



INTERNATIONAL COMMITTEE FOR  
NON-DESTRUCTIVE TESTING

*The World Organisation for NDT*

**Minutes of a meeting of  
ICNDT Working Group 1: Qualification and Certification  
Wednesday 15 November 2017**

**Singapore**

**Participants - Members**

Alexander Mullin (Chair)  
Keith Arcus  
Sajeesh Kumar Babu  
Arny Bereson  
Sharon Bond  
Mirmajid Ghaemi  
Ralf Holstein  
Gerald Idinger  
Jingyuan Ji  
Kyung-Cho Kim  
John Moody  
Bjørn Pedersen  
Norikazu Ooka  
Shohei Ooka  
Vitaly Radko  
Helle H Rasmussen  
Rodolfo Rodriguez  
Kevin Smith

**Observers**

Dave Bajula	ASNT
Juin-Fu Chai	SNTCT
Chih-Huang Chiang	SNTCT
Terry Clausing	ASNT
Mike Farley	Past Chairman ICNDT
David Gilbert	General Secretary ICNDT
Paul Grosser	AINDT
Diwakar D Joshi	Indian Society for NDT
Dr Andrew Malcolm	NDT Society (Singapore)
Peter Milligan	Australian Institute for NDT
Robert Skwirut	Government Canada NRCAN
Vladimir Syasko	Russian Society for NDT

**Apologies**

Nicole Banks	(John Moody stood in)
André Charbonnier	(Member)
Cemil Hakan Gur	(Member)
Harold Jansen	(Member)
Goran Sofroniç	(Member)
Pui Kei Yuen	(Member)



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### 1. Welcome & Introductions

The Chair opened the meeting and welcomed all members and observers. He thanked the Singapore Society for hosting the event.

Introductions were given around the table and apologies were received as above.

The Chair declared that a quorum was achieved.

### 2. Adoption of the Agenda

The Agenda was approved.

### 3. Approval of Minutes of the previous meeting

The minutes of the meeting held on 5 June 2017 in Vienna were approved.

Action arising:

Action Ref. No. WG1/2015-10-30/..	Desc.	WHO	STATUS/COMPLETE BY
1.	Send reminder to those requiring re-appointment to Group	AM	Complete Reminder has been sent.
3.	Update directory of PCBs	SKB/DJG	Ongoing.
8.	Guideline for administering practical examinations	SKB	Complete.
10.	Consider suggestion re: TR25107 vs. CP105	AM	Ongoing.
11.	Renewal by certification	AM	Complete Discussed during meeting.
15.	Continue work on discussion paper for Roles & Responsibilities	AM	Complete Covered on the agenda.

Action Ref. No. WG1/2016-11-06/..	Desc.	WHO	STATUS/COMPLETE BY
4.	Create a sub committee group to discuss Roles & Responsibilities of PCBs, AQB's and AEC's further	RH	Complete Covered on the agenda.
5.	Next update of ICNDT Guide for APCNDT 2017?	AM	Ongoing Next IEC.



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6.	Consider Risks and Opportunities	IEC	Ongoing Awaiting input from P K Yuen.
7.	Consider interpretation of requirements for work experience	IEC	Ongoing. Ref next meeting.

Action Ref. No. WG1/2017-06-05/..	Desc.	WHO	STATUS/COMPLETE BY
1.	Send WG1 recommendations for 9712 revision to ISO/TC 135 SC7	AM	Complete.
2.	Consider draft document on Roles & Responsibilities for next meeting	ALL	Complete.
3.	Consider draft document on Job-specific training & certification for next meeting	HJ	Ongoing.
4.	AINDT to continue work on definitions and guidance on industrial experience	KA/PM	Ongoing although some progress has been made.
5.	Work to continue on interpretation of Table D1	NB/JM	Covered on the agenda.
6.	Work to continue on grading of practical exams	AM	Covered on the agenda.
8.	Issue questionnaire to gauge interest in training and cert in Civil Engineering NDT	AM	To be discussed at next meeting.
9.	Work to continue on NDT societies' assessment of employer-based certification	VR	Covered on the agenda.
10.	Work to continue on inspection qualification bodies and docs to be circulated	AM/SKB	Covered on the agenda.
11.	Remove item on ICNDT certificates from Action Plan.	AM/SKB	Complete.



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**4. WG1 Membership**

The Chair tabled the list of members and noted one change to membership of WG1, i.e. after the meeting in Munich, Helle Hansen Rasmussen was approved by the IEC and welcomed to the group. S Ooka will supplement N Ooka on the group but they will only have one vote. D Bajula will replace K Smith as the ASNT member. The ISNT proposed a new member – name to be advised.

**5. Action Plan**

The Action Plan was reviewed and the Chair highlighted the amendments and proposals following the last meeting in Vienna.

