

**Minutes of the Technical Advisory Board for Mechanical Environments of the
Confederation for European Environmental Engineering Societies
Held on 28th September 2007 at Hotel Mercure, Noordwijk, The Netherlands.**

Present at the Meeting of the Technical Advisory Board for Mechanical Environments (TABME) were;

Dr Ulrich Braunmiller	GUS
Mr Ton Geise	PLOT
Mr Goran Jansson	SEES
Mr Markku Juntunen	KOTEL
Mr Ronnie Van Leeuwen	PLOT
Ir Ivan Malfait	BEST
Mr. David Richards	SEE (Chairman)
Mr Thomas Trost	SEES
Dr Karl Zieghean	GUS

Matters Arising

The meeting welcomed Ronnie Van Leeuwen and Ivan Malfait. As usual a list of TABME members, including corresponding members, this list is attached to the minutes as Attachment No 1.

CEES Website – TABME Content

The reminded the group that much of the information previously discussed was now on the website. However, the group were remained that new information or suggestions was also welcome.

Systematisation of Measurement Methodologies

STANAG 4370. The chairman reported that the Allied Publications, associated with STANAG 4370 Issue 3 are now on the NATO web site as AECTP 100 to AECTP 500.

Mil Std 810G It was previously reported that various working groups that will generate the new version were currently been formed. A CD of draft content (as of May 2007) had previously been offered to the TAB via the chairman.

Def Stan 00-35. The chairman reported that although work on issue 5 was underway, mostly this consisted of a storyboard of new advisory documents. The chairman reminded the group that the latest version of Def Stan 00-35 version 4 was now available at the UK Defence standard website; dstan.mod.uk.

IEC TC104. A number of meetings of various sub groups of IEC TC104 had been held been held at Balingen in Germany in March 2007. The main IEC TC104 groups had also met the week before the TAB in China. The TAB received a brief report of that meeting from Markku. A discussion occurred on the recent progress made by WG14 (climatic environmental conditions) as well as the progress and comments made on the WG15 (mechanical environments) previously discussed by the group.

DIN 30786/7/8/9. Ulrich had previously reported that he had taken over as chair of this work. He discussed a sub-group that had been created to look at standards for transportation of temperature sensitive medical packages. A draft DIN has now been issued on these types of packages. Ulrich said an issue with medicines was that the transportation distances were quite long because typically a specific medicine was produced at only one location worldwide

CEN TC 261 SC5 WG15 – Test Methods & Test Schedules. Ulrich reported that ISO 13335 meeting in the US had decided not to use the vibration tests derived from the SRETS work. However, he indicated that the alternative (Japanese) proposal was not realistically that significantly different. The proposal to make a European standard based upon the SRET work was still a possibility. TC 261 itself was still active and will next meet in November in Paris. The TC is also dealing with packaging test schedules. Some attempt has been made to align the test schedules in the ISO and CEN standards. However, this appears to have failed.

ISO 4180/1/2. Test Schedules. These are under review in ISO in parallel with CEN. Commonality between the two is looking unlikely. Two proposals have been tabled one for CEN and one for the ISO.

UN Orange Book. No information was available at this meeting.

ISO TC 108. Previously a draft document recently circulated by this group (ISO/DIS 21289) on shock and vibration analysis, was discussed. It was observed that portions of this document were similar to the DIN std discussed earlier and supplied to ISO & CEN as a PAS document.

Overview At a previous meeting the group had generated an overview of European and International work currently underway relating to transportation stresses. That overview was included as an attachment in the minutes of the last meeting. This meeting reviewed and updated the chart. The updated version is include here as attachment No 2.

Technical Papers - Working Practices

Copies of the methodologies paper were discussed. Following some discussion it was agreed that the a final draft would be put on the website.

Topics for Future Consideration

Thomas Trost gave a presentation on work he had been involved with in the use of a pressure mapping material made by Tekscan to determine its effectiveness in determine loading distributions between packages in different configurations. Thomas concluded that, although it has some limitations, this pressure mapping material was a useful tool. He suggested it may have other applications.

A discussion on data loggers occurred including mention of new facilities and capabilities that members of the group had recently identified. Ulrich mentioned that a review was underway within GUS as to whether “This Way Up” signs performed a useful function and whether other strategies, including selection of package geometry, were available.

Previously the members of the TABME had previously identified a number of potential future topics for future consideration;

- Basic techniques for data collection / analysis.
- FDS / MRS - Potential variations between different methods.
- Test tailoring – “How do other people do it?”
- Lean testing and / or virtual testing
- Life estimation and Extension

Any Other Business

Markku said the Eureka project on virtual testing was going to start. He asked for suggestions for a “generic case” to be used against this project.

Dave Corben informed the meeting his work within Philips had changed and he would no longer be attending the CEEES meeting. The group thanked Dave for his contributions.

Next Meeting

The date of the next meeting of the TABME is planned for Thursday 14th February 2008 at the Royal Military Collage, Brussels, Belgium.

