**Certification Services Department** Midsummer House, Riverside Way **Bedford Road, Northampton** NN1 5NX, United Kingdom

Tel: +44 (0) 1604-438-300 Fax: +44 (0) 1604-438-301 E-mail: pcn@bindt.org











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# GENERAL REQUIREMENTS FOR QUALIFICATION AND PCN CERTIFICATION OF **CONDITION MONITORING AND DIAGNOSTIC PERSONNEL**

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#### Introduction

The PCN Scheme is managed and administered by the British Institute of Non-Destructive Testing (BINDT), which takes into consideration the needs of industry through advice and guidance provided by a Certification Management committee (CMC) and various Technical committees, as required by ISO/IEC 17024. Membership of committees is open to the participation of individuals and organisations, and further information is available from the Certification Services Division of BINDT.

The PCN Scheme provides a BINDT standard and associated programme that is available nationally and internationally, for the certification of testing, inspection and condition monitoring personnel which satisfies the requirements of numerous European (EN) and International (ISO) standards.

There is a range of qualification examinations available within the PCN Scheme covering various condition monitoring technologies. Examinations are administered directly by BINDT and through a number of Approved Examination Centres (AEC) in accordance with ISO 18436-1.

Organisations that undertake training of condition monitoring personnel that is compliant to the ISO18436 standard and this document are assessed and accredited by BINDT, and are referred to as Approved Training Organisations [ATOs]. The requirements for ATOs are defined in the BINDT accreditation CM Approval document and ISO 18436-3, where applicable.

The present document sets out general requirements while the following associated appendices are published covering specifications for the relevant condition monitoring technology:

Appendix A Acoustic Emission
Appendix B Infra-red Thermography
Appendix C Lubricant Analysis
Appendix D Vibration Analysis
Appendix F Ultrasound

This series of documents is designed to provide comprehensive information for users of the PCN Condition Monitoring Certification Scheme. The complete list of published PCN documents relevant to condition monitoring is detailed in publication reference PSL/8A-CM, which is posted on the Institute's web site at www.bindt.org, where all documents are available to download free of charge.

Organisations requiring at all times to be in possession of the most up to date PCN documents may register with the "PCN Update Scheme" which, for a small annual fee, guarantees that they automatically receive all new and revised PCN documents.

If further information or advice is required on any certification matter, please contact the Certification Services Division of BINDT on telephone number +44 (0) 1604893811, or email <a href="mailto:cm.admin@bindt.org">cm.admin@bindt.org</a>.

### 1. Scope

- 1.1. This document describes a system for the qualification and PCN certification of personnel who perform condition monitoring in a variety of technologies and industrial applications, in compliance with ISO 18436-1 and ISO/IEC 17024.
- 1.2. Specific details of the certification available at each Category in the various condition monitoring technologies are contained in the appropriate supplementary appendix to this document, which are compliant to the requirements specified for these technologies in the relevant technical part of ISO 18436.
- 1.3 The General requirements and specifications for this programme are in full accordance with all technologies defined in ISO18436.

Wherever there is a conflict between the requirements of standards concerning CM personnel qualification and PCN certification, the PCN scheme will comply with ISO 18436 criteria unless otherwise indicated by text placed within a frame similar to that in which this text is displayed, known as a 'delta', whether in CMGEN or any of its appendices. Any minor deviation from the normative standard ISO18436 is allowed under ISO/IEC 21-1, clause 4.3c.

#### 2. References

#### 2.1. Normative references

- ISO 18436, Condition monitoring and diagnostics of machines; Requirements for qualification and assessment of personnel:
  - Part 1: Requirements for assessment bodies and the assessment process
  - Part 2: Vibration condition monitoring and diagnostics
  - Part 3: Requirements for training bodies and the training process
  - Part 4: Field Lubricant Analysis
  - Part 5: Lubricant laboratory technician/analyst
  - Part 6: Acoustic Emission
  - Part 7: Thermography
  - Part 8: Ultrasound
- BS EN ISO/IEC 17024, Conformity assessment General requirements for bodies operating certification of persons.
- ISO/IEC 21-1: Regional or national adoption of International Standards and other international deliverables: part 1: Adoption of International standards.