Status of ISO 9712:2012, contribution of WG1 was covered separately under agenda item 6.

A8 - Identify possibility to create unified body of knowledge based on gap analysis between TR 25107, CP106 and Tec.Doc 628 - awaiting developments in ISO TC 135 SC7 WG9.

The re-numbering of Section B has been completed.

B16 (Develop recommendations for improvement of ISO 9712) has been completed.

B17 – S Bond will advise how to proceed after the ISO meetings have taken place.

Action Ref. No. WG1/2017-11-15/..	Desc.	WHO	STATUS/COMPLETE BY
1.	Action Plan – B17 - advise how to proceed after the ISO meetings have taken place.	SB	

B18 – Clarification of surveillance for ISO 9712 particular case – the Chair will make a recommendation as to how to conduct surveillance.

Action Ref. No. WG1/2017-11-15/..	Desc.	WHO	STATUS/COMPLETE BY
2.	Action Plan B18 – make a recommendation as to how to conduct surveillance for ISO 9712.	AM	

Several issues from NDTSS were discussed:

- (1) Liaison Federations – WG1 (e.g. TG5 APFNDD) Regional Reports.
- (2) Procedure for monitoring Certification Bodies under Schedule II. This will come under the IEC with support from WG1.
- (3) One example could be peer evaluation program for ICNDT recognised certification bodies (cost ?)



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(4) Amplification of interpretation of Schedule II – what is limit of recognition – is it a scheme or certification?

With regard to the MRA, J M Farley commented that these suggestions should become action items, also the ICNDT/EFNDT MRAs? This was also encouraged by the Chair. The Chair had some concerns regarding proposals (2) and (3). He suggested that these should be free of cost to certification bodies. PCBs should be asked to provide reports from accreditation bodies but they should not have additional assessments. There could be language problems with peer evaluation (e.g. China/Russia).

J Farley proposed that these suggestions be added to the Action Plan to look at in future. R Holstein proposed that a small working group be established. This was supported by V Radko but he felt that it may be difficult to implement due to language barriers and costs. An increase in costs could jeopardise the popularity of Schedule 2. Exchange/sharing of questionnaires was suggested.

The Chair will form a task group which will also comprise of R Holstein, S K Babu and J M Farley. Anyone else interested in joining this group should inform the Chair.

Action Ref. No. WG1/2017-11-15/..	Desc.	WHO	STATUS/COMPLETE BY
3.	Form a task group to consider the suggestions from NDTSS	AM	

European Activities

R Rodriguez –spreadsheet and report was discussed, a copy will be provided to the WG1.

Action Ref. No. WG1/2017-11-15/..	Desc.	WHO	STATUS/COMPLETE BY
4.	Provide WG1 with spreadsheet and report on European activities.	RR	

S K Babu to provide report.

Action Ref. No. WG1/2017-11-15/..	Desc.	WHO	STATUS/COMPLETE BY
5.	Provide report.	SKB	

Need to establish close relationship between WG1 and ASNT regarding auditing of employer-based certification programmes.



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APFNDDT

Meeting of task group on certification in Singapore.  
India accreditation for ISO 9712.  
There were 11 papers on certification.  
J Farley pointed out that auditors of certification bodies should have NDT expertise.  
Workshop on Q&C – next year ABENDI.  
Event to include ISO meetings.  
Workshop in Brazil? August 27-29 2018.

**6. Status of ISO 9712: Contribution of WG1**

S Bond reported that a systematic review had taken place which resulted in a need to review the meetings. Currently, around 400 comments have been received, including comments from WG1. With regard to the WG1 comments, J Farley advised that there were two inputs from ICNDT (1) review by WG1 and (2) work from the Vienna Conference.

It was agreed that the Chair, S K Babu and J M Farley would work out a plan for how to proceed after the ISO meetings and make a recommendation to WG1.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-11-15/..			
6.	Work out a plan for how to proceed after the ISO meetings and make a recommendation to WG1.	AM/SKB/JMF	

**7. Administrative Level 3 Personnel**

The Indinger presentation was discussed (D Gilbert to obtain copy).

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-11-15/..			
7.	Obtain copy of the Indinger presentation	DJG	

It was agreed to recommend two possibilities: Re-exam as usual full Level 3 or pre-exam only theoretical part – administrative Level 3. An administrative Level 3 has limited tasks and are not permitted to set up NDT equipment or to perform the tests.

The following comments/questions were raised:

- D Bajula commented about an administrative Level 3 not being able to provide analysis of data. A Level 3 should not be 'limited' in anything and has the ultimate responsibility.





