



c/o The British Institute of NDT
 Newton Building, St George's Avenue
 Northampton, NN2 6JB
 United Kingdom

Tel: +44 (0)1604-893-811
 Fax: +44 (0)1604-893-868
 E-mail: Nicole.scutt@bindt.org

NAndtB/26 (Issue dated 09-12-2015) - Frequently asked questions and UK NANDTB responses

Question Submitted	UK NANDTB Response
<p>Who should be present when candidates are carrying out practical processing exams? EN4179 states that the marking checklist shall include proficiency in the use and standardisation of equipment and materials, adherence to procedural details.....etc. In many training schools the examiner is remote, i.e. not the invigilator, therefore cannot actually see what the candidate does. Can the remote examiner assess standardisation of equipment and materials and adherence to procedural details just from the candidate's report of his results for the exam test piece? Should the candidate be submitting additional information to show what they have done regarding standardisation etc (e.g. evidence of process control checks) or can the examiner assume that, if the correct defects were found, the standardisation etc. is also satisfactory. Note that EN4179 does not contain any rules concerning who should be an 'invigilator' and, although it states that practical examinations shall be administered by the Responsible Level 3 or examiner, the word 'administer' has multiple meanings and does not necessarily imply 'direct observation'.</p>	<p>The Responsible Level 3 or Examiner shall be present during administration of the practical examination.</p>
<p>prEN4179:2014 para 7.1.2 says that at Level 3, the general examination questions shall address the general knowledge of other methods as defined in the standard. Paragraph 1.3 defines these as PT, MT, IRT, ST, ET, UT, RT. Does this mean that every new Level 3 needs to answer some questions on ALL these methods? Given that most training schools do not have Level 3 qualified personnel in all these methods who should write the applicable questions in these other methods for inclusion into the general exams for new Level 3s? Is it expected that the schools go to a certified level 3 in the method and buy some exam questions from them? If so are there suitable people out there offering this service? (particularly for ST and IRT) Alternatively is it acceptable that a Level 3 certified in a different method researches the additional subject and sets some questions based on their own research? It is generally accepted, I think, that the 'other methods' questions in a Level 3 general exam would be of Level 2 standard but I don't think that this is stated in the standard. Existing Level 3 personnel may never have answered questions on the newer methods (e.g. Laser Shearography) themselves but maybe there is an implication that by virtue of having Level 3 certification the individual has shown the ability to understand something about other methods.</p>	<p>For Level 3, the general examination questions shall address the general knowledge of other methods as defined within the standard as well as the method for which certification is sought.</p> <p>Training schools should develop the exam questions themselves where they have the expertise and should acquire the exam questions for NDT methods outside their expertise in an appropriate manner as documented in their written practice.</p> <p>Examination questions at a level 2 standard are acceptable.</p> <p>Level 3 personnel who have satisfied this requirement pre inclusion of ST and IRT do not need to be examined and may set examination questions in this regard if they have the expertise to do so.</p>

Frequently Asked Questions (FAQ's)