#### 2.2. PCN documents:

•	PSL/4-CM	Condition monitoring examination availabilit	tν

- PSL/8A-CM Issue status of PCN condition monitoring documents
- PSL/30-CM
   Log of post examination experience in condition monitoring
- PSL/31 Use of the accreditation mark, the PCN logo and reference to PCN
- PSL/33-CM Verification of Identity
- PSL/62-CM Invigilation of PCN condition monitoring examination or Marine assessments
- PSL/65-CM Procedure for administration of training and PCN examination for condition monitoring personnel
- PSL/57-CM Application for initial/retest examination in condition monitoring or assessment for certification in Marine MMCM
- CP/27 Code of Ethics for PCN certificate holders
- CP16-CM Renewal or Recertification (all categories)
- CP21 Complaints and Appeals

## 2.3 BINDT documents:

• CM Approval Document Accreditation of Condition Monitoring Training Organisations

### 3. Terms and Definitions.

For the purposes of this document, the following definitions apply:

- 3.1. Approved Training Organisation (ATO) competent organisation approved by BINDT to provide training of personnel in specific condition monitoring technologies as specified in BINDT CM Approval Document: 'Approval of Condition Monitoring Training Organisations' and ISO 18436-3. An ATO may also operate, manage and staff remote 'Training Centres' in accordance with CM Approval Document and ISO18436-3 and as approved by BINDT.
- 3.2. Approved Examination Centre (AEC) A facility approved by BINDT for the conduct of qualification examinations under the control of a BINDT appointed invigilator, in compliance with ISO18436-1 and as defined in PSL/63-CM and PSL/65-CM.
- 3.3. Accredited Qualifying Body (AQB) A sector specific third-party certification body (BINDT) issuing certificates of conformity.

- 3.4. Candidate A candidate is an individual seeking qualification and certification who works under supervision of suitably qualified personnel whilst gaining relevant experience for qualification.
- 3.5. Certification Procedure used by the certifying body to confirm that the qualification requirements for a method, Category and sector have been fulfilled and that the individual has demonstrated competence and the required skills in performing condition monitoring measurement and analysis, leading to the issue of a certificate. (BS EN ISO/IEC 17024 refers).

Note: The issuing of a certificate does not authorise the holder to operate; this authority can only be given by the employer (see clause 5.1.1)

- 3.6. Competence The demonstrated ability to apply knowledge and/or skills.
- 3.7. Employer The organisation for which a candidate or holder of certification works on a regular basis; an employer may also be a candidate at the same time.
- 3.8. Examiner An individual certificated to Category 3 in the method and sector for which he or she is to construct, conduct, supervise and/or grade examinations and who is authorised and assigned to do so by BINDT. Exam at Categories 3 or 4 can be graded by an examiner at that Category or higher.
- 3.9. Industrial Experience Period of time spent in performance of the applicable condition measurements and analysis, which leads to the acquisition and maintenance of the required skill and knowledge.
- 3.10. Invigilator An individual approved by BINDT to administer and supervise PCN examinations but who does not evaluate competency of the candidate.
- 3.11. Condition Monitoring Technology A technology used for the monitoring of performance and degradation in normal operating service, of machines and structures, as defined by ISO/TC108/SC5.
- 3.12. Moderator- A person qualified to Category 3 in the relevant sector and method and acts to rescore Category 3 examination papers and to moderate selected Category 1 and 2 papers, as required by BINDT. Also restricted to limitations applied to examiners.
- 3.13. Multiple choice examination question A question giving rise to four potential replies, only one of which is correct, the remaining three being incorrect or incomplete. Personnel approved by BINDT to grade multiple choice questions are specified in CM QP01 WI02.
- 3.14. Narrative examination question A question requiring a detailed written answer that satisfies the key points identified in a model answer. Only a Category 3 or 4 examiner can grade Category 3 or 4 questions, respectively.
- 3.15. Qualification Evidence of training, professional knowledge, skill and experience (see 7.1.2 and 7.1.3; minimum experience defined in the technical specification appendix for each technology applies) to enable personnel to properly perform condition monitoring, and is the prerequisite to attempting examination towards certification.
- 3.16. Qualification Examination An examination administered by BINDT, AEC or approved invigilator that follows the acquisition of the specified qualifications and complies with the requirements of ISO18436-1 under conditions specified in PSL/62-CM and PSL/65-CM.
- 3.17. Recertification The procedure for revalidation of a certificate through assessment by examination.
- 3.18. Record of Certification A written testimony of qualification listing all PCN certification issued under the rules specified in this document and its antecedents, indicating that the named individual has demonstrated competence in performing condition monitoring within the scope of the certification.
- 3.19. Renewal The procedure for revalidation of certification without examination.
- 3.20. Significant Interruption An absence from (or a change of) work activity which prevents the holder of PCN certification from practicing the duties corresponding to his or her Category in the condition monitoring technology and sector for which certification was issued, for a continuous period in excess of 2 years or two or more periods for a total time exceeding 3 years.