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- K Arcus commented that a Level 3 should supervise/mentor technicians, therefore has limited use.
- V Radko asked whether an administrative Level 3 would be allowed to interpret codes and standards and whether an administrative Level 3 would be allowed to act as examiners for both theoretical and practical. The answer to both of these questions was yes.
- Ralf Holstein commented that, once you divide a Level 3, this raises questions as to what they can do. (Some university grades jump straight to L3). Some Level 3 people do administration jobs but it is better to have refresher training.
- The outcome of the discussion in Paris was to leave as is and this was agreed by S K Babu.
- J Moody suggested that a Level 3 must have Level 2 including practical.
- B Pedersen agreed that this could be problematic.
- The Chair asked, how an administrative Level 3 would be examined, would this be a recertification with practical?

**8. Substitution renewal by certification**

R Holstein gave a presentation. (Copy attached).

There are two options; either replacement or renewal or renewal remains – but with improvements. It was proposed that a survey be carried out through WG1 (via the web) with more details and additional questions. This will be done in December. R Holstein will initially collect/collate results and send to a small group first.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-11-15/..			
8.	Carry out a survey of WG1 and collect/collate results.	RH	

It was noted that, in Australia, ISO 17025 has stricter controls.

**9. Roles and responsibilities of Certification body, Authorised Qualification Body and Examination Centre in certification process**

JSNDI would like to suggest some modifications (showed in red letters in the attached documents) in the explanation about each body's functions described in each scenario. Please check the details in the two attached documents.

Document No.1 is the Draft 2 added JSNDI's suggestions.

Document No.2 is the table for analyzing the Draft 2 and comparing the three scenarios.

JSNDI would like to ask ICNDT WG 1 to precisely define the word "remote" in the fifth line of the second paragraph of the Draft 2, although JSNDI understood the word "remote" as a CB/ AQB's outsourced function of EC and checked the proposed scenario.

Also, JSNDI is wondering that Scenario 1 and 2 can be unified because the two scenarios are almost same as seen in the table on the right of the attached document No.2.



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**10. Interpretation of Table D.1 of ISO 9712:2012 (Action B11)**

J Moody reported that there was a proposal to make a recommendation how to use this table for each method.

**11. Recommendation for grading of practical examination (Action B10)**

The Chair presented a document and will circulate a draft table.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-11-15/..			
9.	Circulate draft table for grading of practical examination	AM	

**12. Task Group for discussion if NDT Societies/PCBs could assess and approve employers' certification to ICNDT requirements (Action B15)**

V Radko reported that, based on the previous meeting, a draft questionnaire had been circulated. No comments have been received but it was hoped that comments would be received soon. It was proposed that this document is made an annexe to OP19. J Farley pointed out that it had not been suggested that ICNDT should do the assessing, but rather that societies should. A proposal from ASNT was recommended and agreed and it was agreed that V Radko would work with ASNT on this.

**13. Task Group for discussion if NDT Societies/PCBs could establish an expert group to oversee the inspection qualification activities (Action B16)**

Reference was made to ISO 9001. A questionnaire is to be sent to societies and societies will be asked to collect information. Suggestions are required for people to make presentations on inspection qualification in different countries. R Holstein suggested that we ask auditors and companies. The Chair proposed that R Rodriguez speaks to J M Farley with a view to re-evaluating the questionnaire.

Action Ref. No.	Desc.	WHO	STATUS/COMPLETE BY
WG1/2017-11-15/..			
10.	Speak to J M Farley with a view to re-evaluating the questionnaire	RR	

**14. Accreditation according to ISO/IEC 17025 and ISO/IEC 17024:2012**

Reference was made to the ILAC document which was agreed as being a good guideline for WG1.





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### **15. Surveillance as a process required by ISO/IEC 17024:2012**

Surveillance is a requirement of ISO 17024. BINDT has two documents on this issue, CP16 for PCN Level 1 and 2 and CP17 for PCN Level 3. If renewal is recent it meets the requirements of ISO 17024 and is a good reason to leave as is. The Chair felt that 10 years was too long. V Radko also made reference to ISO 9001. The Chair suggested a survey of certification bodies to see which of them use surveillance. J Farley pointed out the issue of fraud, although we cannot be responsible for something that we have no control over. It was agreed that this issue would be discussed again at the next meeting.

### **16. New revision of ISO/IEC 17024**

S K Babu presented a slide. Accredited PCBs cannot issue certificates in scopes in which they are not accredited. Certificates need to have an accreditation mark.

### **17. ISO/NP TS 21759. Non-destructive testing. Guidelines for training, qualification and certification of non-destructive testing engineers (coordinator)**

S Bond reported that this was being led by Iran. A working draft of guidelines for training, qualification and certification of NDT Engineers has been issued. D Bajula suggested adding 'for' Engineers but J Farley felt that NDT Coordinator would be more acceptable. It was suggested that WG1 defines the terminology.

### **18. Report on the work of the ICEC**

The report had been circulated prior to the meeting.

