



Confederation of European Environmental Engineering Societies

Founded 1984

Minutes of the 64th CEEES General Assembly 16th September 2015 Congress Centrum University Federico II Via Partenope 4, Naples, Italy

1 Opening of the Meeting

1.1 Welcome Address

The president thanks for participation, thanks to the University of Naples to host this meetings and GUS for all arrangements. This meeting was combined again with an international event, this time with the 7th European Weathering Symposium – Natural and Artificial Ageing of Polymers

1.2 Acceptance of the Agenda

The agenda was distributed before and was accepted.

1.3 Roll Call of Delegates (and Observers)

The participants in the meeting were:

David Delaux, Henry Grzeskowiak (ASTE)
Kenneth Möller, Goran Jansson (SEES)
Francois Crepain, Davy Pissoort (BSTEE)
Markku Juntunen (KOTEL)
Harry Roossien (PLOT)
Dave Richards (SEE)
Thomas Reichert, Karl-Friedrich Ziegahn (GUS)
Mauro Jermini (SVU)
Guilio D'Emilia (Italy)

Apologies arrived from Thomas Trost, Roger Källberg (SEES)
Kati Kokko (KOTEL), Ueli Grossen (SVU), Johan Catrysse (BSTEE), Leopold
Kraner, Dietmar Loidl (ÖGUS), Antonio de Brito (SOPSAR)

Short Introduction from Prof. Giulio D'Emilia: Born in Frosinone, Italy, in 1956, Prof. Giulio D'Emilia (M.D.) graduated in Mechanical Engineering in Rome University "La Sapienza" in 1980. Since 1998 he is associate professor in Mechanical and Thermal Measurements at the L'Aquila University, in the Department of Industrial and Information Engineering and of Economics (DIIIE). At DIIIE Prof. Giulio D'Emilia is now teaching, giving courses in the field of Mechanical and Environmental Measurement Techniques.

Short Introduction from Prof. Davy Pissoot: Prof at KULeuven, ReMI Research Group (Reliability in Mechatronics and ICT) a new research group for EMC in Brugge.

1.4 Roll call of activity reports

The activity report updates were postponed to the next meeting in spring.

ACTION: Every national Association are kindly asked to update the information in the Activity report 2015 table before the meeting and to send the report to secretariat@gus-ev.de.

1.5 Approval of the Minutes of the 63rd Meeting held in Berlin

The General Assembly approved the minutes of the 63rd meeting held at the Fraunhofer Forum in Berlin, Anna Louise Karsch Straße, Germany.

1.6 Incoming correspondence, notes and information

Roger Källberg, SEES, send a letter to the CEEES president to inform that the Swedish Society will support a project to digitalise the Environmental Engineering Handbook and develop it further to an e-learning tool. The support from CEEES Members is very welcome, as the effort is too high for SEES alone.

ACTION: The CEEES president will get into contact with the DG Research responsibilities, if there is a call for a "Long life learning project"

Helmut Schweigart, ZESTRON, a former GUS working group leader "Electronic reliability" made a contact for CEEES to DELTA in Denmark. DELTA host the secretary for SPM. The association is probably interested in CEEES and will be invited to the next CEEES Meeting in Belgium in Spring 2016.

ACTION: The president will invite DELTA/SPM to the meeting in Belgium in Spring 2016

2 Technical Advisory Board Reports

2.1 TAB Reliability and ESS

Reference is made to the TAB minutes on www.ceeess.org

Chairman: Henri Grzeskowiak - France
Deputy Chairman: David Delaux – France
Other nation's attendees: Finland, Holland, Switzerland

Core team involved: France (ASTE, Valeo, Thales), Sweden (SSEE, Intertek), Finland (KOTEL, VACON), Holland (PLOT, Plantronics, ESA), Germany (GUS), Switzerland (CHARDAIRE)

Discussed Topics:

1. Publication n°9 :

Reliability methods and tools through product development - D. Delaux (ASTE): David Delaux will propose an excel sheet to be fulfilled by others members; this list could be added in an advanced document untitled: **electronic- Interactive list of documents related to Environmental Engineering and Reliability**