NOTE: Legal holidays, or periods of sickness or courses of less than thirty days are not taken into account when calculating the interruption.

3.21. Training - The process of instruction in the theory and practice of condition monitoring measurement and analysis at a Category appropriate for the qualification being sought, as specified in CM Approval Document, ISO18436-3 and the appendices to this document.

#### 4. Abbreviations

The abbreviations used within this document are as follows:

- AE Acoustic Emission
- AEC Approved Examination Centre
- ATO Approved Training Organisation
- IRT Infra-red Thermography
- LA Lubricant Analysis
- US Ultrasound
- VA Vibration Analysis

### 5. General principles

- 5.1. Duties and responsibilities
  - 5.1.1. The employer:
    - 5.1.1.1. confirms the validity of the personal information provided, including the declaration of education, training and experience required for the eligibility of the candidate;
    - 5.1.1.2. cannot be directly involved in the qualification examination;
    - 5.1.1.3. is responsible for:
      - issuing the operating authorisation, where operating authorisation is a
        written statement issued by the employer based on the individual's
        competence as specified by the certificate and other factors, such as
        job-specific knowledge, skill and physical ability for the specific task.
        - Note: Such authorisation can be dependent on the requirement and provision of additional job-specific training by the employer.
      - any job-specific training;
      - verification of continuity in the application of the condition monitoring technology without significant interruption for CM personnel;
      - undertaking the required annual surveillance of CM personnel in accordance with the procedure defined in PCN document CP/16-CM.
  - 5.1.2. Candidates for PCN Certification may be self-employed or unemployed so long as they provide documentary evidence that experience has been gained and maintained under the supervision of suitably qualified personnel.
  - 5.1.3. A self-employed candidate shall assume all of the responsibilities ascribed to the employer.
- 5.2. Categories of certification available
  - 5.2.1. Individuals certificated in any of the first three categories of classification in accordance with this specification shall have demonstrated the necessary skills in the concepts of condition monitoring for the relevant Category, as detailed in Appendices A-F. The condition monitoring technologies of AE, LA, IRT and US are divided into three categories, basic (Category 1), intermediate (Category 2) and advanced (Category 3), based on natural boundaries of technical difficulty. The technology of VA is divided into four categories, with the 4<sup>th</sup> being a specialist Category.
  - 5.2.2. The range and scope of PCN certification available at each Category and the typical responsibilities are defined in the relevant appendix to these general requirements.

#### 6. Eligibility for Examination

#### 6.1. Education

It is recommended that Category 1 and 2 candidates have at least a secondary school science or technical qualification, or its equivalent. Personnel must be able to manipulate simple algebraic equations at a level equivalent to that of a basic mathematics qualification, use a basic scientific calculator, and be familiar with the operation of personal computers. It is highly recommended for Category 3 and 4 candidates that they have successfully completed two or more years of a mechanical technology or mechanical engineering qualification at an accredited college, university or technical school prior to attempting qualification to these categories.