<p>There is a need for better communication – for example the only indication that UKNANDTB has discussed something is usually in the minutes which are not available on the BINDT website until many months after the meeting. If decisions have been made these need to be transmitted quickly to both auditors and training schools. Also there are sometimes issues during an audit or the auditor may have concerns about an auditee which should be discussed confidentially (perhaps not appropriate to put in emails and transmitted via a third party). Is there a defined route/point of contact for auditors to give and receive information to/from the board in a timely manner?</p>	<p>The UK NANDTB Chairman's e-mail address is available on the home page. There is also a membership listing with names and contact details for Board Members. Unconfirmed meeting minutes will also be published and put on the website.</p>
<p>prEN179:2014 para 7.1.2 states “The general examination for all levels shall be a closed book examination covering the cross-section of the applicable method at the appropriate level”. Para 7.1.3 states “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”. It does not state “at the appropriate level” and therefore is it acceptable that the specific exam at each level can be the same content?.</p>	<p>prEN4179:2014 states “A minimum of 30 questions shall be administered for the specific examination at Levels 1, 2, and 3”, thus specific examinations shall be written at the appropriate level.</p>
<p>prEN 4179 :2014 states at para 7.1.4.3 – level 2. “ in addition to the two minimum known and documented test samples with discontinuities, specimens without discontinuities may be included”. This can potentially be confusing in two ways.</p> <ol style="list-style-type: none"> a. Firstly, that test samples for examination purposes may now not include discontinuities. Yet by definition, test samples have discontinuities. b. Secondly, that practical examinations employ test samples, so when do specimens become test samples? Is the definition of test samples correct, or could it do with reviewing to encompass without discontinuities? <p>Please clarify.</p>	<p>The level 2 practical exam still requires a minimum two test samples, one per technique with discontinuities. prEN4179:2014 now allows specimens without discontinuities to be used in <u>addition</u> to the minimum two test samples. This is not intended to cause confusion, it is intended to add another dimension to the practical in that the candidate has to have the confidence to call a specimen as acceptable, thus creating a more realistic scenario.</p>
<p>NAndtB/24 has been withdrawn and superseded by ISO 18490, no problem with that. However, Is the provision to download the tumbling “E” eye charts from the BINDT web site to remain? If so, is there to be a new link?</p>	<p>Access to the Tumbling E test charts will remain via the BINDT website/UK NANDTB webpage. NANDTB/24 will no longer be available as it has been superseded by ISO18490.</p>
<p>Just wanting to find out more info about the fact that internal certification as per EN4179/NAS410 is no longer valid as per the requirements of EASA part 145, GR23. I have been informed that exams etc. need to be administered by an approved NANDTB accredited body from 1st April. I myself am PCN Aerospace qualified and was just wondering what I would need to do to for our facility to become accredited to conduct exams, training etc. internally to meet the requirements of GR23. Could you provide some clarification?</p>	<p>You have three options:</p> <ol style="list-style-type: none"> 1. Use a BINDT accredited Outside Agency to conduct all your NDT training and qualifications. 2. Become a BINDT accredited Inside Agency. You need to contact BINDT to arrange this. Some organisations have chosen to do this. You had until 1st April to comply so you need an interim solution if pursuing this option.

Frequently Asked Questions (FAQ's)

	<p>3. Get your personnel PCN/AERO certified. You can use the PCN/AERO certificate to satisfy the qualification requirements of your written practice (if stated so). You must still certify your personnel per EN4179 and your written practice. An extra training and examination over and above PCN/AERO as deemed necessary by the RL3 must be performed by a BINDT accredited agency.</p>
<p>As an Outside Agency we act as the Responsible Level 3 for many companies and as a BINDT PCN AQB we examine many individuals. We have a customer who has employed a PCN Aerospace Level 2 Eddy Current Inspection certified contractor. Our customer asked for proof of training hours compliant with the requirements of EN 4179 Table 1. This the contractor, despite being PCN certified, could not show. The contractor's only evidence of training was 24 hours with a BINDT approved training organisation, which is believed was the only ET course available at the time. In discussions with the contractor it was found that he was previously CSWIP in ET and when required by another employer was successfully certified by PCN as Level 2 ET (and other methods) in 1990. At the time of his PCN certification there was no requirement to show the formal classroom training hours. Training was accepted as being documented evidence of on-the-job training and history in the method. The contractor has subsequently been recertified at the required intervals by AQBs (including ourselves). For recertification there is no requirement for evidence of training just the employment history during the previous certification period. This situation showing, in accordance with EN 4179, the lack of formal training has opened a can of worms. There are many other PCN certified individuals who are also being required to be certified to the requirements of EN 4179 and cannot show evidence of sufficient training. My questions to the Board are:</p> <ol style="list-style-type: none"> 1. Does the individual who was certified pre-EN 4179 have to be compliant with all aspects of EN 4179? 2. Does the Responsible Level 3 have the right to accept the historical data provided by the individual? 3. How does the Responsible Level 3 and the Company Written Practice satisfy the requirements of EN 4179 for such individuals? 	<p>1. JAR145 amendment 3 bought in the requirement for NDT personnel to be certified per EN4179 after 31 December 2003. Per JAR145.30(f)(1), NDT personnel certified to a standard recognised by the JAA full member authority may continue to carry out and control such tests after December 2003 [Protected Rights]. The CAA recognised PCN and extended Protected Rights up to November 2004. Whilst formulating it's polices for control of NDT training and examinations, the UK NANDTB further extended protected rights up to April 2011. The requirement to comply with EN4179 and for NDT training and examinations to be under the control of the UK NANDTB became mandatory (for the maintenance sector) after this later date. PCN certifications held and maintained current prior to this date will not comply with EN4179, but remain valid under Protected Rights.</p> <p>2. Per Protected Rights and if permitted by the employers written practice, then the Responsible Level 3 may accept the historical data documented. The Responsible Level 3 should always consider if the previous training and experience is relevant to the NDT role to be performed and demonstrates the necessary level of competence.</p> <p>3. By documenting within the employers written practice that PCN certification gained and maintained prior to April 2011 and recognised by the applicable aviation authority under Protected Rights remains acceptable in lieu of EN4179.</p>
<p>How or when are BINDT to incorporate PSL 44 Vision Test - Colour perception element, with UK NANDTB 24 - vision test. At present we are having to employ two separate documents to satisfy one requirement.</p>	<p>PSL/44A issue 1 dated 24th January 2011, which supersedes PSL/44 for all PCN Aerospace certificate holders, embodies the NANDTB/24 requirements. PCN holders and their employers can access PSL/44A at http://www.bindt.org/downloads/PSL44A.pdf, and the NANDT/24 charts and instructions for use at http://www.bindt.org/NANDTB/NANDTB_Vision_Requirements.html. At its 16th June 2011 meeting the Board approved a PowerPoint presentation for use by Responsible Level 3 personnel covering training in the conduct of visual acuity testing. This is published as</p>

