EF European Federation for Non-Destructive Testing
NDT NEWS

Meetings at WCNDT

ICNDT WG1: Certification
Saturday 14 April (am) and Tuesday 17 April (pm)

ICNDT General Assemblies
Sunday 15 April (am/pm) and Thursday 19 April (pm)

Research Forum
Monday 16 April (pm)

ISO TC 135
Tuesday 17 April (am/pm), Wednesday 18 April (am/pm), Thursday 19 April (am) and Friday 20 April (am/pm)

EFNDT WG5: Safety & Security
Thursday 19 April (pm)

Fledgling Societies Workshop
Thursday 19 April (am)

Volume 1 Issue 5 **March 2012**

PRESIDENT'S MESSAGE

Spring into action

As spring approaches we are stimulated to think about new actions. Which action is the most significant in the NDT world?
We will soon be in the process of elections and endorsements of new management teams for both the European Federation for NDT (EFNDT) and the International Committee for NDT (ICNDT). Within a month of our EFNDT Berlin Week, the 18th WCNDT will be held in Durban. This will be a unique event that will again remind us of the worthy endeavour taken on a global scale aimed at positioning ourselves to face the major challenges to our societies that can only be addressed jointly and comprehensively.
There is no doubt that we need to review the future EFNDT strategy following again the expectations of EFNDT's members, but we need to make a greater commitment in a worldwide context.
What to say in my President's Message at the end of the mandate? Let me start with a question: What are the challenges for NDT people in Europe and what is our global obligation? Being aware of the considerable expectations of the people and the ambitious plans for the future in the 21st Century – to live in a world of modern technology yet, at the same time, in a sound natural environment – we in the NDT profession are the people who need to overcome the challenges of safety and security. In our scientific laboratories and companies we have to continually come up with new methods, techniques and technological solutions that will assure a sustainable development of NDT and technical diagnostics as a very important contribution to the common good. This brings to mind a very commendable saying: 'Nothing moves safely without NDT approval'.
We have to join in a concerted effort and we should be open to cooperation inside Europe and worldwide to increase the influence and importance of the NDT profession as a benefit to safety and quality of life. This is the profession with the right answers to the global problems of safety and security. NDT is able to provide solutions that can be implemented to the benefit of society in overcoming the challenges of today and also those that lie ahead.
What about the priority? Education and training are of crucial concern. It is extremely important that around the world engineering education as well as lifelong education and training should be comparable, to obtain a base of mutual recognition yet geared towards the needs of the future. We know that this is a lasting process, primarily requiring persistency in approach.
Last, but not least – and to continue the opening theme – the distinction of the post of EFNDT President embraces a responsibility from which dignity springs. I have resolved to accomplish the EFNDT President's duties with all capabilities, aiming for EFNDT advancement and better positioning to increase influence by pointing out the importance of EFNDT as a European umbrella association of partnership in safety and quality, and also to expand the scope of EFNDT activities for contribution on a global scale.
Dear colleagues, associates and friends, I am grateful for your unconditional engagement and assistance for the benefit of EFNDT and I shall always remember your precious support to me as well.
I am also pleased to emphasise the significant role of the Croatian NDT Society in the results achieved, thanking it for its unequivocal support at all times during my EFNDT Presidency.

Professor Vjera Krstelj, President, EFNDT

Review and vision of the Vice President

On 8 March, the General Assembly of EFNDT is meeting in Berlin. One of the main items on the agenda is the election of the new Board, the President and the Vice President. After working for more than 11 years as Vice President of EFNDT, I will retire according to the statutes. Therefore, I take this opportunity for a short review, as well as to throw a glance into the future.
In previous years, the main emphasis was put on the evaluation of NDT training at universities in Europe, under the successful guidance of our President, Professor Krstelj. Furthermore, the focus was put on the laboratories accredited according to EN 17025 and the Europe-wide partnerships – memoranda of understanding – with institutions such as EUROLAB and CEOC, both with their headquarters in Brussels. EFNDT certainly has made a lot of progress in these areas. Here I want to congratulate Professor Krstelj, who unfortunately will not be standing as a candidate for the next period.

