



INTERNATIONAL COMMITTEE FOR
NON-DESTRUCTIVE TESTING

The World Organisation for NDT

**Minutes of a meeting of
ICNDT Working Group 1: Qualification and Certification**

Monday, 5 June 2017

Vienna, Austria (alongside Certification Conference 2017)

Participants - Members

Alexander Mullin (Chair)
Keith Arcus
Gerhard Aufricht
Sajeesh Kumar Babu
Nicole Banks
Arny Bereson
André Charbonnier
Ralf Holstein
Harold Jansen
Kyung-Cho Kim
Peter Milligan
Matthias Purschke
Vitali Radko
Rodolfo Rodríguez
João Rufino Teles Filho
Kevin Smith
Goran Sofronić
Pui Kei Yuen

Observers

Mike Farley (ICNDT Chairman)
David Bajula (ASNT)
Sean Blake (SAIW)
David Gilbert (ICNDT Secretariat)
Paul Grosser (AINDT)
Nelia Tymoshenko (Ukraine)
Tony Wooldridge (ICEC Secretary)

Apologies

Sharon Bond (Canada)
P Brisset (IAEA)
Patrick Fallouey (Honorary Member)
Mirmajid Ghaemi (Member)
Cemil Hakan Gur (Member)
Jingyuan Ji (Member)
Gerald Idinger (Member)
Norikazu Ooka (Member)
Bjørn Pederson (Member)

1. Welcome and apologies

The Chairman opened the meeting and welcomed all members and observers. He thanked The Austrian Society for hosting the meeting. Mr Aufricht responded by welcoming all and noted it was a public holiday in Austria.

Introductions were given around the table. Mr Arcus was welcomed as a new member.

The Chairman declared that a quorum was achieved.

2. Approval of Agenda

The Chairman stated that the Agenda had been circulated prior to the meeting. He noted that item no. 7: Substitution of renewal by recertification would be carried over to the next meeting. He also drew attention to item no. 11: Interpretation of Table D1 of ISO 9712: 2012, which would be presented by Mrs Banks. The Agenda was approved.

3. Approval of Minutes of the previous meeting

The minutes of the meeting held on 11 June 2014 in Munich, Germany, had been circulated.

The minutes were approved.

Actions arising:

Action Ref. No. WG1/2015-10-30/..	Desc.	WHO	STATUS/COMPLETE BY
1	Send reminder to those requiring re-appointment to Group	AM	Prior to 4-year anniversary of appointment (April 2016).
3	Update directory of PCBs	SKB/DJG	Ongoing.
8	Guideline for administering practical examinations	SKB	Ref. Agenda.
10	Consider suggestion re: TR25107 vs. CP105	AM	S Bond to work with WG1 on this.
11	Renewal by recertification	RH	Next meeting.
15	Continue work on discussion paper for Roles & Responsibilities	AM	Ref. Agenda.

Action Ref No WG1/2016-11-06/..	Desc.	WHO	STATUS/COMPLETED BY
2.	Forward a copy of the draft standard EN 16729 to Mr Mullin for review	RR	Complete

Action Ref No WG1/2016-11-06/..	Desc.	WHO	STATUS/COMPLETED BY
3.	New methods should meet ISO 9712	AM	Complete.
4.	Create a sub committee group to discuss Roles & Responsibilities of PCBs, AQB's and AECs further	RH	Ref. Agenda.
5.	Next update of ICNDT Guide for APCNDT 2017?	AM	Next IEC.
6.	Consider Risks and Opportunities	IEC	Next IEC.
7.	Consider interpretation of requirements for work experience.	IEC	Ref. Agenda.
8.	Update spreadsheet on PCBs and how they meet standards, esp. 9712.	AM	Complete.

4. WG1 membership

The Chairman tabled the list of members. He also reiterated the terms of reference:

All WG1 members are appointed for a period of four years and are eligible for re-appointment. In case of re-appointment ICNDT Member shall confirm support of its nominee.

The only change since the last meeting was the addition of Mr Arcus. There were currently 21 members and it was noted that the objective to have worldwide representation was being achieved. There was no change in the number of observers.

Members were requested to confirm their nomination by the date shown on the record sheet.

5. Action Plan

The Chairman proceeded to go through the Action Plan step-by-step.

Referring to the Action Plan:

X1 (Review of action plan) is an ongoing task without deadlines.

X2 (Review Terms of Reference): covered by item (4) above.

X3 (Reviewing and refresh membership): covered by item (4) above.

A1. Lines of communication with regional Groupings

Reports were received from the Regional Groups/Federations and presented during the meeting by Harold Jansen (Africa), P Milligan and S K Babu (Asia Pacific), P K Yuen and João Rufino Teles Filho (Pan America), R Rodriguez and Dr M Purschke (EFNDT).