### **19. Report of the "Certification 2017", 6&7 June 2017 in Vienna**

A report will be published in the journal. (Indinger slides?)

### **20. Any other Business**

#### **1. 23<sup>rd</sup> China International Exhibition on QC and Testing Equipment**

This is being held on 29 October – 2 November 2018 in Shanghai. The website for this event is [www.qc-expo.com](http://www.qc-expo.com).

#### **2. S K Babu Workshop**

Workshop being held the following morning (16<sup>th</sup> November).

### **21. Date of next meeting**

June 2017 – exact date and time to be confirmed.

## A) Certification Schemes in Africa

### ISO 9712 Personnel Qualification & Certification Schemes:

The following ICNDT MRA Schedule 2 PCB's are operational in Africa viz. PCN (BINDT); SAQCC-NDT (SAIW Certification) & COFREND

Obtaining a harmonised summary of all certified NDT personnel is a great challenge, however a summary of SAQCC-NDT is given below

- \* Total Number of NDT Certs : 3294 (all methods & all levels)
- \* Total Number of New Certs (YTD) : 136
- \* Total number of Recertification : 22

### Company Certification Schemes:

SNT-TC-1A; ASNT & ACCP company certification schemes are prominent in the reason.

Large end-users have indicated that they prefer ISO 9712 qualifications as a foundation, hence the transition of experienced NDT personnel towards ISO 9712.

## B) Events Planned for 2017 / 2018

- \* AFNDT AGM - Febr 2017
- \* SAINT Conference - 50 years celebration - Febr. 2017; Accolades, JHB , SA

## REPORT EUROPE ACTIVITIES SINGAPORE 2017

ASSOCIATION/ COMMITTEE/FORUM	Serbian Society for NDT (SDIBR) Cert.Body "Zavod Cert Pers"	Polish Society for Nondestructive Testing and Technical Diagnostics SIMP	Czech Society for NDT	BINDT	<u>DGZfP</u>	AEND	Finnish Society for Non Destructive Testing	NORWEGIAN SOCIETY FOR NON- DESTRUCTIVE TESTING.	Österreichische Gesellschaft fürZerstörungsfreie Prüfung (ÖGfZP)
	<b>2016</b>		<b>2016</b>	6 June 2016	<b>2017</b>	<b>11/2017</b>			
TRAINING									
Number of training courses	<b>18</b>	The certification and training activity is not carried out directly by the Society	In cooperation with Association for personel certification (APC): We provide courses for special methods: Training and Exam Acoustic emission Level II and Level III (2016) L II 8 students, L III 3 students	We subcontract the training to 93 approved training organisations. NDT & CM	> 500	102			94
Type	ISO TR 25107				Qualification/Re certification – Course/Practical Training	Qualification to Certification			1/2
Method	(VT=5, PT=5, MT=1, RT				AT, ET, LT, MT, PT, RT-D, RT-F,	ET, MT, PT, RT, UT, TOFD, VT			RT/UT/MT/PT/V T/ET/TT

## REPORT EUROPE ACTIVITIES SINGAPORE 2017

	FAS=2, UT1=4, UT2=1 VT1+2=27, PT1+2=16, MT1+2=4, UT1=4, UT2=1, RT FAS=9				RT-S, RI, TT, UT, PA, TOFD, VT, Radiation Protection				
Number of students	68				Approx.7500 (DGZfP) + 1500 in recognized training organizations = 9000	<b>463 + ??</b> recognized training organizations			841
<b>CERTIFICATION</b>									
Standard	SRPS EN ISO 9712:2013 (EN ISO 9712:2012)	The certification and training activity is not carried out directly by the Society	Czech Society for NDT is not certification body in our country. All certification bodies (app. 6) are firm members of CNDT. CNDT	ISO 9712 ISO 20807 ISO 18436 EN 4179	ISO 9712	ISO 9712			EN 9712
Number of certificates	118			NDT: 50,408 CM: 2,134	7500 (estimated until end of 2017)	8,275			1496
Number of people	119			NDT 23,348 CM: 1,773	5000	4,086			
Methods	VT1+2=47, PT1+2=25, MT1+2=10, RT1=6,			All methods NDT & CM	AT, ET, LT, MT, PT, RT-D, RT-F, RT-S, RI, TT, UT, PA, TOFD, VT	ET, LT, MT, PT, RT, UT, TOFD, VT			RT/UT/MT/PT/V T/ET/TT