Ing Gerhard Aufricht

The upcoming periods will essentially be characterised by the new EN ISO 9712 that will already be valid this year. The EFNDT, with its 27 national NDT societies, now has to translate this common quality standard into action. Only a uniform NDT philosophy can form an adequate basis for this quality standard. Only a common European

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…Review and vision of the Vice President (continued from front page)

certification programme can evenly match the standards set by the other three ICNDT Regional Groups (Asia-Pacific, Pan-America and Africa). EFNDT must promote not only a certification scheme in the future – there will also be a need for harmonised European certificates.

The new BoD will have to foster the exchange of experience and the mutual support of established and young societies. In order to guarantee in the future the broad acceptance of certified NDT personnel for the industry, the NDT professions, NDT users and the public, it is necessary to promote NDT in close coordination with the ICNDT. These actions have to be focused on officials, regulatory authorities, science, research and development.

The fifteenth year after the foundation of the EFNDT in Copenhagen is going to be a thrilling one, full of challenges. It will set the essential course for the development and status of NDT in Europe in the future. With your vote you can influence this development and initiate the necessary changes.

Finally, I wish the future President and Vice President of the EFNDT all the very best of luck and the continuing support of the experienced BoD. For my own part, I would like to offer my contribution and my ICNDT expert knowledge for the upcoming challenges.

Ing Gerhard Aufricht
Vice President, EFNDT
Executive Director Vice and President, Austrian Society for NDT (ÖGfZP)

DGZfP and MAROVISZ hold successful PA training course in Hungary

Phased array (PA) ultrasonic testing represents one of the most comprehensive techniques in NDT. Its benefits are indubitable. The amount of PA equipment sold in Hungary is continuously increasing.

MAROVISZ, the Hungarian Association for NDT, recognising the needs of the domestic industry and the research community, contacted DGZfP, the German Society for NDT, to organise a special training course in the subject. The reason for this was that in Hungary, at least until now, PA is not included in UT courses due to a lack of qualified instructors, whilst DGZfP has a broad experience in PA training. As it is known, PA technology provides an electronically-controlled scan practically without mechanical movement of the probe, an intelligent data acquisition and graphical display. During the course that followed, the trainees were taught how to utilise this new technique in comparison with conventional UT. For the practical part of the training, the equipment ('Omniscan' from Olympus) was provided by DGZfP or, if the trainee already had PA equipment of their own, he or she was able use it.

The course instructors were Messrs Ulrich Südmersen and Gerhard Stremmer. After the course, the very sad news reached us that Mr Südmersen had suddenly passed away. We remember him as a supporter and friend of the Hungarian NDT community.

At the end of the five-day course, after learning about the possibilities of the new technique, 14 Hungarian trainees successfully passed the PA Q2 UT qualification examination. The Examination Committee was composed of experts from DGZfP and MAROVISZ. Certificates were issued jointly by DGZfP and MAROVISZ. The training course was hosted by the College of Dunaújváros in Dunaújváros, Hungary.

The Hungarian trainees were taught how to utilise phased array technology
Photo courtesy of the instructors and already published in the DGZfP Journal

Szalay Károly, MAROVISZ.

Progress of EFNDT Working Group 5: NDT Technology for Public Safety and Security

K Osterloh

The work of building the EFNDT Working Group 5 (WG5)[1], a bridge between technical safety and public security as described previously[2], is in progress. However, no building is erected within a couple of days or months, and it is within the nature of living infrastructures that they are never completely finished as long as they live. To stay with this analogy, the fundaments have been solidly renovated[3] and some of the first pillars positioned!

A further step has been accomplished recently in the form of a workshop in Berlin last September[4], in a wonderfully constructive atmosphere with presentations covering more or less the whole range of activities and discussions, with the added advantage of having these discussions in a small group, allowing everyone to contribute. The event was generously sponsored by DGZfP, the German NDT society. The blueprints for further work exist as documented before[3], though these are not drafted finally into each single detail. To use the analogy once again, the EFNDT WG5 appears more like a living structure than a static entity, though on a solid ground of science and engineering. This appears adequate, particularly when dealing with security, since threats appear rather dynamically, requiring some flexibility in response. Moreover, the bridge connecting the large areas – safety and security – should be able to branch into side areas as requested, converting the bridging task into networking activities. It was a joint result of the discussion that there are sufficient common aspects to communicate on a mutual basis for the benefit of facing increasingly changing challenges, demanding some flexibility in response and, in some cases, innovative approaches.