A2. Liaison:

- a) ISO TC135 SC7 (Revision of training guidelines). Ref. Agenda item.
- b) IAF: nothing new to report.
- c) ASME: nothing new to report.
- d) IAEA. Regional projects underway in South Africa, Malaysia and Eastern Europe. Discussions continuing regarding e-learning.

A7. Website: On-going development – Regional reports were good material.

A8. EN ISO 9712: Work in progress.

A9. Gap analysis: Ongoing.

A10. ASNT: Ongoing.

A11: ICNDT WG6: P Milligan.

B1. ICNDT Guide: Complete.

B3. EQB: OP23.

B4. Standards: Complete. Mr Mullin had created and updated.

B5. Renewal by certification: Ref Singapore.

B6. Clarification of roles & responsibilities: Ref. Agenda.

B7. Human factors: International Specialist Group to be developed.

B8 - B19: Ref. Agenda.

The updated Action Plan was approved.

6. Revision of ISO 9712: 2012

Sharon Bond, Chair of ISO TC 135 SC7, had reported that the ballot for proposals to undertake a review of ISO 9712: 2012 closes on 4 September 2017. The options were to either a) accept the current Standard and make no changes, or b) propose a revision and provide qualified comments as to the reasons. Results of the relevant voting would be discussed at ACPNDT in Singapore in November. A CEN meeting to discuss this would be held sooner. WG1 had produced a questionnaire and detailed response had been received from SAIW (for which H Jansen was thanked).

The response from Germany was summarised as follows:

- The employer responsibilities need to be clearly defined and strengthened. In particular the responsibility for a sufficient industrial experience of NDT personnel should be with the employer.
- Recertification of Level 3 personnel should return to the regulation of the former European standard EN 473.

- Training hours for RT and UT Level 1 should return to the regulation of the former European standard EN 473. The currently required 40 hours is insufficient for the syllabus.
- A (simplified) recertification instead of the formal renewal process after 5 years.

Other points were that e-learning should be included; we should work towards a paperless certificate; and calibration and system checks should be introduced.

Several other comments were made. Mr Mullin summarised these and proposed to send to SC7 with a recommendation that the Standard should be revised.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
1	Send WG1 recommendations for 9712 revision to ISO/TC 135 SC7	AM	ASAP.

7. Renewal by recertification

As stated above, discussion on this topic was deferred until the next meeting.

8. Roles and responsibilities of CBs, AQB's and Examination Centres

Mr Mullin had produced a draft document for discussion. There are three scenarios:

Scenario 1: Certification Body including Examination Centre

Scenario 2: Certification Body - approved remote Examination Centre

Scenario 3: Certification Body - Authorised Qualification Body - Examination Centre

Those assembled requested more time to consider the document before discussion. In particular the terminology needed to be carefully assessed and made consistent. It was agreed to postpone further discussion until the next meeting.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
2	Consider draft document on Roles & Responsibilities for next meeting	ALL	Next meeting.

9. Job-specific training and certification

Mr Jansen introduced the subject and referred to ISO 9712. Industrial experience is talked about in the Standard but no structure is defined. Mr Jansen feels that true harmonisation under ISO 9712 is difficult to attain due to the lack of guidance/structure/responsible entities, and the flexible interpretation of the term 'Industrial Experience'.

National (South Africa) survey was conducted based on a questionnaire and interaction with relevant company responsible Level 3's. Feedback was received from eight of the largest service providers in South Africa.

Based on the initial national survey, it is clear that guidance regarding the industrial experience required, as part of personnel qualification and certification; resulting in company authorisation, is required.

Recommendations to come out of the work are:

- Distribute a modified questionnaire to WG1 members and request input from relevant service providers within their countries.

Parallel to abovementioned:

- Compile a draft document qualifying the various sector and method based competencies and quantifying the technique specific outcomes required in order to achieve relevant company authorisation/certification (In collaboration with ASNT, ANDE & ISO).

These recommendations would be given further consideration.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
3	Consider draft document on Job-specific training & certification for next meeting	ALL	Next meeting.

10. Experience requirements of ISO 9712: 2012

Mr Milligan introduced the subject and once again referred to ISO 9712 and that in it industrial experience is unclear. It was felt that either the Standard should give clear definitions and guidance, or the subject should be removed from it altogether and the responsibility given to the employer (as suggested by R Holstein/Germany).

The point was made that, even if taken out of the Standard, employers will still require guidance.

Mr Mullin requested AINDT to continue with its work in this area and if possible produce some recommendations for WG1 to consider.

Action Ref. No. WG1/2017-06-05/..	Desc.	WHO	STATUS/COMPLETE BY
4	AINDT to continue work on definitions and guidance on industrial experience	KA/PM	Make recommendations when ready.

11. Interpretation of Table D1 in ISO 9712: 2012

Mrs Banks introduced the subject and stated that guidance was required on the application of the headings in the Table. She referred to PCN document CP22.