## REPORT EUROPE ACTIVITIES SINGAPORE 2017

	RT2=16, UT1=5, UT2=9,								
DIFFUSION									
Workshop			3 <b>workshops:</b> MMM (Prague), the New Atomic Law (Prague), NDT in Technical Practice (Brno)		5	Jornadas de mantenimiento industria en Canarias Some lectures in universities			2
Conferences	1 ("NDT 2016"/Subotic a City, Serbian Conference with international participation)	46. Krajowa Konferencja Badań Nieniszczących 46. National Conference on Nondestructive Testing,	<b>Conferences:</b> 32 <sup>nd</sup> European conference on Acoustic emission 2016 (EWGAE 2016) Prague, 46 <sup>th</sup> NDE for Safety Int. Conf. Luhacovice  <b>NDT in Progress 2017</b> (Prague) and <b>NDE for Safety 2017/ Defektoskopie 2017</b> (Chomutov)		WCNDT 2016 in Munich, Annual Conference in Koblenz	<b>Next national conference 2019</b>	Supporting welding society in organizing a conference in quality of welding	NDT CONFERENCE, 28 – 30 MAY 2017,  NDT LEVEL III SEMINAR, 13 – 14 NOVEMBER 2017 NDT INFORMATION # 1-2017, # 2- 2017, # 3-2017	2
Magazines		Badania Nieniszczące i Diagnostyka (Nondestructive Testing and Diagnostics)  The Bulletin of the	NDT Welding Bulletin (4x/per year)		„ZfP-Zeitung“ No. 153, 154, 155, 156, 157	3 digital and paper issued	Writing to welding magazine quality issue "Hitsaustekniikka"		10

## REPORT EUROPE ACTIVITIES SINGAPORE 2017

		PTBNiDT Management Board							
NDT promotion to younger people		The Award of the President of PTBNiDT for the best MA thesis in NDT field (since 2017)	<b>Cooperation</b> with Czech technical university in Prague, Brno University of Technology and University of West Bohemia (Pilsen) – special lectures, diploma projects ...		“Jugend forschert“, annual student award (basic course participation)		Engineering students participating a level 3 course		
PROJECTS									<b>2</b>
OTHERS		The Society established Professor Zdzisław Pawłowski Medal awarded for extraordinary achievements in the field of NDT					Writing a NDT- book for others than NDT-people. Organization of a national interlaboratory measurement		



# REPORT EUROPE ACTIVITIES SINGAPORE 2017

## Meetings of EFNDT BoD

8 June 2017 at EFNDT CERTIFICATION 2017 in Vienna

## Meetings of EFNDT CEC:

7 June 2017 at EFNDT CERTIFICATION 2017 in Vienna

EFNDT MRA Status August 1, 2017

## EFNDT Certification Conference 2017

June 6 – June7, 2017 in Vienna, Austria

Recommendation of the delegates concerning Revision of ISO 9712:

The contributions of the CERTIFICATION 2017 – Conference in Vienna have clearly shown that there is some need for a revision of the standard. There out the EFNDT CEC has identified some common ideas for the revision of EN ISO 9712:

1. The employer responsibilities need to be clearly defined and strengthened. In particular the responsibility for a sufficient industrial experience of NDT personnel should be at the employer.
2. Recertification of Level 3 personnel should return to the regulation of the former European standard EN 473.
3. 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 don't fit to the syllabus.
4. A (simplified) recertification instead of the formal renewal process after 5 years would have a very positive impact to ensure the consecutive skills of NDT personnel.

## Activities of Forum for National Aerospace NDT Boards (ANDTBF)

Control of NDT personnel examinations, level 1, level 2 and level 3. EN4179  
General control of NDT formal training but no direct training

We hold two Forum meetings annually, next meeting is 28 November, Lisbon

Developing an approach by which NANDTB's can be audited and approved independently such that OEM's can have confidence in NDT personnel examinations under the general control of NANDTB's  
Standardised approach to Annual Maintenance Review per EN4179.  
Standardised approach to demonstrating general knowledge of other NDT methods required of a Level 3.

## Meeting of the EFNDT Railway forum

The next meeting will take in Spain.

