European Presidents Day

4th July 2017

in Brussels

13:30 welcome at RAM
14:00 Introduction & Interviews of Guest Invited

14:45 ASTE-Fr. roadmap (P-E Dupuis)
15:00 GUS-Ger. roadmap (T. Reichert)
15:15 PLOT-Hol. roadmap (H Roossien)
15:30 SEE-Uk roadmap (D. Richards)
16:00 BSTEE-Belg. roadmap (D. Pissoort)
16:15 Italy roadmap (G D'Emilia)

16:30 Break - Cocktail

17:30 SEES-Swed. roadmap (P. Eriksson)
17:45 SSEE-Swiz. roadmap (U. Grossen)
18:00 OGUS-Aust. roadmap (by delegation D. Delaux)
18:15 NACEI-Cz. roadmap (excused)
18:30 KOTEL-Fin. roadmap (by delegation D. Delaux)
18:45 SOPSAR-Port. roadmap (by delegation D. Delaux)

19:00 Conclusion
19:30 - Diner Gala

Confederation of European Environmental Engineering Societies

"Coming together is the beginning.
Keeping together is progress.
Working together is success."

Henri FORD

The objectives of the day

Together is better

Closer relationship with all nations
Coordination of Research Program / Working Group
Unified European Efforts

Draw a global roadmap
Several “members” but one “body” for EU commission
Serve Europe and EU Commission

CEEES 2017

Shock testing...


MICHEL COQUELET
ASTE
Karlsruhe 2000

A scientific society needs money !

Creativity is required !

The marvellous society's activity needs to be sold :

The board needs to have a sales director !

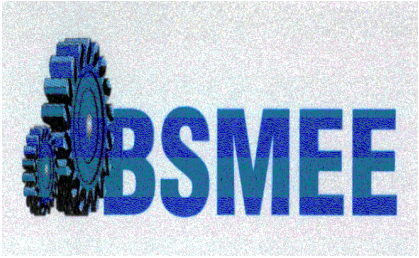
The activities need tobe profitable !

The board needs to have a financial controller.

The activities have to be known :

The board needs to use an advertising agency.

From SBM to BSTEE



Y.Baudoin

Prof Em RMA

ICI/EKC Manager

Past president BSMEE

Yvan.baudoin@ici-belgium.be

Objectives: analysis of R&D in the domain of the Mechanical engineering, support of standardisation, recommendations in testing of machines.

Partners: Academia, IBN, AGORIA, ASME

Major CONSTRAINT:

Objectives of SBM fullfilled by AGORIA (AGORA+I : promotion of new technologies, including standards)

End of IBN sponsorship

OBJECTIVES BSME: link between AGORIA and ACADEMIA
link between B(sme) and A(sme)

BELGIAN SOCIETY OF MECHANICAL ENGINEERING
BSME (…..1998)

Objectives: - mechanical engineering (BMED)
- environmental engineering (BEST)
-

Partners: Academia, SMEs, AGORIA, HAME, JSME,HME, ASME

OBJECTIVES BSME: link between AGORIA and ACADEMIA
link between B(sme) and A(sme)
support of ICOMES

BELGIAN SOCIETY OF MECHANICAL ENGINEERING
BSMEE (….2010)

BMED Committee

- Prof Dr B.LAUWERS (KUL)
- Study-days and co-sponsor of symposiums and Workshops (funding) (Link **CLAWAR**, Link **IARP, IMEKO**
- Mechanical Engineering Promotion (EJMEE, **ICOMES**)

BEST Committee

- Ir F.CREPAIN (KMS)
- EUREKA Project Best-Product
- www.eneest.eu
- Promotion Environmental Engineering (EJMEE, CEEES)
- Development of CETEE, link CEEES
- FUNDING: BELSPO

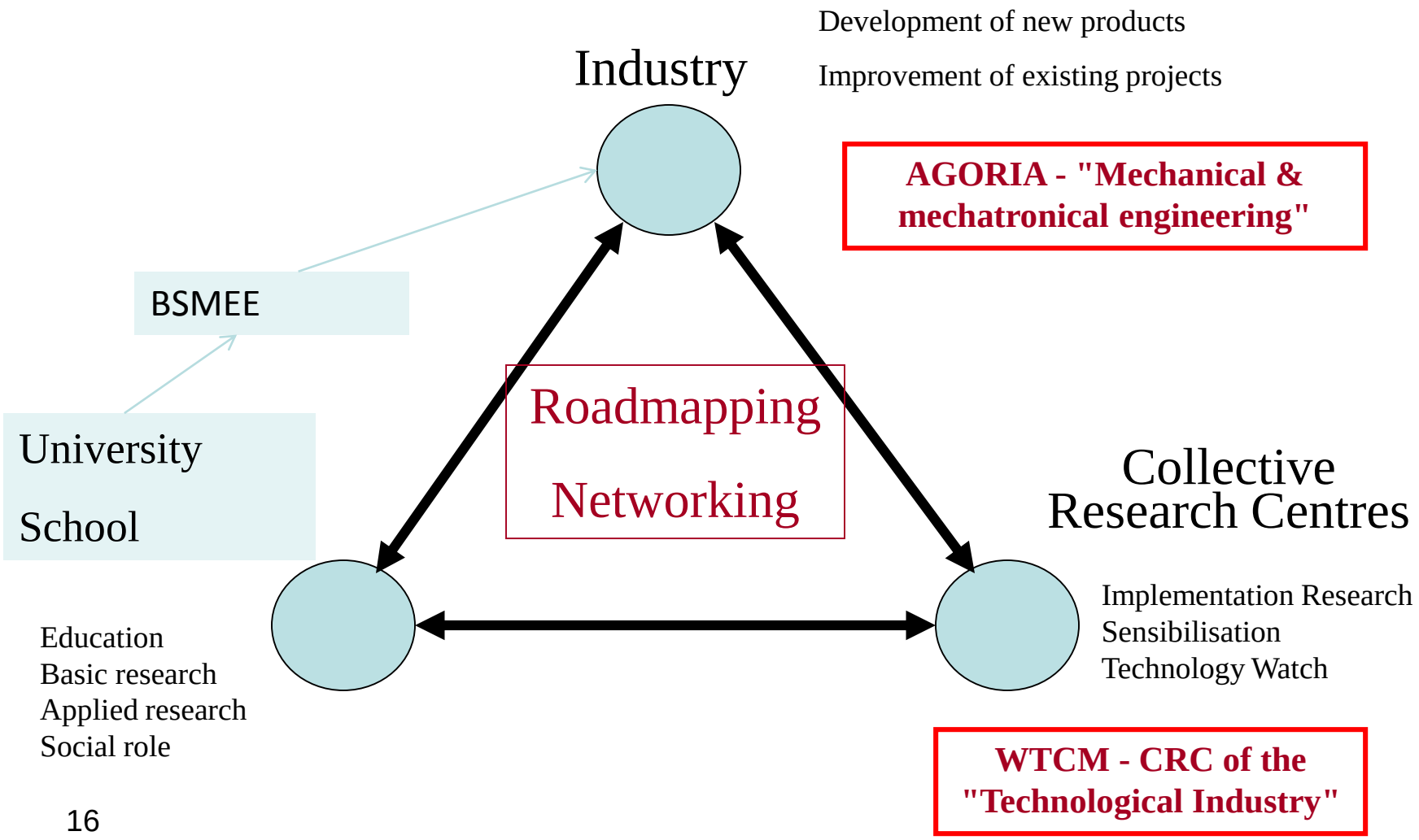
IARP
International Advanced Robotics Programme

BEMEKO

ICOMES
International Congress of Mechanical Engineering Societies

EUREKA

ROLE of BSMEE - AGORIA



About ASME

Not-for-profit Professional Association

Founded in 1880 as the American Society of Mechanical Engineers

Over 120,000 members worldwide

ASME Headquarters

New York, NY, USA

ASME Europe Office

Brussels, Belgium (Europe, Middle East & Africa)

Launch 1 April 2005

Mission

ASME works in partnership with individuals, companies, institutions and affiliates to promote and enhance the technical competency and excellence in mechanical engineering and allied sciences at a global level.

