UK National Aerospace NDT Board

The meeting was opened at 09:30 by the Chairman, Jon Biddulph, who thanked BINDT for hosting the present meeting and welcomed all those present.

1) The agenda was confirmed. Actions are summarised in the minutes and at Annex A.
2) Attendance & apologies for absence are recorded at Annex B.
3) Appointment of office holders
   a) The reappointment of Jon Biddulph as UK NANDTB Chairman, with a two year term of office ending 2013-02-15, was confirmed by unanimous vote.
   b) The reappointment of Keith Phillips as UK NANDTB Vice Chairman, with a two year term of office ending 2013-02-15, was confirmed by unanimous vote.
   c) The Appointment of John Thompson as UK NANDTB Secretary, with a two year term of office ending 2013-02-15, was confirmed by unanimous vote.
      i) The Board placed on record it’s thanks to Alex Lambie, the outgoing Secretary, for his support, and wished him well in his new position.

Action 2011/01: Secretary to update and upload the revised NAndtB/06 (Board members and appointed representatives)

4) Notes of the last meeting
   a) Acceptance of the notes of the 28th meeting was deferred pending incorporation of text to be provided by the Chairman. After incorporation of necessary corrections, the draft minutes are to be circulated to those that attended the meeting for review and approval prior to uploading as confirmed minutes.

Action 2011/02: JB to provide corrections (from his notes taken at the last meeting); JRT to incorporate and correct typographical errors to existing draft minutes, then circulate for approval by those that attended the meeting concerned.
b) Actions assigned at the last meeting

<table>
<thead>
<tr>
<th>Ref</th>
<th>Agreed action</th>
<th>Assignment</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009/18</td>
<td>Distribute Level 2 &amp; 3 Specific papers to members for comment</td>
<td>AL + members listed at 8a</td>
<td>Papers had been reviewed and returned to BINDT, and were now authorised for use in PCN aerospace examinations. Action complete.</td>
</tr>
<tr>
<td>2010/16</td>
<td>Compile initial standardised checklist &amp; process for OA/IA audits.</td>
<td>Sub group</td>
<td>Agenda item.</td>
</tr>
<tr>
<td>2010/32</td>
<td>Issue Outside Agency approval on receipt of report from NANDTB member</td>
<td>AL</td>
<td>Recorded as action complete in unconfirmed minutes of 2010-12-15 meeting.</td>
</tr>
<tr>
<td>2010/33</td>
<td>Complete list of reference standards to be used to generate specific questions</td>
<td>Sub group</td>
<td>Agenda item.</td>
</tr>
<tr>
<td>2010/35</td>
<td>Chase up confirmation on level 3 applicant (Goodrich – now withdrawn)</td>
<td>AL</td>
<td>Recorded as action complete in unconfirmed minutes of 2010-12-15 meeting.</td>
</tr>
<tr>
<td>2010/37</td>
<td>Change headers and footers on NANDTB 23</td>
<td>AC (BINDT)</td>
<td>Action complete.</td>
</tr>
<tr>
<td>2010/39</td>
<td>BINDT to create a banner for NANDTB website</td>
<td>DG (David Gilbert)</td>
<td>Agenda item at present meeting. Action complete.</td>
</tr>
<tr>
<td>2010/40</td>
<td>Board to email pictures to AC for UK NANDTB Banner</td>
<td>All Members</td>
<td>Action complete.</td>
</tr>
</tbody>
</table>

c) matters arising from the last meeting (not covered by the agenda)

i) It was confirmed that the Board’s review of PCN Specific examination papers was now completed, and the revised papers were authorised for use with immediate effect.

**Action 2011/03:** JRT to formally advise BINDT CSD that reviewed/revised papers are authorised for immediate use.

ii) There was some discussion regarding the implementation of the ‘Tumbling E’ vision test detailed in NANDTB/24 and its incorporation as a requirement in PCN CP44A. The test had been uploaded to the Board’s web space for download by users, and had proved to be a popular development. It was suggested that site visit and download counters be established for information purposes.

**Action 2011/04:** JRT to convey the wishes of the Board, that site visit and chart download counters be established, to David Gilbert.