Introduce new chapter on Predictive Reliability model for Electronic - K. Kokko (KOTEL): under preparation

2. Build a new European Recommendation Guideline on « High Accelerated Test - Environmental Stress Screening ».

No proposal made so far by the members to improve the existing document "Environmental stress screening for electronic equipment using Highly Accelerated Tests - GUIDE" produced by ASTE

3. Electronic- Interactive list of documents related to Environmental Engineering and Reliability

To be examined by members for completion. It is proposed to add:

- the list of existing national trainings on the domains under concern
- the list of reliability tools
- the list of Web Sites related

4. Work Shop on Methods for Deriving Test Profiles (Tailoring) to be organized by ASTE- fall 2016 CEEES meeting in France

ASTE is proposing A WORKSHOP with the theme of « **Deriving Test Profiles (Tailoring)** » for the workshop of October 2016 in France ».

The program could be constituted by:

- 4 papers to be proposed by the CEEES members presenting their methods and cases histories
- The preparation of a round Round Robin exercise on **Deriving Test Profiles** , one specific to the mechanical environments and another one specific to the climatic environments.
- Two examples of what could be done for the mechanical environments are presented hereafter.

- The process of preparation could be :
 - ASTE will propose a detailed programme for each of the mechanical and climatic exercise
 - To be discussed and accepted by the other members willing to participate
 - Each participant is developing its own response to the exercise
 - Status of advancement to be presented during the Workshop

Simple example of presentation of life profile environment:

Scenario	N°	Situation	Events	Duration (h)	Occurrences	Number of measurements	Uncertainty coefficient K	Curved references
	1	Logistic transport by road	Shock handling Vibration bad road Vibrations good road	/ 10 20	1 1 1	1 time history signal time history signal 6 PSD	Contractual: 1.3 on temporal Contractual: 1.3 on ERS Statistics (on the ERS and FDS)	CHOCJD_X.TPS Route NS_PS2 Cannon1 (2, 4,5,8,9,10) with 6_PS2
	2	Logistic transport by road	Vibration good road	10	20	4 PSD	Statistics (on the ERS and FDS)	Cannon1 (0, 1,3,6) with 4_PS2
	3	Logistic transport by air	Flight cargo Vibration	2	1	1	Contractual: 1.3 on ERS	C160PA_X_PS2
	4	Logistic transport by railway	Crossing Shock Vibration normal track	/ 3	1 1	1 SRS 1	Contractual: 1.3 on SRS Contractual: 1.3 on ERS	CHOC_X_SRS SNCFBV_X_PS2
	5	Tactical transportation	Vibration rough tracks	12	1	1	Contractual: 1.3 on ERS	Log_PS2 carrying
	6	Carrying tactical use	Vibration all terrain	1	1	1	Contractual: 1.3 on ERS a	Tactique_PS2 carrying

Foot-note: The grayed zones correspond to spots worked out during the following steps.

Specific criteria			
Spectra to be calculated between 5 and 2000 Hz Number of points: 200 Distribution: on logarithmic curve	Q = 10 b = 8 K = 1 C = 1	CVR = 0.08 in extreme response,	Probability of accepted failure: 10-3
		CVR = 1.0 in fatigue	Degree of confidence for the test factor : 90%
		Statistical laws on ERS,SRS and FDS: lognormal	Number of tests: 1 Upper Response Spectrum : risk of 1%
Duration of the specification: 4 hours Only treated one axis (OX) ; No calculation of the FDS for the shocks			

Situation: Transport of a package by truck in the same configuration (boundary conditions, states....) and a journey (or distance)		
Situation	Duration and/or Occurrence Targets	Data available
Highway road	10 hr 60 km/hr	10 PSD Environment: Gaussian random, with variation in the instantaneous speed, topography, driving style...
Secondary road	3 hr 30 km/hr	10 time signals Environment: not necessarily Gaussian with variability of the same type as in the previous case
Transition (acceleration/braking)	100 occurrences 0-30 km/hr	8 time signals
Railroad Crossing	2 occurrences	7 time signals
Pothole	1000 occurrences	3 time signals

2.2 TAB Mechanical Environment

Reference is made to the TAB minutes on www.ceees.org

Chairperson: Dave Richards

Participation from: KOTEL, SEES, GUS

The TABME spent the first half of the meeting looking at a number of relevant new and revised chapters proposed for the UK Defence Standard for Environmental Testing. The seven year work programme to update this standard is close to completion. The 55 mechanical and climatic environmental test procedures have all been revised. Peer review, within the UK, is complete for the majority but comments on a few, mostly mechanical procedures, are still awaited.