ASME Services

- Codes and standards
- Continuing education / lifelong learning
- Certification
- Technical publications
- Global information and technology exchange
- Safety and conformity
- Volunteers and regional affiliation
- Engineering advocacy

Technical Communities: Groups and divisions

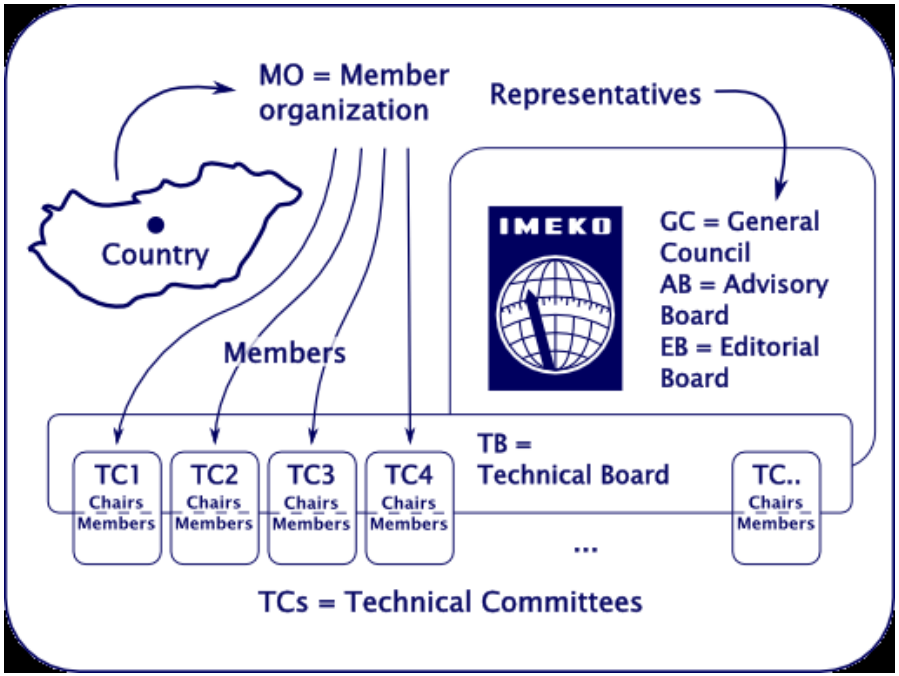
- Basic engineering group (applied mechanics, fluids engineering, tribology, heat transfer etc.)
- Energy conversion group (Fuel & combustion, nuclear, internal combustion engine, etc.)
- Energy resources group (Advanced energy systems, solar etc.)
- Engineering and Technology Management Group (safety & risk analysis, management etc.)
- **Environment and Transportation Group (aerospace, environmental engineering, solid waste etc.**

CHAIR of ICOMES: links with worldwide SMEs

IMEKO

International Measurement Confederation

BEMEKO



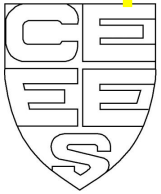
TC19: Environmental Measurements (established in 1999)

Chairperson: Prof. Aimé Lay-Ekuakille University of Salento Italy

TC22: Vibration Measurement (established in 2005)

Chairperson:Mr. Gustavo Ripper INMETRO National Institute of Metrology, Quality and Technology – Inmetro Directory of Scientific and Industrial Metrology (Dimci) BRASIL

EU landscape



EU Bodies

Member States (Committees)

Intergovernmental

- **EDA** Defense
- **Europol** Law Enforcement
- **Frontex** Border Control
- **EEAS** Ext. security
- **FPI** Foreign Policy Instrument

EU Policies

- **DG TAXUD** Customs
- **DG DEVCO** International cooperation
- **DG TRADE** Trade
- **DG MOVE** Transport
- **DG ENER** Energy
- **DG GROW** Enterprise & Industry
- **DG SANCO** Health
- **DG ENV** Environment
- **DG CLIMA** Climate Action
- **DG HOME** Internal Security
- **DG ECHO** Civil protection

EU Research

- **DG HOME** Secure Societies
- **DG RTD** Research
- **DG EAC** Joint Research Centre
- **DG CNECT** ICT
- **Executive Agencies** REA, EASME

+ INTERPOL, NATO, UN Bodies

Industry, Stakeholders, NGO's, Researchers, Experts, etc.

RECOMMENDATIONS

HORIZON 2020 DG TPT call

IMEKO TC affiliations and/or new TC and/or recruitment of new CEEES members via national MEKOs (BEMEKO)

NATO-STO-AVT-WGs via personnel involvement www.sto.nato.int

SUGGESTION (2)

Topic: NATO AVT 303 Workshop CORROSION (2017-2019) Corrosion assessment (non-destructive inspection, destructive inspection, diagnostic tools) • Corrosion monitoring (corrosion/environmental sensor, coating/protection degradation, coating breakdown/failure) • Corrosion prognostic tools (corrosion growth rate modeling, remaining life prediction, structural integrity assessment, probabilistic projection, evaluation and validation of tools) • Corrosion repair (cold spray, additive manufacturing) • Corrosion prevention (coating, corrosion prevention compounds/CPC) • Corrosion case studies (real examples of corrosion mechanisms or failures, repairs, and management) • Corrosion management policy (from "Find it and Fix it" to "Predict and Manage", corrosion prevention and control program/CPCP across fleet, individual fleet/platform)

Topic: NATO AVT 275 Ageing System (Aircraft) (2017-2020)

Ageing mechanisms covered during the Workshop included: fatigue, corrosion, coating degradation, maintenance induced damage and polymeric degradation (time-dependent stress relaxation/deformation) as applied to airframe structures and back-up structure (for both fixed and rotary wing aircraft), mechanical subsystems, electrical/wiring connections, polymeric seals, environmental control systems, flight control systems, and corrosion protection systems. Objective: To develop a document containing the best practices that have been developed in each NATO nation

TOPIC: NATO AVT 287 Design and Operation of Aeroacoustic Wind Tunnel Tests for Group and Air Transport

Among others.

from BSMEE to BSTEE
K. Harri-D.Pissoort

THANK YOU

Yvan.baudoin@ici-belgium.be

C.V.