The [Draft advisory NANDTB #5](#) (regarding examinations required following suspended certification) was presented by Colin Thomas. There was extended discussion on interpretation of the requirements in EN 4179 with regard to conditions of reinstatement following suspension of certification, versus recertification following revocation of certification.

Because the standard presently requires no examination for reinstatement of EN 4179 certification/approval after suspension, the Board considered that the standard was deficient (something was lost during revision of previous version) and it was agreed that JB would draft a new NANDTB Advisory #5 reflecting AIA interpretation of this clause (or these clauses) of the standard, circulating the draft to the Board for agreement prior to sending to Phil Keown (AIA/Nadcap) for comment within a stated timescale.

The Board did not unanimously agree to publish CT’s draft advisory on the basis that (a) it could result in organisations receiving a Nadcap NCR against the AIA interpretation and (b) members considered that full re-qualification is required when employment is terminated and the individual is employed by a new
employer. It was agreed that the draft advisory #5, subject to some further editing, be submitted by the Chairman to Phil Keown (AIA/Nadcap) for acceptance by AIA. Because the Board did not agree CT’s draft advisory #5, a new issue 1 advisory #5 needed to be drafted ASAP, confirming that the Board stood behind the AIA interpretation until it could persuade the AIA otherwise.

**Action 2011/05:** JB to draft a new NANDT Advisory #5 issue 1 and send to AIA for comment within defined timescale.

**Action 2011/06:** JB to draft a summary of new issue 1 advisory #5 for insertion into NDT News.

The question of certificates issued under other standards (e.g., EN 473, ISO 9712, etc.) was raised; could EN 4179 examination exemptions be justified in a case where a holder of one or more of these who was approved under EN 4179 by employer A in the part 145 area moved to employer B, also in the part 145 area? It was suggested that in such cases the Responsible Level 3 at employer B should, in addition to ensuring the requirements of the standard are satisfied, review the scope and status of the third party certificate concerned to ascertain that the qualification is appropriate to his NDT processes and, taking into account the work carried out for employer A, decide for himself whether further training and examinations are required (which is permitted under EN 4179). TB stated that, where this had taken place, the UK CAA would during audit ask the Nominated Level 3 to justify the decision.

Discussion turned to the question of whether it was possible to seek an interim revision (perhaps CEN might issue a corrigendum?) of the European standard, and it was pointed out that this was not feasible where identical standards were published by CEN and AIA.

5) **Membership** ([NANDTB/06 and NANDTB/03 draft rev](#))

a) The present nominees listed in NANDTB/06 were confirmed.

b) BINDT had sought voting membership of the Board, and the Secretary was asked to leave the meeting whilst this was discussed. After a period of discussion, the Secretary was asked to rejoin the meeting, and was informed that the proposed revision to NANDTB/03 and the BINDT application for Board membership were accepted on condition that JR Thompson represented BINDT at Board meetings.

**Action 2011/07:** BINDT to confirm JRT as its representative to attend meetings of the Board; JRT to amend NANDTB/03 and /06

6) **Documents for discussion/approval**

a) **Outside/Internal Agency Certificates**

The meeting discussed the form of the scope of approvals that appear on OA/IA certificates and schedules. The content of the certificate was discussed and agreed during the present meeting, and JRT was asked to draft an Annex containing a table incorporating the present PCN aerospace scopes of certification in terms of scopes of approval of OA/IA. Once agreed, all certificates are to be re-issued with scopes in the approved format and bearing the UK NANDTB logo.

**Action 2011/08:** JRT to finalise changes to OA/IA certificate and schedule, and to circulate the resulting draft to the Board for comment and approval.

b) **Outside Agency audit process and check list documentation**

A report from the sub-group was presented by BS. Following discussion, during which it was pointed out that BINDT would maintain its present system documents for recording audit findings, it was agreed that this should not prevent the auditor completing a YES/NO style checklist and associated standard approved by the Board. It was agreed that the sub-group complete and present its work to JRT for
circulation to the Board which would have 4 weeks to comment, JRT compiling
comments, before finalising and presenting to the next meeting.

