level 2 candidates shall be required to draft an NDT instruction for the new sector.
- 11.4 A certified Level 3 individual changing industrial sectors or adding another sector for the same NDT method shall be required to take the sector-specific examination Parts E and F of the main method examination element only.
- 11.5 All candidates will be required to meet the additional industrial experience requirements as per PCN24/GEN.

## 12. Certification renewal and recertification

- 12.1 Comprehensive general rules for certification renewal, recertification and retests at all levels are described in PCN24/GEN and PCN24/CP16.
- 12.2 Applications for renewal of existing certification can be made using PCN document CP16.

## 13. Reference literature and essential reading

- 13.1 Blended/online training module for product technology (where required).
- 13.2 PCN ATO-approved training/course notes for ET.
- 13.3 PCN24/GEN.
- 13.4 BS EN ISO 9712.
- 13.5 PCN24/SYL/ET (PCN syllabus document for ET derived from TS 25107).
- 13.6 BINDT resource webpage/tab for reference to appropriate industrial standards for ET.

## 14. Change control record

PCN24/GEN/APP/ET – Document issue and review status						
Document issue for review	Changes/amendments	Current document status				
Issue 01	New document: issue 01. PCN24/GEN/APP/ET is a new document drafted to incorporate the requirements of BS EN ISO 9712:2022 and the revised scheme documentation format of PCN24.	PCN24/GEN/APP/ET. Issue 01. Implementation: 1 July 2024.				



Issued by Certification Services Department, The British Institute of Non-Destructive Testing Midsummer House, Riverside Way, Bedford Road, Northampton NN1 5NX, United Kingdom Tel: +44 (0)1604 438300 | Email: pcn.enquiries@bindt.org | www.bindt.org/certification