Title: Professor emeritus

Name: BAUDOIN

Position: Former Executive Head of the RMA/ UVC

Organization: Polytechnical Faculty
Royal Military Academy (RMA)
Brussels, Belgium
http://mecatron.rma.ac.be

Educational Background:
- Engineer Electro-Mechanical Engineering (Polytechnics, Brussel)
- Post-Master Automatic/Robotics Engineering (Free University, Brussels)
- Post-Master High Statistical Studies (University Paris VI)
- Doctor Honoris Causa (Technical University of Iasi, Romania)

Areas of Interests & Contribution

- Head of Programming Division of Informatics Centre of Belgian Army (79/83)
- Member of NATO:Working Groups on Robotics, Human-Machine-Interfaces, Advanced Electrical Mobility Control (85/2011)
- Chairman BSMEE 1997/2009
- Voting Member RTO/AVT (2008-2011)
- EDA (European defence Agency) Project-Initiator in Multi-Robotics Cooperation (2005-2009) (NMRS, managed by Eric Colon)
- Head of IARP (International Advanced Robotics Programme) Working Group on Robotics for Humanitarian De-mining (HUDEM), Robotics for Risky Interventions (RISE) and official Belgian Representative in IARP (2001-)
- FP6 – View-Finder Robotics Project (2006/2009)
- Deputy Director of CLAWAR (Robotics) Association (2006- 2011)
- EUREKA project TENEEST (2007 2011)
- FP7 – TIRAMISU Coordination (2012-2015) www.fp7-tiramisu.eu
- FP7 – ICARUS Member of Project management Team (2012-2015)

Né en 1936, séjourne en Allemagne de 1962 à 1970, carrière dans l'industrie, membre du Beethoven Verein depuis 1956, a écrit des critiques musicales pour Le Monde, des articles dans Entracte et Connaissance des Hommes.

Claude Broussy a été nommé senior vice president de Pall Corporation. Il est chargé de la logistique et de la politique d'achat du groupe au niveau mondial.

Claude Broussy, soixante-deux ans, centralien, a commencé sa carrière en Allemagne chez Braun, puis rejoignit en 1978 le groupe Pall. Il a développé la filiale française de 1978 à 1994 en tant que PDG, puis a assuré la direction de la division filtration industrielle au niveau européen de 1994 à 1997. Il a ensuite pris en charge la réorganisation de la logistique du groupe en Europe. Il était vice-président de Pall Corporation. ●

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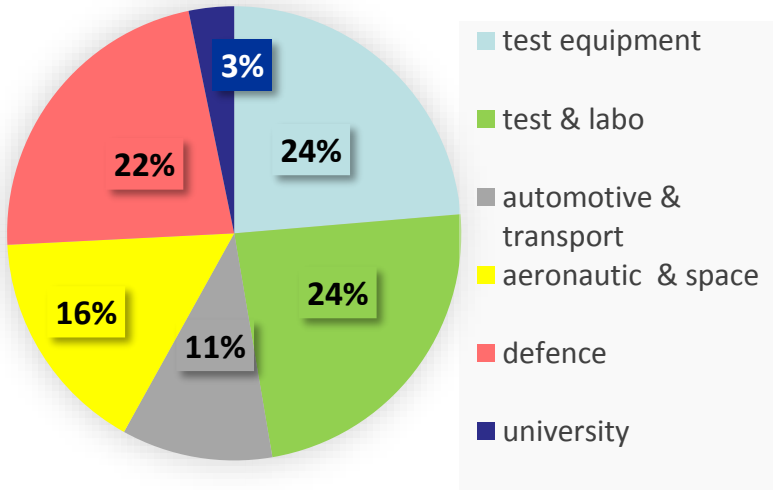
MAIN FEATURES

- Founded in 1967 (50 years in 2017)
- Members : 9 large groups, 7 Intermediate enterprises, 6 SMEs, 17VSEs equivalence to 113 individual members (30/08/16)

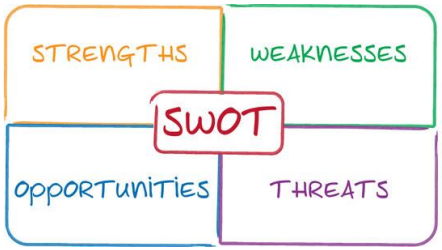
Sector breakdown



- Key figures in 2016 :
  - Budget : 155,000 € (+29%)
  - Net result : 30,000 € (+23%)
  - 2 main conferences ASTELAB in Mechanical (October) and Thermal (September)
  - 1 Technical day (Climatic) at Bruz (DGA)
  - 15 catalog trainings for 55 stagiaires
  - 1 specific training for Renault
  - GAM-PME project to create a technical guide for EMC (funded by DGA)

ACTIVITIES & RESEARCH PROGRAM

- A central office to coordinate the activities : Patrycja Perrin
- Conferences ASTELAB in Mechanical or Thermal testing as major event for the association
- Technical workshops combining technical presentations and industrial tours
- A Training Catalog highly appreciated
- A Web site to share the information (events, documents, news, …) and a bimonthly review (Essais et Simulations) of very good level
- A commission on mechanical and climatic testing and a new one on thermal and maybe measurement, to analyze specific subjects, issue technical guides and participate to standards elaboration



- 50 years history
- ASTELAB
- Technical database
- Three-monthly review « Essais & Simulations »
- Members motivation and expertise

- Technical database not up-to-date
- Network to improve
- No financial support from public organizations
- Difficulty to adress EMC domain

- Need to filter and sort data from the web
- Need to share information and experience
- Request of design and test advices from SME's
- CEEES

- No added value wrt other associations or internet
- Not enough means to develop the activity

PROPOSITION OF IMPROVMENT

- National Improvement
  - Create a technical database and make it accessible through the web,
  - Increase the number of commissions (EMC, measurement, …) to treat the problems, analyze the trends and participate to standards update
  - From commissions work, propose R&D projects and find funding thanks to the ASTE network
- International Improvement
  - From commissions work, propose R&D projects at European level and find funding thanks to the CEEES network
- Request to EU Commission
  - Funding to :
    - Buy tools to create and manage the technical database
    - Support our actions, associations
    - Promote projects based on European collaboration

GUS

Gesellschaft für
Umweltsimulation e.V.

European Presidents Day

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in Brussels

Rege duce pro Jure et Honore

Gesellschaft für Umweltsimulation e.V.

MAIN FEATURES

- The German based Gesellschaft für Umweltsimulation e.V. (Society for Environmental Engineering) was founded in 1969.
  It is the organization of persons, institutions and companies working in environmental engineering and environmental testing.

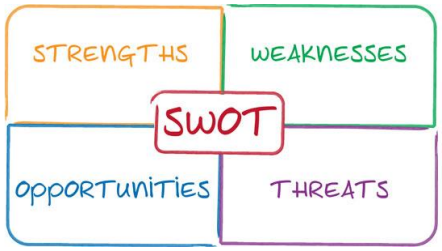
- 194 company members
- 246 private members
- Partnership with VDI
- Cooperation with DFO, DVM, IGKV, EFCA, CEEES, IEST

- Annual Budget Figures are approximately 110.000 Euro
- Main Events:
  Annual Technical Meeting “Jahrestagung” (200 participants, 25 presentations)
  Annual Technical Workshop “Vibration and Shock”, with *InnoTesting* (80 participants)
  Biannual: *European Weathering Symposium* (80 participants, 40 present. and posters)
  Biannual: *Ultrafine Particles – Air Quality and Climate* Symposium (80 participants, 40 presentations and posters)

Gesellschaft für Umweltsimulation e.V.