# REPORT EUROPE ACTIVITIES SINGAPORE 2017

## INTERNATIONAL EVENTS

06.06 - 07.06.2017 Vienna/Austria	<b>8th Int. Conference on Certification and Standardization in NDT</b>
13.06 - 16.06.2017 London/UK	<b><u>First World Congress on Condition Monitoring</u></b>
14.06 - 16.06.2017 Mamaia/Romania	<b>24th International Symposium</b>
04.09 - 06.09.2017 Portoroz/Slovenia	<b>The 14th Int. Conference 'Application of Contemporary Non- Destructive Testing in Engineering'</b>
04.09 - 08.09.2017 Potsdam/Germany	<b><u>7th European-American Workshop on Reliability of NDE</u></b>
04.09 - 07.09.2017 Funchal, Madeira/Portugal	<b><u>International Conference on Structural Integrity, 2017</u></b>
05.09 - 07.09.2017 Telford/UK	<b><u>56th Annual British Conference on NDT and Materials Testing Exhibition</u></b>
06.09 - 08.09.2017 Saclay/France	<b><u>22nd International Workshop on Electromagnetic Nondestructive Evaluation (ENDE 2017)</u></b>
24.09 - 26.09.2017 Dresden/Germany	<b><u>International Conference on Barkhausen Noise and Micromagnetic Testing (ICBM)</u></b>
25.09 - 29.09.2017 Düsseldorf/Germany	<b><u>Schweissen und Schneiden</u></b>
09.10 - 12.10.2017 Hannover/Germany	<b><u>Jahrestagung 2017 des Fachverbands für Strahlenschutz</u></b>
07.11 - 09.11.2017 Chomutov, Czech Republic	<b><u>NDE for Safety / Defektoskopie 2017</u></b>
Parque do Alentejo de Ciência e Tecnologia,em Évora Portugal <b>14 e 15 de dezembro de 2017.</b>	<b>4ª Conferência Nacional em Ensaios Não Destrutivos</b>
11.06 - 15.06.2018 Gothenburg/Sweden	<b><u>ECNDT 2018</u></b>

# WORKING GROUP RENEWAL / RECERT

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SINGAPORE

2017 14 11



WG1 members response  
 Action B7  
 Possible substitution renewal by recertification

06.10.2015

Name	Response
Gerhard Aufrecht (1) or Gerald Idinger (2)	Yes
Harold Jansen	Yes
João Rufino Teles Filho	Yes
John Zirnelt	No
Matthias Purschke (1) or Ralf Holstein (2)	Yes
Norikazu Ooka	Yes
Patrick Fallouey	No
Rodolfo Rodríguez	Yes
Terry Clausing	No
Sajeesh Kumar Babu	Yes
Vitaly Radko	Yes
Peter Milligan	Yes
Nicole Scutt	Yes
Kyung-Cho Kim	No
Jingyuan Ji	No
Cemil Hakan Gur	Yes (partly)
Goran Sofronic	Yes

## Working Group

Ralf Holstein to Chair,  
 Nicole Scutt,  
 Peter Milligan,  
 Rodolfo Rodriguez,  
 Harold Jansen,  
 Gerald Idinger,  
 PK Yuen,  
 Norikazu Ooka,  
 Vitaly Radko,  
 David Bajula,  
 Andre Charbonnier.

# WHERE ARE WE?

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- Discussed 2015 Salt Lake City
- Discussed 2016 Munich
- May 2017 Vienna Conference „Certification“
  - Many presentations and talks on that matter
- 2017 Preparation for National/ISO Voting on Revision
- Europe: 2017 two CEN Meetings, common European approach

## Arguments against a replacement of renewal by recertification

- ISO 9712 is just running well, don't touch it by now
- A change would be costly and time consuming for the CB/AQB/EC
- There are no sufficient resources at CB/AQB/EC to organize more examinations
- It is more expensive for the customer
- Attending more examinations is not realistic in huge countries with a small population
- It may discourage industry from using the standard



## Arguments for a replacement of renewal by recertification

- The current renewal process is no sufficient face to face surveillance of the candidate
- Many customers are required to stay in line with the 5-year-cycle of MIL 410/EN 4179, ASNT TC-1A, ASME, API
- Accreditation and surveillance processes are commonly based on 5-year-periods
- The skills of the candidate are checked and updated every 5 years
- Many candidates face difficulties to pass the recertification examination after 10 years due to a lack of appropriate basic skills
- The whole central certification process of 10 years could be questioned if a candidate is found not able to pass recertification examination
- Cases of low performance of AQB or EC could be corrected after a shorter period of time

# HOW TO PROCEED?

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- Different views on pro and con
  - Nations
  - Training providers / CB / EC
  - Service providers
  - Accreditation bodies
  - Level 3's
  - Authorities
  - ....

## 7 HOW TO PROCEED?

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- List of arguments
- Two options:
  - Replacement of Renewal
  - Renewal remains – improvements
- Survey to WGI member via WEB
- Additional questions like use of 9712, Number of Certificates...