**Action 2011/09:** BS to submit completed checklist to JRT for circulation to members and
comment within 4 weeks. JRT to compile comments and present at next meeting
(standard to be generated after checklist approved).

7) Review and approval of PCN examination papers

Subgroup to complete list of reference standards to be used to generate specific papers.
CT led sub-group (GMcC, JRT & CT) to progress work to completion.

**Action 2011/10:** CT to work with GMcC and JRT to complete list of applicable standards
for use in drafting PCN aerospace specific questions.

8) Control of Qualifying Agencies

a) Confirmation of capability within scope of approval
   i) It was reported that Board members had visited BINDT accredited Qualifying
      Agencies to verify that they had the capability to offer training and examinations
      within their accredited scope.
   ii) JB had visited AIT and ISA. CDo had visited Lavender’s and ARL reporting that
      the organisations had demonstrated capability to deliver training and
      examinations within scope even though the range of specimens available was
      small (the acquisition of expensive specimens had been delayed pending
      business uptake). The Board accepted the reports, made in identical format, and
      the recommendations of the presenters.
   iii) BS had visited SWS of NDT, and was visiting NDT Consultants on 17th February,
      but had not used the same format as CDo/JB, and wondered whether he should
      return to those organisations and compile a report in the same format as others.
      The Board agreed that BS did not need to revisit SWS of NDT to revise scope
      summary to the agreed format.

b) Outside agency audits – a tabulated summary report was provided, but the Board
   wished to undertake a review of OA audit detail and summary reports (which had not
   been provided for this meeting). JRT was able to project for the information of the
   meeting relevant parts of audit documentation relating to the audits of TAECO and
   SWS of NDT, and undertook to provide more detail in future.

c) At this point it was pointed out by TB that, when it applied for BINDT accreditation,
   TAECO was under the impression that BINDT Internal Agency accreditation would
   result in recognition by the UK Board; the fact that the Board has subsequently
   clarified that this is not the case for future overseas Internal/Outside Agencies should
   not result in the denial of that approval previously assumed for TAECO.

d) Reports of other OA/IA audits
   ii) 71 IR Squadron audit report and progress of corrective action;

      RAF St Athan had submitted evidence of CA at end of September 2010, but had
      received no acknowledgement or feed back. The Board held the view that this
      was an unacceptable situation.

      The Director, Certification Services (Peter Milligan) investigated this matter whilst
      the meeting was in progress, and was able to locate and provide evidence of
      acceptance of corrective action, and to confirm that 71 IR Sqn accreditation would
      be recommended and a certificate issued when the recommendation was
      confirmed. It was not anticipated that there would be any further delay in this
      matter.
e) Quality management systems requirements
   It was confirmed that the Board required Internal and Outside agencies quality
management systems to be in conformance with ISO 9001. This would need to be
reflected in the NANDTB/12 and/or BINDT accreditation of training documents.

   **Action 2011/11:** JRT to review NANDTB/12 and correct as appropriate to embody
the requirement for ISO 9001 QMS at OA/IA.

f) PCN: The AQB Audit Programme was projected, and it was agreed that this was to
be tabulated in the minutes of the present meeting.

   **Action 2011/12:** JRT to include in the minutes the PCN (aerospace) AQB audit
schedule for 2011.

g) For GR 23 Part 21 organisations, it was stated that control of examinations by
NANDTB via BINDT Internal Agency accreditation is mandatory with effect from 1\(^{st}\)
April 2011.

   **Action 2011/13:** CSD to provide a situation report on the number of applicant GR23
Part 21 organisations be provided with (or soon after the distribution of) these
minutes.

9) UK NANDTB Website (New Domain) Design
   a) David Gilbert gave a presentation showing the proposed home page style. The
meeting approved the proposed Banner, and it was agreed to establish a task group
to work with Mr. Gilbert to finalise the home page content and hyperlinks to other
pages and files.