ACTIVITIES & RESEARCH PROGRAM

- Dissemination of research projects and results via the conferences and symposia
- Supporting additional world wide events like “World Clean Air Congress”
- Supporting Standardization Working Groups and Guideline setting working groups (DIN, IEC, ISO)
- Participating in EUREKA Best Product TEENEST projects and others
- Supporting members in networking and partner search for research projects on National and International level
- Supporting members in finding the right test lab for specific tests
- Stimulating Round Robin Tests and Training Courses of environmental experts
- Presenting Leading Edge Research in Environmental Testing in Standardization Organizations
- Writing Handbooks and Best Practice Guides or Recommended Practice's
- Communication of News by Mailings and via the web-site www.gus-ev.de
- Archive and Documentation Environmental Testing
- etc…..



GUS Gesellschaft für Umweltsimulation e.V.

- Established expert network in Germany
- Corporate and private membership
- Secretariat supported by research center
- Several Working Groups in different application areas
- Supplier of equipment, user of equipment and research groups involved

- Long time needed for writing *Handbooks* and *Best Practice Guides or Recommended Practice's*, due to voluntary basis
- Lack of funding for some activities to get faster results
- Lack of funding for research

- Co-operations and international networks to get more visibility
- Common research projects applications to be able to generate results and knowledge faster
- Increase membership by looking for new applications like green energy, life cycle assessment, green economy

- Expert knowledge expected to be available for free (e.g. Wikipedia, Google etc…)
- Outsourcing of Test Labs
- Reduction of testing due to cost reduction and to fast product development cycles (testing in the field)

Gesellschaft für Umweltsimulation e.V.

PROPOSITION OF IMPROVEMENT

- National Improvement
  Widen scope of work to new application areas and working together with expert groups / industrial groups e.g. renewable energy, flying cars, autonomous driving, Life cycle assessment and climate change effect research

- International Improvement
  Strengthen contact to national expert groups not covered by CEEES
  Supporting networking of national expert subgroups on International level with the aid of common projects

- Request to EU Commission
  Realizing Environmental Testing as a leading edge research topic with respect to time saving and acceleration of tests, avoid adverse effects of products to the environment and human health
  Support networking on expert level not dividing between environmental or material research, it is linked to each other

FHI PLATFORM OMGEVINGSTECHNOLOGIE

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Rege duce pro Jure et Honore

MAIN FEATURES

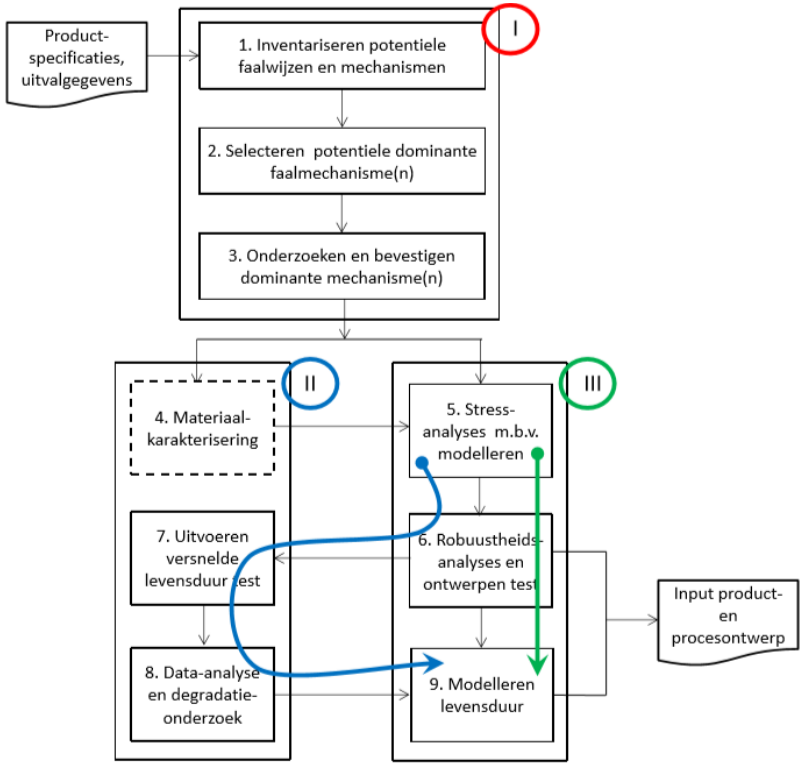
> Founded in	1996
> Members :	50 companies 40% industry (Océ, Thales, Barco etc.) 20% aeronautics (NLR, BAE, Fokker etc.) 20% chips (ASML, NXP etc.) 10% automotive (Inalfa etc.) 10% medical (Philips etc.)
> Key figures in 2016 :	budget 50 k €, 4 members meetings /year 4 workgroup Reliability meetings/year 4 workgroup Mechanical testing meetings/year 1 showcase or conference/year Board: 1 strategy session and 3 meetings/year Board: 5 members

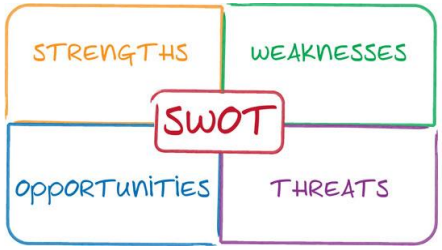
ACTIVITIES & RESEARCH PROGRAM

- Center themes
  - Prognostics and Health monitoring
  - Physics of Failure and Virtual testing (incl. simulations)
  - Robust design
  - Testing of coatings and sealings

- Workgroup Mechanical testing
  - Shock Response Spectrum
  - Modal analysis
  - Customer specific testing and transfer of measured data to test specifications

- Workgroup Reliability
  - Physics of Failure (process description)
  - PoF and Virtual assurance trial
  - Design of Experiments





- Diversity in subjects and competence
- Stable workgroups and board
- Variety in members (universities, users, laboratories, suppliers)
- Variety in topics and locations
- Growing interest

- No funding by government
- No budget for lecturers of trials (virtual testing, PoF etc.)
- Economic situation

- Focus on new technologies (VT, PoF etc.)
- Integration (System Engineering)
- Books and knowledge sharing
- European network
- Focus on applications

- Insufficient information for members
- Insufficient input from CEEES
- Poor contact with target groups

PROPOSITION OF IMPROVEMENT

➢ National Improvement	Increased personal contact moments members Inputs from/to CEEES (and IEST via CEEES) Presentation of results PoF etc.
➢ International Improvement	Planning for attendance international meetings Alignment on technology studies Incorporate companies and universities Help SSEE with handbook (or self)
➢ Request to EU Commission	Budget for awareness and training In-kind support Project manager for Europe

The Society of Environmental Engineers

(United Kingdom)

By David Richards CEng, CEnv, HonFSEE, FIMechE

MAIN FEATURES

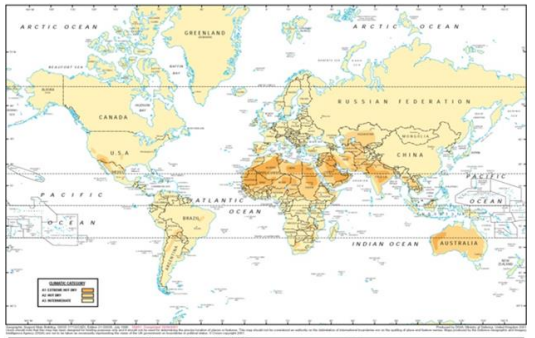
- The United Kingdom Society of Environmental Engineers (SEE) was founded in 1959, as a forum for sharing knowledge in the field of Environmental Engineering.
- The SEE is currently based at 22 Greencoat Place, London, SW1P 1PR.
- The membership of the SEE comprises 603 individual members and 21 corporate members. The individual membership are composed of 326 “full” members with the remainder either associate, student, joint or retired members *(numbers as of March 2017)*.
- Approximately 40% of our members are from outside the UK and approaching 50% of our members are associated with “green” environmental issues.
- The SEE 2017/8 budget for the SEE is in excess of £150,000. The SEE is a registered charity and as a result receives significant tax benefits.
- The budget does not include the SEE publications which are operated by a separate partner company; Concorde Publishing Ltd based at 100 Borough High Street, London, SE1 1LB.