### 6.2. Training

- 6.2.1. Eligibility for examination is defined within the appendices to this document in terms of the required minimum duration of training for each of the four condition monitoring technologies.
- 6.2.2. To be eligible to apply for examination the candidate shall provide documentary evidence of successful completion of a BINDT accredited or recognised course of formal training based on the specific requirements of Annex A2 of each appendix. Sources of technical information are listed in Annex B of each appendix. The minimum duration of cumulative training is shown in Table 1 of each appendix. This training should be in the form of lectures, demonstrations, practical exercises and formal training courses.
- 6.2.3. The training syllabus in each appendix includes a requirement for practical knowledge and practical skills evaluation of the practical exercises, by the trainer, at Category 1 only. The training declaration shall attest to the successful completion of the practical exercises.
- 6.2.4. Training must be undertaken at a BINDT ATO (a training waiver may be applied at the discretion of BINDT). Where PCN examinations are to be conducted for candidates in an overseas location and BINDT validated training is not available through a BINDT ATO, any training that covers the relevant syllabus may be granted interim recognition for up to two years as meeting PCN requirements for pre-certification training.
- 6.2.5. Formal training will take the form of lectures (or an optional equivalent self-study as part of the generic theory topics), demonstrations and practical skills training exercises, as specified in the relevant appendices to this document and CM Approval Document. The self-study component must be no more than 50% of the course content and be designed, created, issued, and managed by the approved ATO. Self-study (on-line, internet-learning, CD) not created, assigned and managed by the ATO completing the training course will not be accepted as equivalent training time. The trainer must assess the candidates understanding of the material from the self-study portion of the course before the formal component of training resumes and be satisfied that adequate knowledge transfer has occurred. Training course syllabi are shown in Annex A2 of the appendices to this document. Training courses must be wholly based on material derived from the 'essential reading' references and standards listed in Annex B of the appendices to this document.
- 6.2.6. To receive credit for the completion of a course, candidates must satisfy BINDT that:
  - 6.2.6.1. they have successfully completed the specified training as validated by a quantifiable and verifiable training course examination or continual assessment, which includes marking of an examination or series of small tests which culminate in an overall mark [pass mark 70% {in AE & IRT the pass mark is 75%}] leading to the issuance of a declaration-of-training provided by the ATO; and
  - 6.2.6.2. the time devoted to each topic is specified in Annex A2 of the relevant appendix to this document, and consistent with the Category of certification being sought; or

6.2.7. Mature candidates at Category 2 (3 for VA) may not need to have completed a BINDT validated course of training at Category 2 (3 for VA) and without the need to have previously held Category 1 (or 2 for VA) certification, providing they can produce verifiable documentary evidence of training and experience that satisfies the requirements for both Category 1 and Category 2 (and Category 3 for VA) qualifications.

To be eligible to apply for assessment as a mature candidate entry, the candidate shall provide evidence of successful completion of a course of training, that meets the minimum duration and covering the PCN syllabus as specified in the relevant Appendix.

Training should be in the form of lectures, demonstrations, practical exercises, elearning or formal training courses.

Mature candidates shall satisfy the experience requirements for Category 2 (3 for VA), as specified in the relevant Appendix, without significant interruption. If a significant interruption exists, the candidate may be required to undertake further training as determined by BINDT.

6.2.8. Eligibility to attempt a qualification examination includes submission of the training certificate/declaration or other evidence to BINDT, together with evidence of experience (refer clause 7.1.3), payment of the examination fee (invoice term: 30 days net) and submission of PSL/57-CM to BINDT at least 10 working days prior to the examination.

### 7. Eligibility for Certification

### 7.1 Industrial Experience

- 7.1.1 The minimum duration of experience required for specific certification is defined in the relevant Appendix A, B, C, D or F to this specification for each of the four condition monitoring technologies.
- 7.1.2 For categories 1 and 2 candidates, industrial experience may be acquired either prior to or following success in the qualification examination. In the event that the experience is sought following successful examination, the results of the examination shall remain valid for up to five years or double the minimum required duration of experience, whichever is the lesser. For Category 3 and 4 candidates all experience requirements must be acquired before the qualification examination.
- 7.1.3 Documentary evidence of prerequisite experience (as defined in each relevant technical appendix to this document), identity verification and application for initial examination shall be submitted to BINDT on form PSL/57-CM/Marine. Experience gained after the examination may be submitted on form PSL/30-CM/Marine. Variation in identity (eg: marriage, deed pole etc) may be submitted on form PSL/33-CM/Marine.
- 7.1.4 Candidates for Category 1 and Category 2 shall have their evidence of experience validated by a person at ISO 18436 Category 2 or higher (in the same discipline), or in the absence of such persons, by the candidates technical supervisor or client.
- 7.1.5 Candidates for Category 3 and 4 shall have their evidence of experience validated by a person at ISO18436 Category 3 at least, or in the absence of such persons, by the candidates' technical supervisor, senior manager or client.
- 7.1.6 The validation process for all categories requires the signature of the validating person, their position and current certificates status and discipline, on the documentary evidence.