Frequently Asked Questions (FAQ's)

	NAndtB/25.
PCN/AERO issue 2 rev C dated 1st January 2011, para 7.3.2.1 Note already states that it is in part an open book examination (10 questions). Have we missed something?	The present status of PCN AERO is (at 2011-04-19) Issue 2 Revision D dated 2011-03-04. The note referred to states: <i>At Level 2, 20 of the 30 specific written questions will cover application of the NDT method (and no reference material will be provided), the remaining 10 questions will cover aerospace product technology, standards and specifications (the AQB will provide any specifications requires for use by the candidate in this examination part).</i>
Why are the AQBs being tasked with writing PCN specific examinations - from previous NANDTB minutes. Each AQB will have a different interpretation on the specifications, therefore every AQB will have different levels of examination difficulty. Coupled with the differences in practical samples it will make a mockery of the concept of 'Central Certification'.	This is not the case. Specific questions will continue to come from the central question bank.
When will the AQBs be advised which specifications are to be used. How are ET & UT going to be satisfied? There is no generic aerospace specific specifications unlike PT, MT and RT which have the ASTMs.	As of 16 February 2011, this is being addressed by a UK NANDTB Sub Group.
When the Board issue its minutes, can we have a bit more information than - 'it was discussed' - for our questions & concerns.	The UK NANDTB agrees that this is not satisfactory. Agreed responses to questions submitted are returned via the route submitted. To share the agreed responses, the UK NANDTB is capturing all questions submitted and UK NANDTB responses in this FAQ document.
Concerning the tumbling E near vision test - does this only apply to UK aerospace company examinees? We have a number of trainees who attend from non UK companies who I suspect are not bound by our NANDTB requirements.	The tumbling E chart does apply to UK Aerospace companies and any organisation/country affiliated to the UK Board that come under the control of the UK NANDTB
Are exemptions allowed for level 2 questions in level 3 examination when the candidate holds level 2 certification.	The Board noted that EN 4179 does not permit exemptions, and that it considers the NADCAP finding to be justified.
Concerning colour vision testing: can the Responsible L3 train and authorise other personnel to conduct this test?	The Board confirmed that this was permissible.
The following test is from clause 4.2 of GR 23: With effect from the publication date of this Generic Requirement, training and examination of all NDT personnel working in UK based Organisations must be under the control of the UK NANDTB. Where an Organisation uses its internal expertise and resources to operate and maintain an EN4179 based scheme, such organisations have	There are two forms of training (1) Formal Training and (2) On the Job Training. The UK NANDTB is 'controlling' (1) which imparts the knowledge and skill to achieve 'qualification'. On the job training is training in the work environment to gain 'experience', which the UK NANDTB is not required to 'control'.