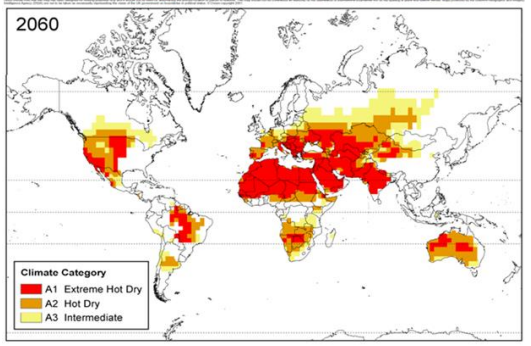
ACTIVITIES & RESEARCH PROGRAM

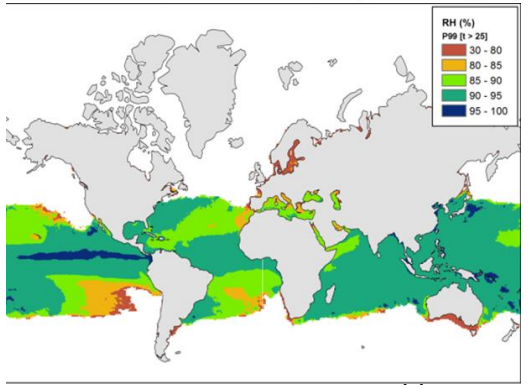
- **Since the mid 1990's the SEE has provided professional registration to its members.**
- **It is licensed by the UK Engineering Council to undertake professional registration of engineers as Chartered Engineering (CEng), Incorporated Engineer (IEng) and Engineering Technician (Eng Tech). The SEE is also licensed by the Society of the Environment to register Chartered Environmentalists (CEnv).**
- ***Currently 346 of our members are on one or more of these registers.***
- **The SEE also provides registration services for 9 other societies including; the Safety and Reliability Society, the Institute of Corrosion, Institute of Explosive Engineers, the Institute of Concrete Technology and the Association of Cost Engineers.**
- **Registrants from a number of these societies become joint members with the SEE.**

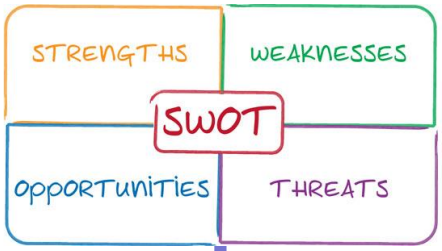
ACTIVITIES & RESEARCH PROGRAM

- The SEE works with its partner, Concorde Publishing Ltd, to provide technology focused journals and websites that address the full range of environmental engineering technology.
- The journal “Environmental Engineering” and the “Test House Directory” are the primary publications but other publications encompass DAQ and Sensors, EMC, Climatic and Vibration and Clean-rooms.
- The SEE UK has historically provided experts to represent the UK on International Standards committees. Over the years it has initiated a number of environmental documents that are now included as International standards.









Growing membership,
Small cost base,
Wide Journal circulation
Good relationships with other Societies.

The SEE is the smallest of the 36 organisations licensed by the Engineering Council.

Professional Registration provides source of new young (national and international) members who are then "tied" to membership to retain registration.

Take over by larger organisation.

PROPOSITION OF IMPROVMENT

- **National Improvement.**
  - Falling membership in the early 1990's necessitated a critical review of our "business model".
  - As a consequence of that review we now provide professional registration. Also the publication of the Journal is now with a partner company.
  - Additionally we widened our area of interest to related "green" environmental areas.
  - Support UK initiatives such as "Big Bang"
- **International Improvement.**
  - In recent years we have seen a rapid development of our International membership.
  - We currently have a separate Chapter in Hong Kong and have had requests for similar Chapters elsewhere.
- **Request to EU Commission.**
  - None, for obvious reasons.

BS TEE

Belgian Society of Testing and Environmental Engineering

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Rege duce pro Jure et Honore

MAIN FEATURES

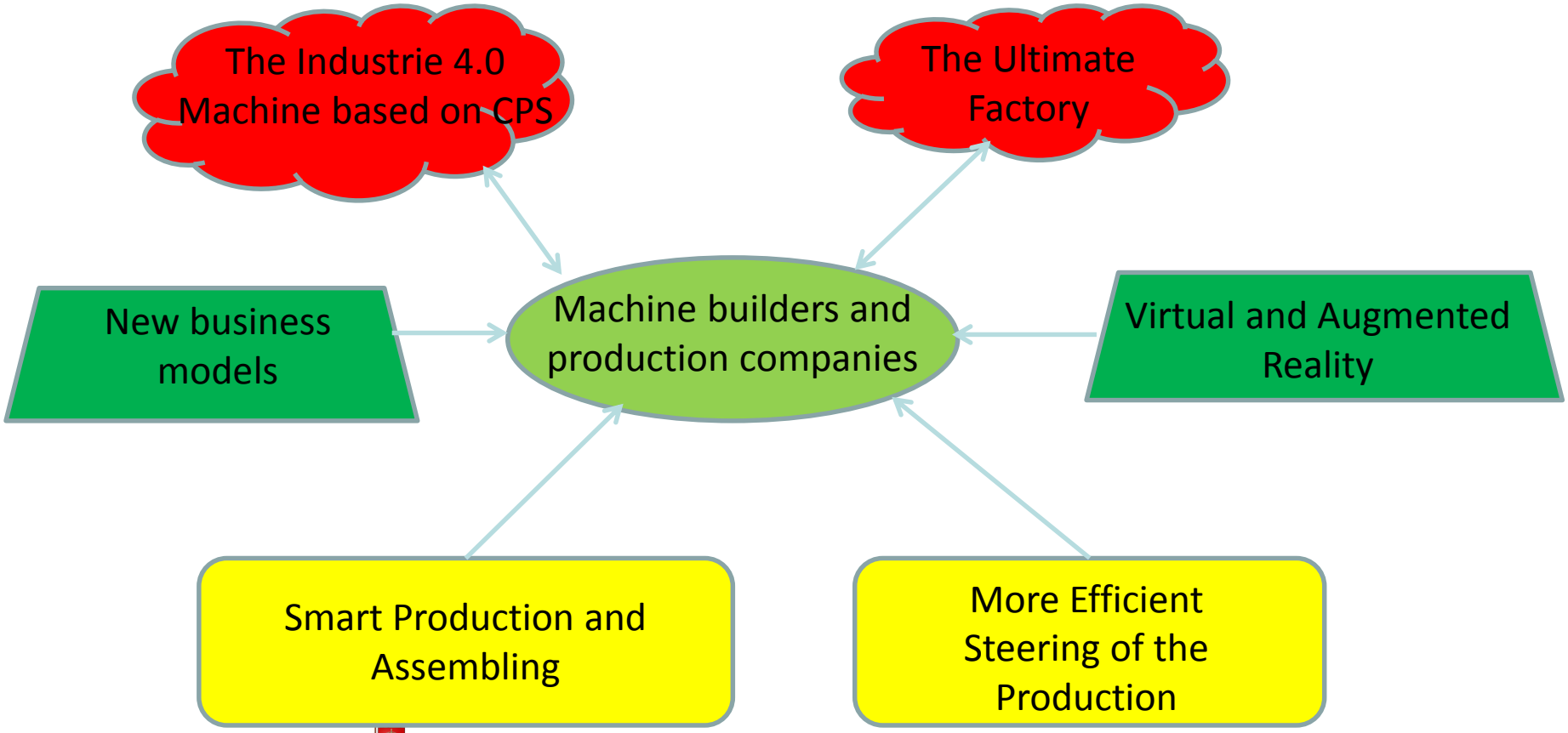
BS TEE
Belgian Society of Testing and Environmental Engineering