   **Action 2011/14:** JB, KP and TB to meet with DJG to finalise new domain design and
content; DJG to offer selection of dates for ½ day meeting at BINDT, Northampton

10) Outside Agency Questions and Interpretations had been submitted by Messrs. Manson
and Lavender, and forwarded by GMC to the Secretary for consideration by the Board. It
was agreed that JB would respond to each question and circulate results to the Board for
agreement, then send responses to questioners.

   **Action 2011/15:** JB to deal with questions from TEG, inform the Board of the proposed
responses, and respond directly to questioners (Secretary’s note: a Q&A file will be
established and uploaded to the website).

11) ANDTBF
   a) The Secretary had circulated a summary report of the 23\(^{rd}\) November 2010 meeting.
There was no discussion on this topic.

   b) **ANDTBF/02** UK Board nominated representation was confirmed unchanged.

   c) The Board was asked to comment upon the development of training/examination
syllabuses under Cosac/PRI MoU for PT L1 and PT L2.

      i) The Cosac syllabuses were considered to be far too generic for an employer
based approval system, and there were unanswered questions concerning the
motives of PRI and Cosac within the MoU provided.

      ii) There was a lengthy discussion of the need for such syllabuses, and the
consensus view of those Board members present was that the UK NAndtB would
decide the syllabus adopted for PCN aerospace examinations (for which it is the
established Technical Committee), and that Outside and Internal Agencies would
devise the syllabuses for each specific employer EN 4179 2\(^{nd}\) party approvals
system.
12) Report from TEG
   a) The Co-opted TEG representative was not present at the meeting, and had not
      provided a report for the Board’s consideration.

13) Any other business
   a) Tumbling E eyesight test (NANDTB/24) issues
      i) Was there a need for a standard record chart for recording eyesight test results?
         It was noted that at least one Internal Agency had devised an appropriate record
         form, and that PCN document PSL/44A included the form for recording such
         tests.
      ii) Is there a need for a standard training pack for eyesight testing? The Chairman
          offered the use of the PowerPoint presentation that he had devised for Rolls
          Royce during the NAndtB adoption of the Tumbling E vision test.
          
          **Action 2011/16: JB** to provide for upload to the Board’s website a PowerPoint
          training presentation on use of ‘Tumbling E’ vision tests.

      iii) Is a calibrated device for checking test chart dimension necessary? No
      iv) Is the eye to Chart Distance of 400 mm correct? Yes
      v) Does this requirement apply only to UK aerospace company examinees? Yes,
         only those companies with EN 4179 qualification examinations that are under the
         control of the UK Board are required by the Board to adopt this vision test.

   b) Thermal Inspection/Thermography.
      TB spoke of an Infra-red technique using thermo-reactive paper. BS suggested that
      this may not be accepted as an NDT Technique, and that the only training necessary
      was viewing of a training video. Test interpretation is, he said, carried out remote from
      the inspection site. TB asked the Board for an opinion on whether this was an
      inspection technique (with training and experience not in accordance with EN4179),
      or a non-destructive test (IRT in the standard)?
      
      The consensus view of the Board was that the test described should be considered
      IRT and that qualification should be in accordance with EN 4179. TB said that the
      CAA would promulgate this ruling.

   c) **Application for Affiliation** from Slovenia
      i) The application for Slovenian Airworthiness Authority affiliation with the UK
         NANDTB was accepted, with the proviso that examinations that were to be
         controlled by the UK Board were administered by UK NANDTB recognised*
         BINDT Accredited Outside Agencies (*ordinarily, the Board recognises only UK
         based organisations).
      ii) The applicant was to be advised of the acceptance of the application, and that
          being affiliated to the UK NANDTB required conformance to UK **CAA GR23**.
          
          **Action 2011/17: JRT** to notify the Slovenian NAA that affiliation to the UK
          NANDTB was granted in accordance with **NANDTB/21**, the conditions of which
          are to be conveyed to the applicant.