It was proposed that work should continue and a recommendation be produced for the interpretation of Table D1 for different methods.

Mr Grosser made the point that ISO 9712 makes no reference to false calls.

Action Ref. No. WG1/2017-06-05/..	Desc.	WHO	STATUS/COMPLETE BY
5	Work to continue on interpretation of Table D1	NB	Make recommendations when ready.

12. Grading of practical examinations

Mr Mullin suggested that a recommendation be drafted, beginning with one method.

Action Ref. No. WG1/2017-06-05/..	Desc.	WHO	STATUS/COMPLETE BY
6	Work to continue on grading of practical exams	AM	Make recommendations when ready.

13. Risk analysis - harmonisation

Mr P K Yuen introduced the subject and presented the background, including Canada's system and perspectives. He suggested that an analysis of risks and opportunities should be undertaken involving a strategic approach:

- Short, medium and long-term considerations
- Quality Management model (ref ISO 9001:2015): «Planning to address Risks & Opportunities»
- Engineering approach – similar to FMEA

He said it was necessary to analyse and review PCBs' pathways, roles and behaviours, and also consider societies, AQB, AECs, training centres, regulators and end-users.

He looked at the current challenges and considerations and outlined what he felt the next steps should be:

- Mutual Recognition: Credible, Controlled and Sustainable for All-Involved
 - Plan for future technologies and rapidly evolving landscape
 - Virtual / online training and exams environment
 - Remote centres / organizations
 - Rapid growth + international trade and mobility
 - Alternatives / competing options

- Agreements (like any partnership ... or marriage ... =))
 - Develop and agree on desired outcomes long-term: everyone on same page
 - Set expectations and boundaries: put in appropriate controls
 - Carry-out, execute and fine-tune: details, details, details ...

In conclusion, P K Yuen believes that ICNDT WG1 has the great opportunity and responsibility to shape the present and future of NDT certification internationally!

- Develop specific framework and protocols through continued collaboration
- Detailed analysis of cause and effects of MRA, be proactive to properly anticipate → mitigate risks and leverage opportunities.

Dr Farley encouraged all group members to consider and comment on the presentation and recommendations contained in it. P K Yuen was encouraged to continue with the work.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
7	Work to continue on Risk & Opportunity Analysis	PKY	Make further recommendations when ready.

14. Training and certification in NDT in Civil Engineering

A questionnaire had been issued to gauge interest but response was poor and it was felt that another one should be issued and the results evaluated before further discussion.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
8	Issue questionnaire to gauge interest in training and cert in Civil Engineering NDT	AM	ASAP.

15. NDT societies' assessment of employer-based certification

Mr Mullin introduced the subject, which was based on a suggestion from Mr Cameron Sinclair from BINDT, whereby it was proposed that national societies could audit employers' certification systems, in accordance with ICNDT specifications and requirements. It was suggested that a register would be kept of audit results, etc.

There was some discussion and support and it was understood that ASNT were considering such a scheme.

Mr Mullin proposed to continue work in this area and if possible produce some recommendations for WG1 to consider.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
9	Work to continue on NDT societies' assessment of employer-based certification	AM	Make further recommendations when ready.

16. Expert group to oversee inspection qualification activities

A questionnaire had been issued to gauge interest but it was felt that this was too general and it was suggested that another one should be issued and the results evaluated before further discussion.

Dr Farley felt that accreditation of inspection bodies and laboratories was an interesting aspect that ought to be included.

Mr Babu offered to circulate relevant documents.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
10	Work to continue on inspection qualification bodies and docs to be circulated	AM/SKB	Make further recommendations when ready.

17. ICNDT certificates based on MRA Schedule 2 bodies

This was an action that had come from the ICNDT Executive Committee, requesting the Group to consider whether ICNDT certificates could be issued for bodies signatory to the MRA Schedule 2.

After some discussion it was decided to vote. The question put was: 'Does the Working Group wish to take the proposal forward or not?'

The result of the ballot was:

In Favour - to take forward - 5
Against - not to take forward - 8
Abstentions - 1

It was therefore agreed to remove the topic from the Action Plan.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-06-05/..			
11	Remove item on ICNDT certificates from Action Plan	AM/SKB	ASAP.

18. Report on the work of the ICEC

Mr Wooldridge presented the report on the work of the ICEC (appended).

19. Any other business

There was no further business.

20. Date and place of next meeting

The options for the next physical meeting of WG1 are:

1. 15 November 2017, alongside the Asia Pacific Conference in Singapore.
2. June 2018, alongside the European Conference in Gothenburg, Sweden.

Following due consideration it was agreed to go for Option (1):

15 November 2017, alongside the Asia Pacific Conference in Singapore.

The Chairman thanked all for their participation and closed the meeting.