In parallel with the revision of the test procedures three other parts of the standard have been extensively revised. This has included new chapters setting out clear requirements for climatic testing. That part of the document also now contains a prediction of the effects of climate change on the requirements for equipment. The climate change predictions are based upon the HadCM3 climate change model developed by the UK Meteorological Office. The predictions have been used to update the climate maps and probability distributions currently included within Def Stan 00-35, AECTP 200 Leaflet 2011 and Mil Std 810. The model has also allowed the inclusion of information on the likelihood of consecutive days of high or low temperature. The climate change predictions are to be offered for inclusion in AECTP 200, Mil Std 810 and IEC EN 60721-2.

The TABME was shown two revised chapters on the mounting of equipment for mechanical testing and a reworked chapter on vibration and shock control. They were also shown the revised multi-axis vibration testing procedure and the revisions to the general purpose vibration test to permit it to encompass high kurtosis testing.

It was reported to the meeting that a working group of IEC TC 104 had met in Washington to revise the first three chapters of IEC EN 60721-3. These chapters set out the environmental conditions that may be experienced by electro-technical equipment during storage and transport. The revised chapters are now available for comment via national standards organisations. It was also reported that the next meeting of the full IEC TC 104 committee and its working groups would be held the week of the 14th June 2016 at the BSI building in London. It was further reported to the TABME that PD TR 62113-4 had now been published and included information on the mechanical environments occurring during storage and handling.

2.3 TAB Climate and Air Pollution Effects

Reference is made to the TAB minutes on www.ceees.org

Chairperson: Thomas Reichert (GUS)

Participants: ASTE; SEES, BSTEE, GUS

Guests: Giulio D'Emilia, University of L' Aquila, Pietro Russo, University of Naples, Italy

The Chairman informed about the upcoming International Environmental Engineering Events in 2015/16:

7th European Weathering Symposium, Naples, Italy, 16th -18th September, 2015, (with Co-organisation from University Federico II, Naples)

Innotesting 2016, 25th-26th February 2016, Berlin (Wildau)

Risk Management in the Factory of the Future, Brugges/Leuven, Belgium 3rd-4th March, 2016

SLP Symposium 2016, Santa Fe, NM, USA, 20th -22nd March 2016

Two presentations from our Italian guests informed about environmental research and testing in Italy, which is of interest for CEEES:

Pietro Russo, University of Naples introduced the Institute for Polymers, Composites and Bio-materials IPCB. New methodologies for the correlation between structures, properties and processing of polymers and composites, innovative materials based on thermosetting resin and nanocomposites, packaging materials, biomedical applications, agriculture, synthesis and chemical-physical modification for the development of multifunctional thermoplastic systems and high tech blends are the main research areas. Pietro introduced further the Regional Centre of Competence: New Technologies for Production Activities (SCARL). CRdC Tecnologie Scarl is a limited liability company organised as a consortium of 5 universities and 2 of the major independent research institutions in Campania. The presentation is attached to the minutes.

Giulio D'Emilia, University of L' Aquila, introduced the activities of his group on research topics for Environmental Engineering (civil and industrial sectors): Material Chemistry, Electrical and Electronic Engineering, Managerial Engineering, Mechanical Engineering (Energy production and saving and product/process design and development), Chemical and Biotechnological processes, Information Engineering etc. A short discussion about possibilities for an Italian Member Association followed. It was agreed to have this presentation also in the GA to decide about the next steps. The presentation "University of L'Aquila a proposal for Partnership" is attached to the minutes.

The TAB Chairman informed that GUS started a new Working Group for the review of the IEC 60068 series, but first for internal improvements.