Attachments

- 1 Names and Addresses of TAMBE Members
- 2 An Overview of European and International work

Name	Country	Society	E-Mail	Telephone No	Mail Address
David Richards	UK	SEE	Dave.richards@environmental.org.uk or dave.p.richards@lmco.com	+44 01525 843667	Lockheed Martin UK Insys Ltd; Reddings Wood; Ampthill, Bedfordshire; MK45 2HD. United Kingdom
Thomas Trost	Sweden	SEES	Thomas.trost@stfi.se	+46 8676 7087	STFI – Packforsk AB Mail Box 9, SE-16493 Kista Stockholm, Sweden
Ulrich Braunmiller	Germany	GUS	braunmiller@ict.fhg.de	+49 721 4640 116	Fraunhofer-Institut für Chemische Technologie Joseph-von-Fraunhofer-Str. 7, D-76327 Pfinztal (Berghausen), Germany
Markku Juntunen	Finland	KOTEL	Markku.juntunen@vtt.fi	+35 894566215	VTT Metallimiehenuvja 6, Espoo, PO Box 1000, FIN-02044 VTT, Finland
Ton Geise	Netherlands	PLOT	Ton.geise@jjbosbu.nl	+31 102 619333	J.J. Bod B.V. Marconistraat 11; 2809 PH Gouda; The Netherlands
Göran Jansson	Sweden	SEES	goran.jansson@testcenter.se	+4658684508	Bofors Test Center Box 418, S-69127 Karlskoga, Sweden
Dr.- Ing. Karl-Friedrich Ziegahn:	Germany	GUS	kfz@umwelt.fzk.de	+49 7247 82 8590	Forschungszentrum Karlsruhe FZK Postfach 3640, 76021 Karlsruhe, Germany
Dave Corben	Netherlands	PLOT	d.corben@philips.com	+31 40 27 98974	Philips Applied Technologies – Mechatronic High Tech Campus 7 /Room 1.A.025, 5656 AE EINDHOVEN, The Netherlands
Mr Olavi Nevalainen	Finland	KOTEL	olavi.nevalainen@vtt.fi	+358 9456 5642	VTT Industrial Systems Otakarri 7B, Espoo, PO Box 13071, FIN-02044 VTT
Mr Kjell Ahlin	Sweden	SEES	kjell.ahlin@bth.se	+46 708 575094	Blekinge Institute of Technology Dept of Mechanical Engineering SE-371-79 Karlsruna, Sweden
Mz Camilla Jarlfors	Sweden	SEES	Camilla.jarlfors@ dynamics.saab.se	+46 586 82573	SAAB Bofors Dynamics AB SE 691 80 Karlskoga, Sweden

Name	Country	Society	E-Mail	Telephone No	Mail Address
Mr B. Belotti	Italy	AITP	mbelotti@iol.it	+39 255308223	Belotti Sistemi S.A.S. Piazza Trento 6, 20135 Milano, Italy
Mr Eckhard Schneider	Germany	GUS	schneider-eckhard@t-online.de	+49 42 06 41 93 60	SIMTEC Heiligenroder Strasse 42A, D-288 16 Stuhr, Germany
Mr Ueli Grossen	Switzerland	SSEE	Ueli.grossen@ruag.com	+41 33 228 30 48	RUAG Landsystems (Umweltsimulation) Labor 2, Allmendstasse 86, CH3602 Thun
Mr Aad Van Dorp	Netherlands	PLOT	dorpav@nlr.nl	+31 527 248457	National Aerospace Lab NLR PO Box 153, 8300 AD Emmeloord, Netherlands
Mr J Fritz	Germany	GUS	Josef.fritz@t-online.de	+49 89 607 23604	Astrium GmbH 81663 Munich, Germany
Prof Hakan Torstensson	Sweden	SEES	hakan.torstensson@hb.se	+46 33435 5971	Hogskolan I Boras SE 501 90 Boras, Sweden
Mr Erik Rudolphi	Sweden	SEES	erik.rudolphi@ingemansson.se	+46 87975780	Ingemansson Technology AB PO Box 47321, SE-10074 Stockholm, Sweden
Mr L Kushel	Germany	GUS	Lutz.kuschel@smt-hybrid	+49 351 266 130	SMT & Hybrid gmbh An der Priessitztaue 22, D -01474 Weissig Dresden, Germany
Mr Jouni Siren	Sweden	SEES	jouni.siren@dynamics.saab.se	+46 58682937	SAAB Bofors Dynamics AB SE 69180 Karlskoga, Sweden
Ir. Ivan Malfait	Belgium	BEST	Ivan.malfait@barco.com	+32 56233422	BARCO President Kennedy Park 35, B-8500, Kortrijk, Belgium
Mr Ronnie Van Leeuwen	Netherlands	PLOT	Ron.vanleeuwen@nl.thalesgroup.com	+31 402503714	Thales Cryogenics B.V. Hoogle Zijde 14, NL-5626 DC, PO Box 6034, NL-5600 HA, Eindhoven, The Netherlands

An Overview of European and International work

Group / Standard	Connection with CEEES Working Group	Other Connections
ISO – TC 108 wg 26 &27		Kjell Ahlin
ISO – TC 122	Thomas Trost	
ISO - Railway		
IEC TC 104	David Richards Aad Van Dorp Markus Dumelin Markku Juntunen	
CEN TC 261	Ulrich Braunmiller Thomas Trost	
CEN TC 320 Transportation Services		Soren Ostergaard
DIN 30787 NAVP 1.4	Ulrich Braunmiller Karl Zieghan	Ed Furrer
BSI	David Richards	
UN Orange Book		
Mil Std 810		Skip Connon
Nato Standard - AC310		David Richards
Nato Standard - AC301	Markus Dumelin	Peter van Harmelen David Richards
Nato Standard - ITOPS		
CEN Workshop Agreement Defence Procurement WS10	Karl Zieghan	David Richards Goran Jansson Markku Juntunen
IEC Railways		Odd Sylwan