**Option 1:** The current renewal process is optimized to improve the surveillance of the candidate

- No modification required, the current renewal process is sufficient
- A closer surveillance is needed in case of complaints and appeals only
- In addition to the current statement of the employer about uninterrupted work, a witness signature of a competent and certified level 2 or 3 is required
- In addition to the current statement of the employer about uninterrupted work, one or more surveillance reports/work samples/inspection reports are required
- In addition to the current process, randomly selected 10 - 20 % of the candidates should be required to deliver work samples/inspection reports to the CB
- In addition to the current process, randomly selected 10 - 20 % of the candidates should be required to undertake a recertification examination
- Annual performance appraisal / 'satisfactory work', including vision acuity to be performed by Company and results forwarded to PCB
- All candidates should be required to keep a log book up to date

**Option 2:** Renewal is replaced by recertification every 5 years. How to improve the recertification process?

For Level 1 and 2

- No modification required, the current recertification process is sufficient
- Recertification exam should cover both specific and practical (reduced number of samples + WI for Level 2) aspects
- The recertification examination should be simplified to reduce time and costs (reduced number of specimen and randomly selected)
- Annual performance appraisal / 'satisfactory work', including vision acuity to be performed by Company and results forwarded to PCB
- A refresher course should be required to update the knowledge of the candidate about new standards and techniques

**Option 2:** Renewal is replaced by recertification every 5 years. How to improve the recertification process?

For Level 3

- No modification required, the current recertification process is sufficient
- The structured credit system should be deleted to guaranty a face to face surveillance of the candidate
- Structured credit system can remain if closer surveillance is also included
- The practical recertification exam should be deleted
- Full Level 2 Practical exam must be mandated as part of Level 3 recertification + Spec : Code / Standards + Qual & Cert (Basic Part B)
- The recertification examination should be simplified to reduce time and costs
- A refresher course should be required to update the knowledge of the candidate about new standards and techniques



## WHAT'S NEXT?

- Survey transferred to WEB
- Distributed to WG I members in December

JSNDI would like to suggest some modifications (showed in red letters in the attached documents) in the explanation about each body's functions described in each scenario. Please check the details in the two attached documents.

Document No.1 is the Draft 2 added JSNDI's suggestions.

Document No.2 is the table for analyzing the Draft 2 and comparing the three scenarios.

JSNDI would like to ask ICNDT WG 1 to precisely define the word "remote" in the fifth line of the second paragraph of the Draft 2, although JSNDI understood the word "remote" as a CB/ AQB's outsourced function of EC and checked the proposed scenario.

Also, JSNDI is wondering that Scenario 1 and 2 can be unified because the two scenarios are almost same as seen in the table on the right of the attached document No.2.

## For WG1 Action Plan – Regional Report

### Pan-America Report – North America section

Major events that were held:

- NDT in Canada Conference, Quebec, Canada, June 6 - 8, 2017
- ASNT Annual Conference 2017, Nashville TN USA, October 30 – November 3, 2017

Major upcoming events:

- ASNT Research Symposium, 2018, Orlando FL USA March 26 – 29, 2018
- Nondestructive Evaluation of Aerospace Materials & Structures 2018, Bridgeton MO USA, June 5-6, 2018
- NDT in Canada 2018 conference, June 19 - 22, 2018 in Halifax, Nova Scotia, Canada
- Digital Imaging and Ultrasonics NDT 2018, Mashantucket, CT USA, June 26 – 28, 2018
- 6th Japan-US NDT Symposium, Honolulu HI USA, July 8 – 11, 2018
- NDE/NDT for Highway and Bridges: Structural Materials Technology (SMT 2018) and the International Symposium Non-Destructive Testing in Civil Engineering (NDT-CE 2018), New Brunswick, NJ USA, August 27 – 29, 2018
- ASNT Annual Conference 2018, Houston TX USA, October 28 – 31, 2018

### North America

#### *Canada*

Canada's national NDT society, Canadian Institute for Non-Destructive Evaluation, leads and supports the various international ISO and ICNDT activities, having key staff serving as chairs and members in committees and subcommittees. As a society, it also serves as a key liaison for national and international activities, and in bridging the connection between its members, the industry, and the society's mandate, along with engaging with Canada's national certification scheme. It hosted its annual national "NDT in Canada" conference during June 6-8, 2017.

Canada is currently implementing the latest ISO 9712-2012 without modifications under the national standard, "CAN/CGSB 48.9712-2014 / (ISO 9712:2012, IDT) - Non-destructive testing - qualification and certification of NDT Personnel." The national certification standard (CAN/CGSB – Canadian General Standards Board) and the national personnel certification body (PCB) are both administered by the Government of Canada, with the federal department of Natural Resources Canada (NRCan) maintaining the national authority to implement the PCB – via the

NRCan National NDT Certification Body (NDTCB), and The NDTCB holds external accreditations to ISO 9001:2015 and ISO 17024:2012 IAF recognized accreditation bodies.

The NDTCB oversees a network of Accepted/Recognized Training Organizations and Authorized Examination Centres in support of fulfilling the requirements of the certification scheme. The current Accepted Training Organization (ATO) requirements have been revised and the NDTCB is now transitioning to the Recognized Training Organization (RTO) framework, along with better alignment with ISO/TR 25107.

The NDTCB is also planning for a migration of its written exams to computer-based testing (CBT) systems. Effective November 1st, 2017, it is starting its first rollout with the CNSC Exposure device Operator (EDO) program, with its written examination being available in an updated electronic format only.