3 CEEES Management and Organisation

3.1 CEEES Statutes

The statutes are available in word format in English and French and remain unchanged.

Action: The president will send the Status and by laws to the Italian interest group

3.2 CEEES Working Practices

The working practise is an ongoing process. In 2013 we have changed the working practices. This year there was no need to change further. The role of treasurer and back up was discussed and considered to be good in the working practices. A question raised up belonging to the bank accounts. It was clear stated, that CEEES need an account in Belgium. David Delaux is officially the back up for Francois Crepain.

Action: The CEEES Secretariat should write the invoices (fees) on behalf of CEEES to the member associations (GUS, Thomas Reichert)

3.3 CEEES Presidency

10/2014-10/2016 Presidency: GUS (Thomas Reichert)
 Vice-presidency: ASTE (David Delaux)

10/2016-10/2018 Presidency: ASTE
 Vice-presidency: proposal SEES

For the period 2016-2018 it is proposed that Sweden (SEES) takes (vice) presidency.

Action: SEES will discuss this internally.

3.4 CEEES Membership

During the last meetings the Assembly decided to clarify the situation for AITPAs membership. The president therefore contacted AITPAs president Gianluigi Angelantoni by mail. Gianluigi stated that the Italian Association is not active anymore since years and officially steps back from the membership in CEEES.

The General Assembly accepted unanimously the decision from AITPA.

Two new possible members will be invited for the next CEEES Meeting in Leuven/Bruges:

Guilio D'Emilia, University of L'Aquila, Italy

Christian Skytt, Kim Albert Schmidt, Delta/SPM, Denmark

Action: The president will contact the candidates in time.

4 Financial Matters

4.1 Annual Balance Sheet 2015

The treasurer François Crepain presented the annual balance sheet and it was accepted by the General Assembly. See appendix.

4.2 Proposed Budget 2015

The proposed budget of 2015 was not changed.

4.3 Open Payments

Given the situation and agreement to discharge NACEI and SOPSAR, there were no open payments from the year 2014.

4.4 Costs Funding Structure

Discussions regarding the cost funding structure and EU programs are continued. There is still a need to increase the visibility of CEEES by supporting European projects and proposal preparations.

Action: To proceed to find a Call for the VPET proposal (Markku Juntunen)

5 Future Development of CEEES

5.1 CEEES Way Forward Strategy

CEEES Way forward was updated during the meeting with following key expressions.

- Connections
 - just do it
 - in between meetings (formal and informal)
 - **use CEEES website** (– less used)
 - follow European research projects
 - involve universities professors and PhD students
 - e-learning
 - transport loads
 - add automotive area
 - follow service life of consumer products* (on German agenda)
- Connections to other European associations
 - EU commitment and funding
 - EFCA (air quality directive etc.)
 - EU directives, which and were to find
- Link TAB and GA to conferences
 - 2015 Sept: 7th EWS Italy
 - 2016 Sept: Innotesting (organized by GUS members BAM/Rolls-Royce)
 - 2016 IEST
 -
- Improve attendance
 - combine with events
 - agendas of TAB meetings
 - activity reports
 - attractive website
 - possible difference between individual and company members
 - collect more points of contact in the companies: information might be blocked (busy, gatekeepers, no handovers)
 - early notice of dates (placeholders) to assure availability
 - aim for new and young faces
- Marketing
 - where are the benefits*
 - promotion/promotion material – increase visibility
 - use salesforce equipment suppliers to point at CEEES at their customers*
 - assign a person for market watch
 - website

*High priority to do or to develop

5.2 CEEES Website

For renewing the CEEES website there is a working group consisting of Thomas Reichert, Jonathan Martino, Dave Richards and Harry Roossien. The group decides the technical specifications of the site. (AR: Thomas Reichert, Jonathan Martino, Dave Richards and Harry Roossien).

This is still on-going; Dave Richards and Thomas Reichert write some Actions to update the existing sites. There is still a joint meeting necessary what we expect from our site.

Karl-Friedrich Ziegahn (GUS) mentioned that the national websites should be attractive; the CEEES website is more used as a portal to “Environmental Testing” search.