Frequently Asked Questions (FAQ's)

<p>until 01 April 2011 to obtain accreditation from BINDT.</p> <p>And this has given rise to a question ...</p> <p>The delivery by outside agencies of formal training and examination require BINDT accreditation. However “training” as a broader term covers rather more and it is required that job specific training is carried out at the employer and for the plant, equipment and product technology specific to that activity. There may also be On-the-job training carried out and in some cases refresher training carried out or even extension of knowledge training (e.g. for a new revision of a procedure or National/International specification or Standard) and it is not yet clear how Auditors will interpret the requirements for such training.</p>	
<p>It is accepted that formal training and extensions of such training – for example for a new technique within a method - would need to be done under the BINDT accreditation (since an additional practical sample would need to be tested for such an extension).</p> <p>However, should a Specification or Standard be updated, or should there be a need to carry out some sort of extension, maybe for an additional Prime where “extension specific exam questions” need to be administered, can this be done under the jurisdiction of the Responsible Level 3 at the “Organisation”?</p>	<p>Where an individual requires training and qualification to extend scope of approval, i.e. new technique, new materials etc. This requires the use of a BINDT accredited organisation. For continuation training, i.e. spec updates etc, it would be acceptable for the RL3 to manage this.</p>
<p>I've just attended an 80 hour IRT course and in the process of building up my hours for level 2. What I need to know is how can I achieve the next step to level 3? When are PCN (aero) / NANDTB going to bring this qualification on board?</p>	<p>At present the only option for progressing to level 3 certification for IRT in the UK is via employer based (2nd party) certification. However, there is work underway to develop a PCN qualification for IRT and information on progress can be obtained for BINDT certification services (PCN@BINDT.org)</p>
<p>Does the UK NANDTB allow recertification by the Point System (EN 4179 Appendix A)?</p>	<p>The UK Board recognises recertification through the points system.</p>
<p>Do NANDTB's consider certification by their Board to be transferable? (If you work for Employer A, and are certified by the NANDTB for that country, then leave and go to work for Employer B, who also uses the services of the NANDTB for that country, is Employer B exempted from having this employee retested?)</p>	<p>The UK Board has not published any policy on transferability, but would expect the new employer to comply with the requirements of the standard.</p>
<p>How do the various National Aerospace NDT Boards establish their membership? Are suppliers included on any of the NANDTB's as voting members, or are the Boards comprised solely of Primes?</p>	<p>The UK National Aerospace NDT Board is chartered by, and composed of, the participating prime contractors and other aerospace organisations holding design authority for Aerospace Structures, Engines and/or Components. The UK civil and military aviation safety regulators are observer members. Suppliers of NDT services (not components) attend the Board meetings as co-opted members.</p>
<p>Please provide a brief synopsis of how NANDTB function (do they administer examinations,</p>	<p>The UK Board controls qualification examinations and pre-</p>

Frequently Asked Questions (FAQ's)

<p>approve sites to administer training and exams, a combination of the two or something different)?</p>	<p>examination training delivered by BINDT assessed and approved Authorised Qualifying Bodies (AQB), Accredited Training Organisations (ATO), Inside Agencies and Outside Agencies.</p> <p>The UK Board's control is established through a system of oversight of BINDT assessments of these organisations. BINDT is a UKAS accredited NDT personnel certification body (ISO IEC 17024), and a UKAS accredited management system (ISO IEC 17021) certification body.</p> <p>The UK aviation regulatory bodies take cognizance of the policies published by the UK NANDTB and ensure compliance during their regulatory activities within the industry.</p>
<p>Regarding specific training for filmless radiography.</p> <p>Currently the MAI documents referenced in the presentation both in Pittsburgh and London define training. We all assume this is what will go in the revised versions of NAS 410 and EN 4179, but what we don't know is if filmless will be classed as a bolt on to conventional RT or a new method.</p> <p>What the UK NANDTB's stance is on using <u>non UK based</u> training schools in the UK in cases like this.</p>	<p>To be under the control of the UK NANDTB, general training and examinations shall be provided by BINDT ATO/OA, but job/technique specific/on the job training can be provided on location in the UK or USA by competent individuals/organisations that are not BINDT ATO/OA.</p>
<p>What is the underlying authority/regulation by which NANDTB (and, subsequently, nominated Level IIIs in their own companies) can mandate any 'training, qualification and approval' for the methods beyond the 7 main methods?</p>	<p>EASA AMC145.A.30(f), gives a NANDTB the authority to mandate training, qualification and approval for methods beyond the 7 main methods.</p>
<p>What is the validity period of qualification/certification?</p>	<p>The period of certification is 5 years. Certification is valid until the end of the month in which the event began.</p> <p>Validity shall commence (date of issue of the certification) when all of the requirements for certification (training, experience, satisfactory vision test, success in examination) are fulfilled.</p>