- BSTEE:
  - Founded shortly after second world-war as the Belgian Society of Mechanical Engineers
  - During the years, the focus switched from pure mechanical to more general environmental testing
  - Hence, name change to Belgian Society of Testing and Environmental Engineering
- Members :
  - Mix of academic (e.g. KU Leuven, VUB, RMA), test houses (e.g. Labo De Nayer) and industrial members (e.g. Weiss)
- Key figures in 2016:
  - Budget: ~2500 euro
  - Training:
    - Two-day course on Design and Test for Electo-Magnetic Immunity
  - Events:
    - Several one-day seminars, often linked to and in collaboration with on-going research projects (co-financing)

ACTIVITIES & RESEARCH PROGRAM (1)

BS TEE
Belgian Society of Testing and Environmental Engineering

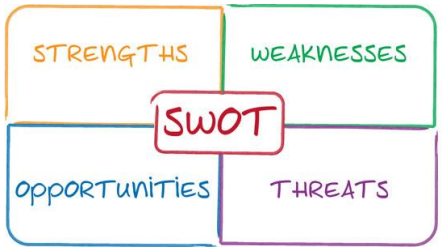
- Within Belgium strong focus on Machine-production, Mechatronics and Industry 4.0
- Based on discussion with the main companies (both large and small), the following main themes have been identified:



ACTIVITIES & RESEARCH PROGRAM (2)

BS TEE
Belgian Society of Testing and Environmental Engineering

- Reliability, robustness and safety are key elements within these areas:
  - more reliance on both hard- and software to operate complex systems reliably and safely under all possible conditions and this over the system's entire life-cycle
  - Any interruption will inevitably lead to high economic losses
  - Ensure that production facilities and products themselves do not pose a danger to people or the environment
- Hence, the need for support on testing and environmental engineering
- Specific themes (non exhaustive list):
  - Dependable mechatronic systems (hard- and software)
  - System engineering
  - Functional safety
  - (Highly-)Accelerated Testing (virtual and physical)
  - ElectroMagnetic Compatibility



BS TEE
Belgian Society of Testing and Environmental Engineering

CEEES

Long and strong history of BSMEE/BSTEE

Very strong connection with CEEES

Both academic and industrial members are EU of world-leaders in their area

Too few members

Hard to arrange regular BSTEE events due to busy agenda's of key people

Strong focus of Belgian and EU government on Industry 4.0, with related questions on reliability, robustness and safety

Closer collaboration with PLOT (NL)

High "competition" with other organisation: Flanders' Make, Sirris, Agoria

Key people have to spend too much time and effort in trying to get research funding

PROPOSITION OF IMPROVEMENT

BS TEE
Belgian Society of Testing and Environmental Engineering

- National Improvement
  - More alignment over Flanders, Brussels, Walloon
  - More easy access to funding
  - Better alignment with Flanders Make, Sirris and Agoria

- International Improvement
  - Collaboration with PLOT (NL)
  - In general: more visibility of CEEES
  - Better access to EU (H2020) funding

- Request to EU Commission
  - More support in e.g. setting up Marie-Curie European Training Networks
  - More attention to the CEEES themes in the H2020 calls

European Presidents Day

4th July 2017

in Brussels

MAIN FEATURES

> Under construction

> Members : interest of 30 academic and technician people (as private members), interest of 10 companies or institutions (aerospace, automotive, environmental testing labs, university departments, Technical Committees)

> Key figures in the recent past

- Partecipation to CEEES events: 3 meetings + TAB
- 2 workshops

ACTIVITIES & RESEARCH PROGRAM

> Constitution of Italian Chapter

> Database realization with reference to Environmental Engineering issues and activities

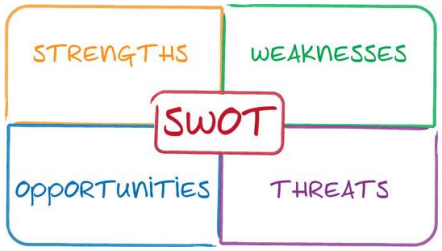
> Promotion of national network

> Promotion of scientific cooperation between industrial and academic partners

> Workshop on Environmental testing

> Support to ETN proposal including Italian participants. Main topics:

>> Reliability
>> Mechatronics
>> Advanced statistics and algorithms



Strengths

- Rigorous methodological approach
- Experimental validation
- Interdisciplinary scenario
- Enthusiasm

Weaknesses

- Low level of cooperation between University and industry
- Little infrastructural support to research networks

Opportunities

- Italian program «Industria 4.0»
- Increasing attention to new technologies and approaches
- R&D development and growth

Threats

- Resistance to change
- Need of a rapid consolidation

PROPOSITION OF IMPROVMENT

- National Improvement
  - Dissemination of know-how
  - Sharing proactive attitude towards new technologies

- International Improvement
  - Network extension
  - Discussion with Institutions interested in environmental engineering

- Request to EU Commission
  - To pay attention to issues related to environmental testing and engineering
  - To involve experienced boards on standardization and best practices in validation of experimental activities


INTERCOM UNIT
Agent Orange
C3

13:30 welcome at RAM
14:00 Introduction & Interviews of Guest Invited

14:45 ASTE-Fr. roadmap (P-E Dupuis)
15:00 GUS-Ger. roadmap (T. Reichert)
15:15 PLOT-Hol. roadmap (H Roossien)
15:30 SEE-Uk roadmap (D. Richards)
16:00 BSTEE-Belg. roadmap (D. Pissoort)
16:15 Italy roadmap (G D'Emilia)

16:30 Break - Cocktail

17:30 SEES-Swed. roadmap (P. Eriksson)
17:45 SSEE-Swiz. roadmap (U. Grossen)
18:00 OGUS-Aust. roadmap (by delegation D. Delaux)
18:15 NACEI-Cz. roadmap (excused)
18:30 KOTEL-Fin. roadmap (by delegation D. Delaux)
18:45 SOPSAR-Port. roadmap (by delegation D. Delaux)