Canada continues to hold the chair/secretariat position for ISO/TC135/SC7, which is responsible for the development of the international ISO 9712 standard, and is very active nationally and internationally to undertake and participate in the next systematic review of the ISO 9712 standard.

## *USA*

### International Movement

ASNT has taken progressive strides with international stakeholders and sister societies to move ASNT and NDT forward in a thoughtful and productive way. We have moved the needle of our effectiveness in these efforts even more so with the achievement of a record number of Memorandums of Understanding (or MOUs) and the historic signing of a Mutual Recognition Agreement (or MRA) with JSNDI, the Japanese Society.

The 30 signed MOUs mean reciprocal respect for each society's standing as the regional professional NDT organization. ASNT and Partner organizations know the value of each collaboration. NACE presented a concurrent course at the 2016 Annual Conference. At our recent 2017 Annual conference ABENDI (the Brazilian society) collaborated with ASNT to bring the Flexible Riser Integrity Management (also known as FRIM) as a technical session. The ASNT brand is strong, not just here in the U.S. but around the world.

The MRA with JSNDI is another indication of how ASNT's global outreach is creating a direct impact to ASNT's membership and certifications. The MRA brings a commitment of cooperation in mutually beneficial projects and opportunities for each society's members and constituents. We will be publishing more information about this MRA in the upcoming issue of Materials Evaluation.

## Certification Update

The strength and foundation of ASNT is its certification. 2017 has seen a great deal of movement in this area. Computer-based testing (CBT) had its first anniversary this year. Exams are now able to be given in thousands of locations around the world.

ASNT continues on its path reshaping ACCP to fully adopt ISO/IEC 9712, which will be completed by the end of 2018. This includes the implementation of Authorized Training Organizations (also referred to as ATOs) to provide training and a revised Authorized Examination Center process to administer ACCP examinations. We are utilizing the wisdom and talents of seasoned members of CMC, T & E, SDC, SNT-TC-1A committee, and the ASNT executive committee and ISC technical services staff to provide the foundational work upon which we are building.

Also of certification importance is the development of an Employer-based Certification Audit Program. What we are calling the ASNT EBC will be a review of a company's written practice, verification of compliance with the defined requirements in the written practice to provide the assurance that it complies with SNT-TC-1A and/or CP-189. ASNT plans to create an international registry identifying companies complying with this program. We firmly believe companies will experience a significant return on their participation in the audit program by being subjected to fewer audits by end clients because of the brand eminence of ASNT in industry sectors and the administration of the program by trained NDT professionals. As this program continues to take shape, ASNT will share update with you and the NDT industry and all stakeholders.

Another 2017 development in certification is exploratory groundwork for creating a Performance Demonstration Qualification (PDQ) program for the Oil & Gas Industry. The purpose is to standardize PDQ testing of NDE technicians, alleviating the burden of owner/operators from providing and maintaining their own programs. The resulting impact should be a significant minimization of costs and over-testing of NDT technicians. As with every ASNT endeavor, our expectation is that this program strives to meet the standards of stakeholders and achieve the full support of industry.

## Publications Update

ASNT continues to publish key industry publications. The past year for ASNT publications was as productive as ever in maintaining ASNT's position as the preeminent professional resource for NDT methods, industry sector applications, study guides, and training companions. Currently, new in the ASNT store includes the Leak Testing Handbook, Liquid Penetrant Handbook, and PTP Visual Testing.

ASNT has upgraded our Materials Evaluation Digital platform. This new interface provides users with more functionalities and control over their experience. The table of content pages are hot-linked as are many of the emails and information for advertisers.

### ASNT Outreach

Our Society outreach hasn't only been with peers and like organizations. ASNT has integrated STEM outreach as a programmatic priority and created dedicated events to reach school-age students.

This year ASNT exhibited at the National Science Teachers Association STEM Forum and the Girl Scouts triennial convention – GIRL 2017. The thousands of brand impressions ASNT made by its mere presence was well worth the staff and volunteer hours in these exhibition halls. The encouragement of young people to discover NDT as a necessary function that keeps their world safe are the initial and parting words when ASNT staff and member volunteers interact with attendees.

Just 2 years ago, we began the ASNT Day of STEM for high school students and their educators. Since that event, the Day of STEM (hosted at the spring Research Symposium and our Annual Conference) have grown programmatically and practically to ensure every moment of the student's time is well spent and memorable. ASNT has reached hundreds of students at our events.

### Conferences

ASNT hosted 7 conferences in 2017 offering over 500 presentations, hundreds of exhibitor providing NDT services and technology. Our annual conference held in Nashville was one of the most well attended shows in history.

### South America

[Please refer to additional reporting by South America representatives.]