### 8 Qualification Examination

- 8.1 For each certification Category, the candidates shall be required to answer a type and number of examination questions as specified in the relevant appendices.
- The pass mark required for BINDT IRT and AE examinations is 75%, while the pass mark required in LA, VA and US examinations is 70%.
- 8.3 Initial examination enquiries to BINDT may be by telephone or email. Formal applications must be made on the application form, PSL/57-CM/Marine, submitted by post. No examination appointment can be considered confirmed until correctly completed application form and the

- required fee have been received by BINDT. Refer to PSL/65-CM for detailed procedure for examination enquiries.
- 8.4 The qualification examination must be taken within 5 years of completing the approved training course, however it is highly recommended that the qualification examination be taken within 12 months.
- 8.5 Examination Materials and Documentation
  - 8.5.1 The examination shall be closed book.
  - 8.5.2 The examination may (where applicable) be presented in languages other than English for categories 1 and 2 only. All Category 3 and 4 examinations will be in English only. Assessment of Category 4 vibration analysis candidates may also include part, or full, assessment by a peer review panel, at the discretion of BINDT.
  - 8.5.3 A BINDT authorised invigilator will be provided with all necessary examination documentation, including reference material if specified, for submission to candidates at an AEC.
  - 8.5.4 Candidates must not be in possession of any reference documentation during a PCN examination.

### 9 Conduct of Examinations

- 9.1 PCN CM examinations are conducted at an AEC and are administered by a BINDT approved invigilator in accordance with PSL62-CM and PSL65-CM.
- 9.2 At the time of examination the candidate shall have in his possession valid proof of identification, showing a photographic image, which shall be shown to the invigilator upon request. The invigilator will countersign the stamped examination check-sheet validating this proof of identity in accordance with PSL/62-CM. The photograph and signature from the candidate attending the examination is verified against that submitted to BINDT with PSL/33-CM/Marine or PSL/57-CM/Marine prior to the examination.
- 9.3 BINDT may, at their discretion, make accommodation for candidates with conditions that may require some form of compensation (e.g. dyslexia).
- 9.4 The presence of mobile phones and any other electronic communication or data storage device is prohibited in examination rooms. Refer to PSL/62-CM for invigilator procedures.
- 9.5 Once an examination has commenced, candidates found in possession of equipment, materials or documents, which, if used during a PCN examination, would be deemed to constitute cheating, will be considered to have cheated and the examination will be terminated. No examination results will be issued for those examination parts already completed and a letter will be sent to the candidate concerned and to the employer or sponsor explaining why their examination was terminated. Candidates proved to have cheated in a PCN examination will not be accepted as a candidate for any further PCN examination for a period of 12 calendar months from the date of the examination in which cheating was established to have taken place.
- 9.6 At the end of the qualification examination, completed examination scripts will be handed to the invigilator, who will seal the packages and return them to BINDT.
- 9.7 The candidates shall use only black or blue ink pens. The use of pencils and red pens is not permitted.
- 9.8 The translation of qualification examinations into languages other than English is managed by the certifying body (BINDT), as determined by established policy.

### 10 Grading of Examinations

- 10.1 Completed examination papers will be marked and graded by an approved person at BINDT by comparison with model answers. Category 3 and 4 examinations containing narrative questions will be marked and graded by a BINDT approved examiner and may be moderated by an appointed examiner in the relevant technology in accordance with PCN procedure.
- 10.2 To achieve qualification the candidate shall obtain the minimum grade indicated in the relevant appendix to this document.

#### 11 Re-examination

- 11.1 A candidate who fails the initial examination may attempt only two re-sit examinations within a 12 month period. Each re-sit examination must take place not sooner than 30 days after a previous examination. BINDT may use its discretion in allowing an earlier re-sit examination in the event that evidence of further training acceptable to BINDT is undertaken.
- 11.2 If the candidate fails all three examinations then he/she will not be allowed to attempt the same examination for 12 months after the date of the last failed examination.
- 11.3 A candidate whose examination results have not been accepted for reason of fraud or unethical behaviour shall wait four years' before re-applying for examination.

#### 12 Publication of Examination Results

- 12.1 The examination result notification (pass or fail) will be sent to the candidate at the address given on PSL/57-CM/Marine, with guidance on successful completion of prerequisites if applicable.
- 12.2 Examination results for those who pass the examination will be issued immediately by email, and official result notice and certificate normally issued within 30 working days of completion of examination (see clause 6.1.6), provided all examination fees have been paid and all prerequisites are satisfied.

