ICNDT
The World Organisation for NDT

Notes of a Workshop on Harmonisation of third-party NDT Personnel Certification to ISO9712 and aligned standards

17th WCNDT, Shanghai - Monday 27 October 2008

Agenda

The Workshop, lead by international panels of experts, explored the following questions and was intended to deliver recommendations to Standards Committees and Certification bodies.

1. What do industry, regulators, and NDT personnel need from third-party certification schemes?
2. What are the key differences between ISO9712 and CP106, and ISO 9712 and EN 473? Why do they exist? Are they really important?
3. How can these differences be resolved? By choosing a preferred alternative, by compromise, or by allowing options?
4. Recommendations
5. ICNDT Guide

1. What do industry, regulators, NDT personnel need from third-party certification schemes?

JMF: gave an opening PowerPoint presentation.

WH: The model described in your presentation is excellent. Have you found this type of model accepted elsewhere in industry?

JMF: Yes, this model essentially embodies the methodology promulgated within the framework of the two 3rd party standards, i.e., emphasising the responsibility of the employer in terms of job-specific training, qualification and authorisation.

GN: In ICNDT Guide chapter 6, it is very clear, and JMF's presentation reflects the Guide. We need to comply with ASME and, with the increased emphasis on the role of the employer within a written practice, there is good convergence of 2nd and 3rd party approaches.

WH: And describing the roles and responsibliities in the form of JMF's diagram is helpful.

J Macc: But realise that the JMF model is not widely available, and would not necessarily be recognised all around world – particulary in the Far East and Africa.

JZ: stated that he had around 35 years experience in ISI in Canada, and had been involved in the initial development and two revisions of 9712. His company employs ~2500 certificated technicians, 50% hold 2nd party, and 50% 3rd party through CGSB and PCN, and the company is dovetailing the 2nd and 3rd party approaches.

JZ went on to state that we need to impart sense of urgency – there is a growing shortage of NDT certificated personnel. We are using more advanced NDT on complex fabrications, and my company currently has 400 unfilled jobs for RT, UT and VT levels 2, and RT assistants. An ISI company needs to be credible; it needs a credible program in order to prove competence to clients.

There is a need to prove satisfactory completion of qualification examinations, which are the primary demonstration of competence. People have different learning rates, we cannot sensibly apply subjective criteria of training and experience duration – these are intangible. Portability of qualifications is vital. We need to use foreign qualified workers, and have the certificates of Canadian qualified inspectors accepted

wherever they are working. Certification schemes need to be responsive to new technologies. Development periods of 5 – 10 years are no good. We also need an economic system for recertification; this is problematic in Canada for geographical reasons.

Y Shoef: There are significant differences between 2nd and 3rd party approaches to certification. How can you combine them?

JMF: We refer to TC-1A only in the context of proper use of 3rd party certification. We are not covering this today.

Malaysian Society: Appreciate hard work behind the ICNDT guide. The situation is very confusing for employers because there are so many referenced documents System to be used under responsibility of employers. Those in Europe and USA may understand all of this, but those in Asia and Africa are all confused. We need only one standard.

JMF: The ICNDT Guide sets out to describe the status quo. Examples of problem: there are four different Training syllabusses.

Jim G: refering to JMF comments on PCN meeting 9712 and 473, but industry wishes that the two were combined.

JMF: ICNDT, APCNDT and EFNDT had written to the CEN and ISO Chairmen asking for a single standard.

WH: What are the possibilities of portability and what is the employer's role in this?

JZ: Cannot presently send techs around the world without putting them through local CBs.

RN: doing NDT since 1960, when there was no central certification until the ASNT L3 programme. Still exists. In meantime, programmes popular in USA are 2nd party. Disadvantage is lack of central examination bank. RN: Another disadvantage is need for new exams on each change of employer. This is an advantage of 3rd party. How does industry see 3rd party? Needs competent NDT personnel, but attempts to install 3rd party have stalled, except for Performance Demonstration in critical applications. System evolving. Why CP106? Standards development committee charged by ASNT Board with development of standard alligned with 9712 – ended up with deviations due to differing national opinions.

DB: Overview – IAEA/RCA agreement. 18,000 'trained' to 9712 in Indonesia over past few years. Keen to have a certification system to satisfy Russian requirements and in accordance with 9712. Shortage of techs; require mobility. Philippines, 75% certified every year emigrate to get better paid jobs. Most NDT in SE Asia use TC 1A. Australia and New Zealand use of 9712. Malaysia Institute adopting 9712 and will launch scheme next year. Goods manufactured and tested will be to 9712,. Only top end of industry who specify what personnal qualifications are required. Majority use a 2nd party system; dont work to specs.

YY (Malaysia): Those countries that have a good 2nd party qualification system today are willing to move to adopt ISO 9712; He propose that we all keep an open mind: all systems are good until abused. We have over 100 countries using mainly 2nd party systems and what we need is external audit of such systems..

2. What are the key differences between CP106, ISO 9712 and EN 473.

JRT presented a review of the key differences between CP 106, ISO 9712 and EN 473 culminating with recommendation to form a joint TC135/TC138 WG to produce a guide on conformity assessment using the Europwean and International standards.

3. How can the differences be resolved?

There was an extensive discussion on options which included 1. acceptance of differences (pragmatism), 2. eradication of differences (combining standards into one).