6 International Relations

6.1 European-USA relations

The president Thomas Reichert is planning to participate in the IEST 2016 if there is no conflict with national or company duties.

Action: To get into contact with Chris Peterson in time

6.2 Hungary, Poland and Spain and others

This point was not further discussed during the GA. Last status is described below.

- Poland: No information
- Spain: Due to the local crisis funding seems to retain progress in consolidating societies and universities. They are not willing at this moment.
- Hungary: No information.
- Rumania: Harry Roossien contacted Rumania because they have vibration and virtual testing. They are not willing at this moment.

7 Projects

7.1 Virtual Testing

This approach for funding VPET is still alive. Details will possibly present during the next meeting, when Markku Juntunen is available.

8 Resolutions and Actions

General

Action: For the period 2016-2018 it is proposed that Sweden (SEES) takes (vice) presidency. Roger will discuss this internally. (R. Källberg)

Action: Prepare a questionnaire concerning branches for distribution around the members (D. Delaux, T.Reichert)

ACTION: Every national Association are kindly asked to update the information in the Activity report 2015 table before the meeting and to send the report to secretariat@gus-ev.de.

ACTION: The CEEES president will get into contact with the DG Research responsibilities, if there is a call for a “Long life learning project”

ACTION: The president will invite DELTA/SPM to the meeting in Belgium in Spring 2016

Website

Action: Technical specifications website (Dave Richards, Harry Roossien, Jonathan Martino and Thomas Reichert)

Action: Send the to-do list for refurbishing the existing website to the webmaster (T. Reichert)

9 Future Meetings

9.1 Next meetings

- Spring 2016
Proposed is the 3rd -4th March 2016 in Bruges/Leuven

Davy Pissoort, BSTEE presented an outlook of the CEEES Conference in Spring:
EMI Risk Management: A necessity for safe and reliable electronic systems.
(see Annex)

- Autumn 2016
Proposed is South-West of Paris, Itevil, France
Date: tbd
- 2017
40th Anniversary of KOTEL
UFP Symposium in Brussels in May
8th EWS in Vienna in September

10 Any Other Business

Suggestion to check wikipedia page (environmental testing) and mention CEEES as the European umbrella organisation.

Annex 2 – Branches Distribution for ASTE

Aeronautic	17%	
Automotive	1%	
Consultant	4%	
Defence	19%	
Electronic	11%	
Test & Lab	40%	
University & Research	7%	

The proposal is to start an inquiry to members / or the association already have the information about the relation to branches in CEEES.

To maximize the benefit, we probably should structure the inquiry in a combination of all.

Industry Groups and Technology Groups from SEE

Industry Groups

Aerospace & Defence.

Transport *including Automotive & Rail.*

Electrical, Electronics & Telecoms.

Manufacturing & Process *including Mechanical, Chemical, Pharmaceutical & Medical.*

Power, Energy & the Built Environment *including Construction & Land remediation.*

Technology Groups

Testing & Reliability *including Vibration, Shock, Climatic, Noise, EMC*

Design & Simulation

Cleanrooms & Contamination Control

Packaging

Environmental Management

Interest Groups GUS

Electronics

Automotive

Construction or Civil Engineering

Defense

Transportation and Packaging

Material Research

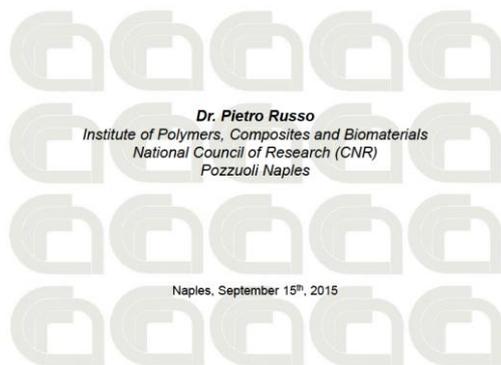
Environmental Research

Test Lab

Annex 3 - Presentation Davy Pissoort, KU Leuven
(Please click on picture)



Annex 3 - Presentation IPCB
(Please click on picture)



Annex 4 - Presentation University of L'Aquila
(Please click on picture)