19:00 Conclusion
19:30 - Diner Gala

S·E·E·S

SWEDISH ENVIRONMENTAL ENGINEERING SOCIETY

European Presidents Day

4th July 2017

in Brussels

Rege duce pro Jure et Honore

MAIN FEATURES

S·E·E·S

SWEDISH ENVIRONMENTAL ENGINEERING SOCIETY

- SEES - Founded in 1985
- Members : 13 member companies/organisations, in addition contribution from senior experts/advisors!
- Key figures in 2016:
  - ✓ Turnover 37 kEuro
  - ✓ Closing Balance 8 kEuro

ACTIVITIES & RESEARCH PROGRAM

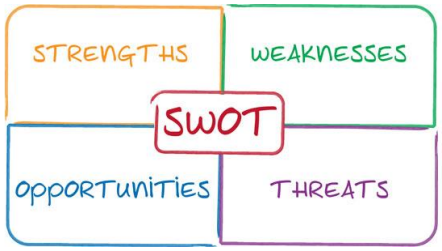
- ***Technical seminars*** - 2 times/years
(opportunity to develope and increase the knowledge level of the Society)

- Used to participate in ***Eureka projects*** – Seeking for new Projects!

- Yearly giving a 2 day-course in Environmental Engineering

- 2 national projects within Vibration (Round-Robin + control signal benchmarking)

- Eventually updating the ”Handbook of Environmental Engineering”



S·E·E·S
SWEDISH ENVIRONMENTAL ENGINEERING SOCIETY

- Open discussions at mult-levels within organisations!
- Participation from the whole Triple-Helix

- SEES has been dependet on military industry – declining in Sweden
- ICT / Electronics (for example Ericsson) has decreased their development activities

- Wind/Marine Energy has huge challenges which has to be solved!

- The present focus on EE is fading, Mature companies tend to solve the problems in-house!

PROPOSITION OF IMPROVMENT

S·E·E·S
SWEDISH ENVIRONMENTAL ENGINEERING SOCIETY

National Improvement

- Improve the collaboration with military and automotive industries and add Energy industries
- Seek for new members / new technical areas (branches)
- Involve Maintenance in Life-time technology (durability)

International Improvement

- Collaborate with the Energy branch, ex. Windpower/Maritime Energy
- Involve Maintenance in Life-time technology (durability)

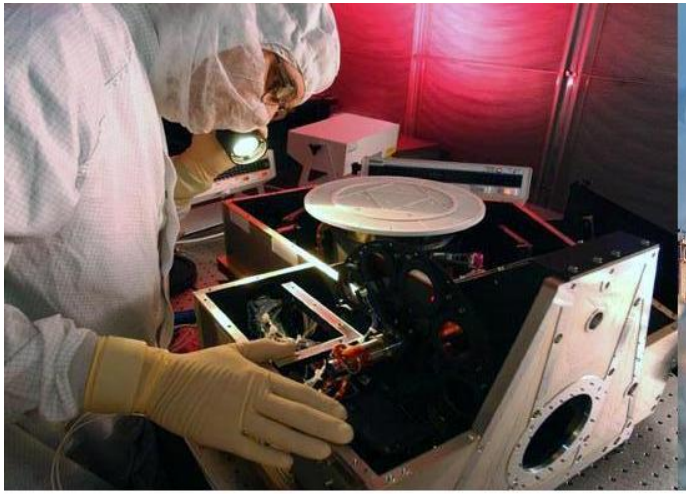
Request to EU Commission

- Contact to the Energy sector?
- Test Beds – where to seek for funding?
- Life-time technologies – activites?
- NoE/RoK – any more calls of this type?
- KICs – opportunity for CEEES?

European Presidents Day

4th July 2017

in Brussels



MAIN FEATURES

> Founded in 1988
the roots are in 1984 as a subsection of the GUS from Germany

> Members
65 in total (36 company members, 29 individual members)
approximately 20% user of EE, 40% test labs, 40% manufacturer of test infrastructures and software programs

> Key figures in 2016
budget CHF 33'000.-
annual meeting 3. and 4. November in Olten with 39 participants

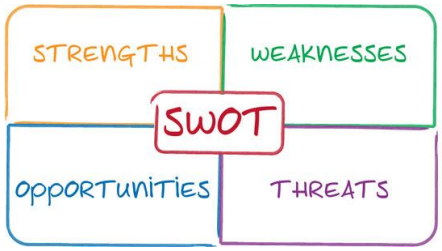
This will be more or less the same society in the next future.

ACTIVITIES & RESEARCH PROGRAM

> the board members decided in 2013 by reason of the limited resources of them to reduce our activities to the annual meeting

> also in 2013 we made a member survey, the results showed a high agreement with this decision

> from this points we have actually no specially program in addition to the annual meeting



- most of the members remain true to the society
- there are a lot of different specialist member

- most of the members are passive

- for some technologies there are no specialist member

- chance to motivate the members to be more activ in the society

- due to passive members it is difficult to recruit new board members
- only very few government members

PROPOSITION OF IMPROVMENT

- National Improvement
  the members should be more interesting in the work of their society

- International Improvement
  from my point of view most of the national societies do their best
  it is important, the more activ societies will respect the situation of the less activ societies
  the goal has to be to work together, but every nation with their possibilities

- Request to EU Commission
  due to my situation and few know how in EU themes, I have no precise requests
  in general, I propose to accept the individual needs possibilities of the nations

European Presidents Day

4th July 2017

in Brussels

MAIN FEATURES

- **Founded in 2006**
  as a platform for the exchange of knowledge in the field of ´application-related´ ageing of products and materials
- **Members: 34**
  Representatives from industry & trade, industrial organizations, testing institutes and private individuals
- **Key figures in 2016 / 2017:**

  budget: **~ 20.000 EUR p.a.**

  events: *** Technical Meetings**
  *** Technical Conferences**
  *** Regular ÖGUS Working Groups**
  *** Organization of Proficiency Testing Schemes (“round robins”)**

ACTIVITIES & RESEARCH PROGRAM

Technical Meetings:

Half-day events

- *at sites of ÖGUS members or*
- *at sites of companies with special interest in ageing behavior of products / materials or*
- *with relevant institutions.*

Technical Conferences:

2016: "Sustainable product quality through environmental simulation"
2017: "Mechanical Environmental Simulation: Fatigue Testing"
2018: "Testing Design"

ÖGUS Working Groups (WG):

Forum for the exchange of knowledge and experience at plenary and bilateral levels

WG "Mechanical Environmental Simulation"

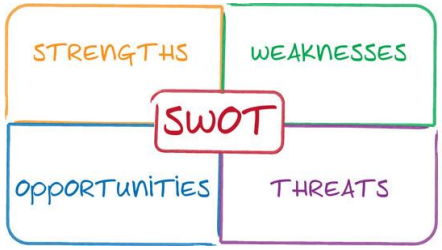
WG "Paintwork & Coatings"

WG "Adhesives Austria" (since 2017)

Organization of Proficiency Testing Schemes ("round robins")

Artificial Weathering (Xenon Arc / Luminescence)

Salt Spray Testing



Österreichische Gesellschaft für Umweltsimulation
ÖGUS

Flexibility / high personal engagement of single ´officials´

No full-time staff
→ most work done in spare-time
→ limited back office support

High interest within the field of long term stability of adhesive bondings

Strong connection to OFI as an important Austrian testing institute

Small association / with only 34 members
→ limited budgets
e.g. for growth promotion and activities
→ limited visibleness

In Austria (de facto) NO funding of experimental R&D work
Official argument: ´lack of research risk´

PROPOSITION OF IMPROVEMENT

- National Improvement

  National framework conditions for funding of R&D activities

- International Improvement

- Request to EU Commission

  Possibilities for funding of research and training activities in the field of environmental simulation

European Presidents Day

4th July 2017

in Brussels

MAIN FEATURES

KOTEL

> The purpose of KOTEL is to promote quality, reliability and efficiency of electronic components, equipment, systems and software design, manufacturing, procurement and maintenance in Finland
> KOTEL has been founded in 1967; 50Y celebration during 2017

> Members : 25 companies (various industries and engineering services) and research/educational institutes; over hundred (100) active members in projects and working groups.