RL: mutual recognition will of necessity represent the Lowest Common Denominator. From a UK perspective, the minimum is not high enough. In the UK we are having to top up even PCN with job specific training and qualification before issuing authorisation to work.

JMF: EN 473 has increased training duration, whilst CP 106 has decreased it. Why?

DM: Differences in training hours hardly matter; the examination is the arbiter of competence.

DB: Yes, the practical exam is most important to the power industry. More specifics should be incorporated into the 3rd party standards.

MJ: The TC-1A Written Practice is often misunderstood and abused. There is no certification in TC-1A, the owner of the plant and the employee will agree the qualification and approval. PANI 2 recognised the role of the employer and plant owner. We needs to revise ISO 9712; Very few L1 Certifications are issued? Why? Because they always have to work under supervision of L2.

LD: We are using TC-1A and we are also involved in 9712 exams. The Asia Pacific MRA requires recognised parties at all levels of the certification system. He denied that the MRA resulted in adoption of the Lowest Common Denominator.

JMF: summarised JRT's presentation. Lots of detailed differences, none of which would prevent the implementation of a MRA. It would not be easy to resolve the multiplicity of training syllabuses. The IAEA syllabus out of date. EN 473 references TR 25107, and CP106 refers to CP 105, both of which are current. We need one common syllabus; not four separate syllabuses. JMF felt that all of those present appeared to sympathise with the view that training durations are of secondary importance.

MK: The most important question is the content and difficulty of the written examination; he proposed a common bank of questions.

4. Recommendations to Standards Committees, Certification Bodies and Users of third-party certification

TS: Noted that the out of sequence review of the two 3rd party standards leads to them to differ. ISO 9712 is due for review again next year, and we need to apply a joint review process.

HH: Concerning the proposed initiative for ISO and CEN to form joint WG: this has already been highlighted by JRT. During Cert 2007, AK prposed Joint WG under TC 138 control. It had been planned to discuss this in plenary TC 135, but AK had been unable to attend the Agentina meeting. Sunbsequently, this was discussed by HH with AK and the CEN TC138 Secretary. At this point, ISO document N334 was tabled.

JMF: summarised the recommendations:

TC135, in response to TC138 proposal, is discussing a joint WG and will ask for a vote of TC135 members on the formation of such a WG. Does the meeting support this formation? A show of hands confirmed 33 representatives present in support.

JZ: Did not support this resolution, yet another WG is the last thing we need. There are no irreconcilable differences between TC135/TC138 – ISO 9712/EN 473. He suggested the submission of EN 473 to TC 135 as a draft for the next ISO 9712 (4th edition).

JMF presented a slide, proposing that it be recorded that ICNDT WG1 had met and a summary of the views expressed be submitted to a TC135/TC138 Joint WG, which will be asked to incude the involvement of a representative of ICNDT (JMF?).

WH: Proposed submitting these comments and proposals to TC135 & TC138 Chairmen

JZ: Should ICNDT offer to chair the JWG (being neutral)?

DM: Maybe there are alternative proposals? We already offered to host such meetings but now need agreed resolutions.

JMF: in response to a question from YY, stated that the reason for the continued existence of EN 473 is related to regulations that embody it as a harmonised standard.

Hatano: Europeans can explain their reasons for retaining EN 473 to ISO TC135, and these can be incorporated into the new ISO 9712 standard.

JMF: Concluded with a summary of the views to be expressed to the chairs of 135/138, and agreed to discuss within ICNDT the proposal for appointnment of neutral chair.

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New topic: ICNDT Guide

This Guide as a whole needs to be approved for wider publication, and section 7 (recommendations) needs to be discussed today.

The General Assembly had agreed process for agreement on Section 7, which was to invite email comment by 31 December 2008 on whole document and on S7 in particular (a revised section 7 to be circulated after the present meeting), inviting proposals and comments which will be considered. JMF presented a breakdown of the draft recommendations Section 7, and a number of changes were made to the draft.

MEG: Is there equality in accreditation? It seems essential to use accredited certification, but recognising that the IAF MLA is not yet in force, the accreditation process may differ. There is no standard requiring accreditation (it is voluntary), but this requirement was embodied in the recommendations anyway (was this the consensus of the meeting?)

LD: On collaboration on MLAs: it may be possible to share auditors.

WH: Re MRAs,this is at an exploratory stage. The wording assumes an outcome. Would like different words that did not direct specific outcomes.

MJ: suggested that the Guide document, excluding Section 7 if necessary, should be published ASAP.

JMF: indicated some small changes also necessary in Sections 1-6 following discussion at the PGP.

DM: proposed a list of acronyms.

Prof H Hatano: we owe much to ICNDT production of guidelines etc., and we look forward to future support and cooperation.

JMF: thanked all present, including the panel members, and Prof. Hatano.

DM: this was a good meeting; we must capture it and disseminate the discussion on the ICNDT website.

The meeting was closed at 11:55 hrs, Monday 27th October 2008.

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ICNDT Workshop attendance on Monday 27th October 2008.

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Garcia, alfonso	IMENDE	Mexico
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Holliday, Wayne	ASNT	USA
Johannes, Manfred	SAINDT	South Africa
Katoh, Mitsuaki	JSNDI	Japan
Klyuev, Vladimir	RSNDT	Russia
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