Several technological approaches were presented at the WG5 workshop meeting in Berlin[4], ranging from improving the signals of metal detectors for humanitarian demining to the detection of explosives with various methods in different locations, including under water. It was of particular concern how to transfer theoretical approaches developed in the laboratory to practical applications in the field. In addition, further subjects were included inherently involved in the context of providing safety and security. It started with the history of the EFNDT WG5 which had, as a matter of fact, its origin in humanitarian demining, considering NDT technologies to support the detection of antipersonnel mines after the Yugoslav Wars in the early 1990s, and since then in recent armed conflicts all over the world. Though it cannot be said that the problem may be resolved in the affected countries, more ubiquitous these days is the threat of terrorist or criminal attacks that may be encountered anywhere at anytime. The fact that technical principles such as the radiological ones are common practice has already given reason to broaden the subject beyond demining to cover also those problems as stated in the Working Group's commitment[1]. The transfer of laboratory developments to useful applications inevitably involves assessments on efficiency and practicability, and this requires criteria everyone participating in this process could agree on. Defining the requirements is one endeavour that is allocated in standardisation processes, the other one is applying adequate tools to assess if and how far the tested technologies are up to standard. Two approaches were presented: the probability of detection (POD) analysis and the use of the receiver operating characteristics (ROC). In this context, it was suggested in the discussions to establish a list of methods and technological approaches that are established in one area and might be of benefit in another, *ie* a special kind of 'technology radar'. Since bridging different areas requires a common language, *ie* a common understanding of certain terms such as risk or security, the development of the definition of risk with its changes in the recent past was also presented at this workshop event. A mutual agreement on such definitions should be regarded as the railing on the bridge of communication; this may avoid misunderstandings and endless unavailing discussions. The real backbone of the workshop were the presentations of past and ongoing projects, as well as the discussion of future ones.

In conclusion, this workshop was regarded as a really successful meeting.

All the presentations of this workshop and the previous meeting in 2010 will be available on the EFNDT website (www.efndt.org). To access these, please email david.gilbert@bindt.org and request the necessary permission. In order to achieve this you will need to be registered on the EFNDT website.

The next occasion for a discussion will be at the 18th WCNDT in Durban, South Africa, 16-20 April 2012, in a session on Thursday 19 April 2012, 14:00-15:20, in room MR11/A. Another meeting is intended to be held in the late autumn of 2012.

Dr Kurt Osterloh is convenor of the EFNDT Working Group: 'NDT Technology for Public Safety and Security' (http://www.efndt.org/Organisation/WorkingGroups/WorkingGroup5.aspx).

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1. *http://www.efndt.org/Organisation/WorkingGroups/WorkingGroup5.aspx*
2. *K Osterloh, N Wrobel and U Ewert, 'Detection technologies – common concepts in security and safety', 6th Future Security, Security Research Conference, Berlin, 5-7 September 2011, pp 125-127. ISBN 978-3-8396-0295-9.*
3. *K Osterloh, 'Aims and objectives of the EFNDT Working Group: 'NDT for Public Safety and Security', Insight, Vol 53, No 6, pp 331-333, June 2011.*
4. *K Osterloh, 'Die Brücke zwischen technischer und öffentlicher Sicherheit', EFNDT WG5 Workshop, Berlin, 26-28 September 2011. In: ZfP-Zeitung, No 127, pp 14-15, 2011.*

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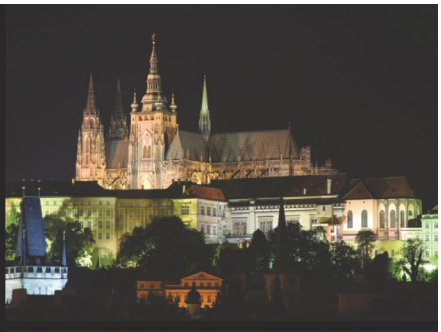

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