14) Date and location of:
   a) the 30th meeting of the UK NANDTB was agreed to take place on 4th May 2011, at
      Aviation House (CAA), Gatwick Airport.
   b) subsequent meetings to the end of 2011:
      16th June 2011, Bombardier, Belfast  
      14th October 2011, MTD, London  
      7th September 2011, Caparo, Reigate  
      1st December 2011, Messier Dowty, Gloucester
### Annex B – Actions assigned at the 29th UK NANDTB meeting

<table>
<thead>
<tr>
<th>Ref</th>
<th>Agreed action</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/01</td>
<td>JRT to update and upload the revised NANDT/06 (Board members and appointed representatives)</td>
<td>Updated 2011-03-01</td>
</tr>
<tr>
<td>2011/02</td>
<td>JB to provide corrections (from his notes taken at the last meeting); JRT to incorporate and correct typographical errors to existing draft minutes, then circulate for approval by those that attended the meeting concerned.</td>
<td>Completed and distributed 2011-02-28</td>
</tr>
<tr>
<td>2011/03</td>
<td>JRT to formally advise BINDT CSD that reviewed/revised papers are authorised for immediate use.</td>
<td>Completed with e-mail to NLS 2011-03-01. Afternote: aerospace papers &amp; questions now undergoing further internal review.</td>
</tr>
<tr>
<td>2011/04</td>
<td>JRT to convey the wishes of the Board, that site visit and chart download counters be established, to David Gilbert.</td>
<td>Completed with e-mail to DJG 2011-03-01; received response with attached statistics; relayed to Board</td>
</tr>
<tr>
<td>2011/05</td>
<td>JB to draft a new NANDT Advisory #5 and send to AIA for comment within defined timescale.</td>
<td>new NANDT Advisory #5 distributed for comments April 2011 (see 30th agenda item)</td>
</tr>
<tr>
<td>2011/06</td>
<td>JB to draft a summary of new issue 1 advisory #5 for insertion into NDT News.</td>
<td>Secretary’s note: since Advisory #5 is only one page, a summary is not thought necessary. Suggest insert whole advisory.</td>
</tr>
<tr>
<td>2011/07</td>
<td>BINDT to nominate JRT as its representative to attend meetings of the Board; JRT to amend NANDT/03 and /06.</td>
<td>NANDT/03 and /06 updated 2011-03-01 to reflect wishes of the Board.</td>
</tr>
<tr>
<td>2011/08</td>
<td>JRT to finalise changes to OAI/A certificate and schedule, and to circulate the resulting draft to the Board for comment and approval (see also Excel version).</td>
<td>Distributed drafts by email 2011-03-07; only comments received as at 2011-05-03 from David Griffin.</td>
</tr>
<tr>
<td>2011/09</td>
<td>BS to submit completed checklist to JRT for circulation to members and comment within 4 weeks. JRT to compile comments and present at next meeting (standard to be generated after checklist approved).</td>
<td>Draft circulated. No comments received as at 2011-05-03. Agenda item at 30th meeting.</td>
</tr>
<tr>
<td>2011/10</td>
<td>CT to work with GMcC and JRT to complete list of applicable standards for use in drafting PCN aerospace specific questions.</td>
<td>Sent e-mail with list of standards 2011-03-01; received alternative (improved) list by return</td>
</tr>
<tr>
<td>2011/11</td>
<td>JRT to review NANDT/12 and correct as appropriate to embody the requirement for ISO 9001 QMS at OA/IA.</td>
<td>Revised NANDT/12 on 2011-03-07 ready for upload.</td>
</tr>
<tr>
<td>2011/12</td>
<td>JRT to include in the minutes the PCN (aerospace) AQB audit schedule for 2011.</td>
<td>Completed. See secretary’s note: Annex C</td>
</tr>
<tr>
<td>2011/13</td>
<td>BINDT CSD to provide a situation report on the number of applicant GR23 Part 21 organisations be provided with (or soon after the distribution of) these minutes.</td>
<td>e-mail request to Amy 2011-03-07 and 2011-04-01 (covered by 30th agenda item)</td>
</tr>
<tr>
<td>2011/14</td>
<td>JB, KP and TB to meet with DJG to finalise new domain design and content; DJG to offer selection of dates for ½ day meeting at BINDT, Northampton</td>
<td>e-mail reminder 2011-03-01. DJG reported to JRT that a productive meeting had taken place early April.</td>
</tr>
<tr>
<td>2011/15</td>
<td>JB to deal with questions from TEG, inform the Board of the proposed responses, and respond directly to questioners.</td>
<td>Draft FAQ provided by JB and distributed by JRT 2011-04-19 for review and comment by members. None received as at 2011-05-03.</td>
</tr>
<tr>
<td>2011/16</td>
<td>JB to provide for upload to the Board’s website a PowerPoint training presentation on use of ‘Tumbling E’ vision tests.</td>
<td>Carried forward</td>
</tr>
<tr>
<td>2011/17</td>
<td>JRT to notify the Slovenian NAA that affiliation to the UK NANDTB was granted in accordance with NANDT/21, the conditions of which are to be conveyed to the applicant.</td>
<td>Completed 2011-03-07.</td>
</tr>
</tbody>
</table>
### Annex B - attendance and apologies for absence