#### 13 Certification

- 13.1 The PCN Certification Records Office will issue certification to candidates who fulfill all prerequisites (training, experience, and success in the relevant examination) for certification.
- 13.2 Where a candidate for certification has achieved a pass in all relevant examination parts, but has not yet satisfied the pre-requisite experience requirements, the issue of certification may be deferred for up to 2 years, or twice the minimum required period of experience, from the date of success in the PCN examination, whichever is the lesser. A revised PSL30-CM/Marine is required to verify acquisition of experience.
- 13.3 By issuing the certificate/wallet card, BINDT attests to the qualification of the individual but does not give any authority to work.

### 14 Validity of Certification

- 14.1 The maximum period of validity of a PCN CM certificate/wallet card is five years from the date of initial examination. The certificate will be designated as issue 01.
- 14.2 PCN certification shall be invalid:
  - if not signed by the holder;
  - in any condition monitoring technology which is not covered by the certificate;
  - at the option of BINDT after reviewing evidence of unethical behaviour;
  - if a *significant interruption* takes place in the application of the competence for which the individual is certificated;
  - if the five-year time period has elapsed, and has not been renewed;
  - from the date of issue of notification of failure in a PCN examination for re-certification.
  - If an individual becomes physically and/or mentally incapable of performing the duties, as specified in ISO18436-1.
  - If abused or misused
  - 14.3 If a certificate is invalidated due to abuse, misuse or violation of the code of ethics, then the person shall not re-apply for certification examination for 12 months, and only after a PCN convened appeals panel reviews the circumstances. If catastrophic failure of a system is caused by such activity the extent of invalidation can be extended up to a maximum of 5 years after review in accordance with CP21 and CP27), at the discretion of the panel.
- 14.4 PCN certification can be verified at www.bindt.org.

#### 15 Renewal

- 15.1 At any time within the final 6 months of an initial certificate (issue 01) validity, the holder may renew his certificate for a further period of five years upon submission of satisfactory documentary evidence of continuity, without significant interruption, in the application of the certificated competence. To ensure continuity of certification, it is advisable to apply at least 56 days prior to expiry. The renewed certificate will be designated as issue 02.
- 15.2 Applications for renewal after the certificate has expired may be considered for up to one year after expiry, but such applications will be subject to payment of an additional non-refundable administration fee.
- 15.3 If the criteria for renewal are not met, BINDT will immediately cancel the certificate and, to regain the certificate concerned, the individual will need to successfully complete the process for initial certification.
- 15.4 Application for renewal for all categories of certification is made on PCN-CM form CP16-CM.

#### 16. Recertification

- 16.1 Five years after any certificate is revalidated through the renewal option, in order to revalidate the certificate for a further five-year period, the holder will provide satisfactory documentary evidence of continuation training, satisfy the criteria for recertification, and achieve success in an abbreviated written examination covering the sector specific application of the certificated competence. The certificate will be designated as issue 01.
- 16.2 Application criteria for recertification are the same as for renewal, (as detailed in 15.1 and 15.2 above).
- 16.3 Application for recertification for all categories of certification is made on PCN-CM form CP/16-CM.

### 17. Complaints and Appeals

- PCN certificate holders must recognise that personal integrity and professional competence are the fundamental principles on which their activities are founded. Accordingly, it is a condition of PCN certification that holders shall comply with a code of ethics (as defined in CP/27 and ISO18436-1). This undertaking is given at the time of submitting an application for examination and/or certification.
- An aggrieved party in a dispute, which considers itself to have reasonable grounds for questioning the competency or ethical behavior (see CP/27) of a PCN certificated individual, may petition BINDT for cancellation of certification. Such a petition must be accompanied by all relevant facts and, if it is the view of BINDT that an adequate case has been presented, the certification will be suspended and a full investigation of the circumstances under dispute will be initiated.
- 17.3 If the petition is substantiated to the satisfaction of the PCN Certification Management Committee (CMC), the certification may be cancelled, or renewal or re-certification may be refused, for such period as the CMC may decide or, as delineated in clause 14.3.
- 17.4 The candidate or the employer upon application in writing may make appeals against certificate cancellation, failure to certify or failure to renew, to the CMC which may delegate the process of dealing with complaints and appeals to a properly constituted sub-committee, who will refer to the articles of this document and CP27, where applicable.
- 17.5 All complaints and appeals are made on PCN form CP/21.