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Representative</th>
<th>Attendance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agusta Westland</td>
<td>Berkeley, Phil</td>
<td>YES</td>
</tr>
<tr>
<td>Airbus UK</td>
<td>Phillips, Keith</td>
<td>YES</td>
</tr>
<tr>
<td>Airbus UK</td>
<td>Williams, Alun</td>
<td>APOLOGIES</td>
</tr>
<tr>
<td>BAE Systems</td>
<td>Dootson, Chris (CDo)</td>
<td>YES</td>
</tr>
<tr>
<td>BINDT</td>
<td>Lambie, Alexander (Secretary/co-opted)</td>
<td>APOLOGIES</td>
</tr>
<tr>
<td>Bombardier</td>
<td>Scott, Bobby</td>
<td>YES</td>
</tr>
<tr>
<td>British Airways</td>
<td>Worral, Clive</td>
<td>YES</td>
</tr>
<tr>
<td>CAA observer</td>
<td>Lawrence, Chris (observer)</td>
<td>YES</td>
</tr>
<tr>
<td>CAA observer</td>
<td>Ted Blacklay (observer)</td>
<td>YES</td>
</tr>
<tr>
<td>Honeywell</td>
<td>Gane, Stanley</td>
<td>YES</td>
</tr>
<tr>
<td>Messier Dowty</td>
<td>Thomas, Colin</td>
<td>YES</td>
</tr>
<tr>
<td>Messier Dowty</td>
<td>Durrant, Chris (CDu)</td>
<td>YES</td>
</tr>
<tr>
<td>OA co-optee</td>
<td>McCully, Graham (co-opted)</td>
<td>YES</td>
</tr>
<tr>
<td>Rolls Royce</td>
<td>Biddulph, Jon (Chair)</td>
<td>YES</td>
</tr>
<tr>
<td>TEG</td>
<td>Griffin, David (co-opted)</td>
<td>APOLOGIES</td>
</tr>
<tr>
<td>MOD</td>
<td>Purcell John (Observer)</td>
<td>YES</td>
</tr>
<tr>
<td>BINDT</td>
<td>John Thompson (status to be confirmed)</td>
<td>YES</td>
</tr>
<tr>
<td>BINDT</td>
<td>David Gilbert, Director, BINDT</td>
<td></td>
</tr>
</tbody>
</table>

Joined for part of meeting dealing with website
Annex C – AQB audit schedule (aerospace only)

<table>
<thead>
<tr>
<th>AQB/YR</th>
<th>Cert Expiry</th>
<th>2010</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AIT (Norwich)</strong></td>
<td>09/02/2012</td>
<td>21st Jan (S) Lambie</td>
<td>March (S) Milligan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SWS (Singapore)</strong></td>
<td>21/03/2011</td>
<td>22nd Feb (S) Lambie</td>
<td>Feb (R) Milligan</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SWS of NDT (Wales)</strong></td>
<td>23/10/2011</td>
<td>23rd Sep (S) Lambie</td>
<td>Sept (R) Milligan</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>TWI (Cambridge)</strong></td>
<td>05/11/2011</td>
<td>Nov (S) Lambie Postponed to 11th Jan 2011 (S) BL</td>
<td>Nov (R) Milligan</td>
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</tbody>
</table>