### 18. Certification and Examination Records

- 18.1 BINDT will retain records relating to qualification and certification of personnel for a minimum period of 11 years.
- 18.2 An updated database of certificated personnel, which includes (amongst other things) the name, PCN identification number and scope of certification held by each individual, is maintained by PCN and can be viewed at <a href="https://www.bindt.org">www.bindt.org</a>.
- 18.3 Audit of specific individual examination records, which are under the jurisdiction of BINDT or its nominees, may be permitted at the discretion of BINDT under certain circumstances, unless in violation of national or EU codes of privacy.

#### 19 Use and Misuse of Certificates

- 19.1 The issue of a PCN certificate indicates that the holder has demonstrated an acceptable level of skill and ability measured by means of an examination conducted in accordance with the prevailing requirements for a specific condition monitoring technology. Holders or employers are not permitted to imply any further degree of competence on the basis of the certificate.
- 19.2 PCN certificate holders or their employers must not use or refer to PCN certificates, the PCN logo or the BINDT logo, nor must they knowingly allow them to be used or referred to by a third party, in a manner that may be considered fraudulent or to bring the PCN Scheme into disrepute.
- 19.3 All certificated personnel are required to keep a register of complaints made against them within the scope of the certificate of competence (see CP27). Failure to keep such a register or failure to enter valid complaints in it will be construed as a misuse of the certificate and appropriate penalties will be applied (see clause 14.3). The register of complaints must be made available to BINDT on request.
- 19.4 The penalty for misuse of PCN certification in all cases is invalidation of the certificate (see clause 14.3). If the misuse was in the public domain, publication of the transgression may also be undertaken. Any misuse that appears to be an infringement of the law will result in the matter being reported to the legal authorities in the country concerned.
- 19.5 Certificates are valuable documents, which should be kept in a safe place. Any suspicion of forgery or misrepresentation must be reported to BINDT. Loss or theft of certificates must be reported to the legal authorities in the country concerned and to BINDT.
- 19.6 It is required that all PCN certificate holders maintain records demonstrating continuity in the application of the technology for which they are certificated and used to complete CP16-CM.
- 19.7 New employers presented with PCN certification should satisfy themselves that the certificate holder has been employed without *significant interruption* on work for which the certificate was granted. It is strongly recommended that the employer request sight of the certificate holder's record of continuity and current status via the BINDT website or direct enquiry to PCN.

### 20. Transition Period

- 20.1 When new PCN examinations are first introduced within the scheme, or are introduced in a country where the examinations have not previously been available, the requirement for persons to have attended a recognised course of training at a BINDT accredited training organisation before attempting a PCN examination may be waived, at the discretion of the PCN Certification Management Committee, until such time as sufficient training provision has achieved PCN recognition or BINDT accreditation.
- 20.2 During any transition period, BINDT may appoint duly qualified personnel as examiners for a period not exceeding five years from the effective date of scheme and examination implementation. Any extension of this period can be granted only on the authority of the PCN Certification Management Committee.

Examiners shall possess (also see clause 3.7) the:

- 20.2.1 knowledge of the general principles of condition monitoring technologies and specific knowledge relating to the industry sector;
- 20.2.2 experience of the industrial application of the condition monitoring technology;
- 20.2.3 ability to create examination questions and model answers, validate questions by cross-reference to the training syllabus and source of knowledge (Annex B of the relevant appendix to this document), and compile, mark and grade examination papers;
- 20.2.4 certification to Category 3 if marking and grading Category 3 or lower examination papers, or otherwise approved by BINDT;

#### 21 Files

21.1 All files and records are maintained and stored in accordance with the requirements of BS EN ISO/IEC 17024 and ISO 18436-1.

### **SUMMARY OF CHANGES**

ISSUE	ISSUE DATE	SUMMARY OF CHANGES
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3	1 <sup>st</sup> July 2019	Clause 9.3 amended to match paragraph within clause 6.1 of ISO 18436-2
4	1 <sup>st</sup> October 2021	<ul> <li>Clause 6.2.7 amended to match clause 5 of 18436-1</li> <li>Clause 11.3 amended to match clause 7 of 18436-1</li> <li>Clause 14.2 amended to match clause 9, a of 18436.1</li> </ul>
5	1 <sup>st</sup> April 2022	<ul> <li>Introduction &amp; Clauses 2.1, 4, 5.2.1, 6.2.6.1, 7.1.1 &amp; 8.2 to include US references</li> <li>Clause 2.2 amended formatting</li> <li>Clause 3.13 amended document reference</li> </ul>