> Key figures in 2016 (budget, training, event, …)

- ✓ Workgroups: 5 active workgroups, >90 active members, 15 meetings. No separate budget.
- ✓ Projects: 1 completed project, 2 proposals opened to members during 2016. Project budgets typically 50k€-100k€ for 2 years; funding from members, but public funding may be also utilized.
- ✓ Seminars and events: 2 seminars arranged during 2016 (2 planned for 2017)
- ✓ Total KOTEL budget 2016: 45 k€ (2017: 100 k€)

Kotel 2017

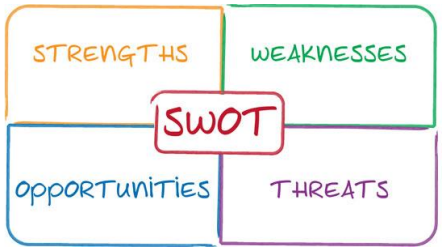
Suomi Finland 100

- **Our key strategic objectives is to further enhance and expand KOTEL's visibility and obtain new methods for information sharing, collaboration attractiveness with our target groups, audience and members in engineering society.**
- **We want to wellcome all new members with new ideas and challenges!**

www.kotel.fi

ACTIVITIES & RESEARCH PROGRAM

- **KOTEL Working Groups function as forums for active and collaborative information sharing** – In WGs, experts jointly conduct studies, small projects, benchmarks, workshops, initiate & organize seminars and provide ideas and concepts for research projects. WGs also arrange extended working group meetings about a special topics under interest. Active working groups 2016-2017:
  - WG 5 Environmental testing
  - WG 7 EMC (Electromagnetic Compatibility)
  - WG 21 Energy efficiency and thermal management
  - WG 6 Reliability technology
  - WG 19 Environment and electronic
- **Research projects focus on seeking solution for the KOTEL member companies' problems** - Projects are launched on the basis of the membership interest. Results are immediately available for participating companies. Final reports are published after 2 years in KOTEL report series.
  - Latest finished: RECO (Reduce cost & maintaining reliability through product lifecycle), REFLEX (Reliability and lifetime of flexible epoxy polymer capacitor)
  - Projects ongoing 2017: PORE (Reliability of Polymer Materials)
  - Projects under preparation 2017: "Corrosive environments today (what is really 3C3)"
- **Working groups topics, research projects results, special topics and trainings are available in open seminars or in extended working group meetings** ---
  - 2017 seminars: Reliability of flexible capacitors and life profiles and uncertainties on reliability and verification (KOTEL-CEEES seminar). IoT related seminar under planning (in Oulu during H22017)
- **KOTEL seeks actively for new opportunities for cooperation & collaboration ---**
  - International cooperation is carried out in the Nordic and European level. Within Europe KOTEL cooperates actively with Committee of European Engineering Societies CEEES (In Finland this cooperation is under the SEEF-group). At domestic level main cooperation and collaboration continues with Technology Industry of Finland and National Electrotechnical Standardization Organization in Finland (SESKO).



Strengths

- Diversity and scale of KOTEL members – strong basic foundation
- Rather robust, low risk and standardised ways of working for collaboration and projects
- Support of large companies in Finland (e.g. ABB, Kone, Konecranes, Nokia, Wärtsilä)

Weaknesses

- Scale of project budgets is rather limited
- Lack of visibility in industry, marketing & media – lack of marketing resources
- Attractiveness and visibility among smaller companies (potential members)
- Member companies focus and rules concerning shared knowledge and open projects

Opportunities

- European co-operation with CEEES & partners
- Emerging technologies on CleanTech, Automotive, Marine, IoT, 5G, hybridisation, …
- New working groups bring new members, ideas, projects and opportunities into KOTEL

Threats

- Very limited resources & capabilities to maintain and develop Kotel services
- Further limited public funding for basic technology projects (lower research value)
- Large international companies further narrowed investments in Finland (high cost labour)
- Finnish burocracy combined with tough company policies

www.kotel.fi

PROPOSITION OF IMPROVMENT

- National Improvement
  - Our key strategic objectives is to further enhance and expand KOTEL's visibility and obtain new methods for information sharing, attractiveness and collaboration within our target groups, audience and members in engineering society. We want to welcome all new members with new ideas and challenges --- KOTEL is looking for the new ways and ideas to "renew and restart" the collaboration and cooperation of its member companies AND find new ways to wake up the interest of the smaller companies as well – we need more members and new blood.

- International Improvement
  - Enhance and strengthen CEEES collaboration. A lot has been discussed how we could better utilize modern medias better on information sharing, collecting and sharing new ideas, gaining more visibility and finding (cost)efficiency to meetings and projects --- how can we lower "barriers", convince the member companies about the value-add and return-on money invested on participation, projects, traveling etc.

- Request to EU Commission
  - In Finland, we would appreciate more public funding also for more engineering related issues; typically our projects are "less scientific, very practical engineering problems, but shared among industry" and for those it is most often just waste of time to spend money on application bureaucracy.

Sociedade Portuguesa de
Simulação Ambiental e Avaliação de Riscos

PORTUGAL

European Presidents Day

4th July 2017

Brussels

António Guerreiro de Brito

MAIN FEATURES

- 2007 | foundation
- 2010 | 20 members from universities and private small companies
- 2009 | 52th International CEEES meeting
  | Innovative environmental testing (Oporto)
- 2010 | International Symposium on water scarcity under climatic uncertainty (Mirandela), in cooperation with UNESCO

2011 – mid 2017 | non-operational period

Restart in 2017

Sociedade Portuguesa de Simulação Ambiental e Avaliação de Riscos

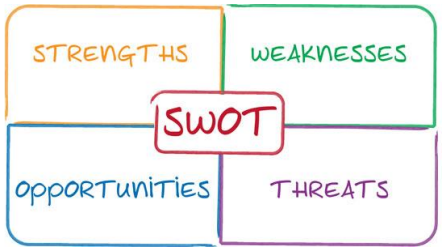
ACTIVITIES & RESEARCH PROGRAM

New activities 2017-2018

Life cycle assessment and environmental sustainability certification

Analysis of food supply chains *(in progress – mango, lime, table eggs)*

…



- Good connections to portuguese research centres

- Insufficient connection to private companies
- Lack of financial resources

- To become a knowledge centre on Environmental Testing
- To provide services and training on life cycle assessment
- To provide services and training on risk analysis
- To develop a trans-platform of the three expertise areas

- Private sector inertia and apathy due to financial constraints, short term priorities and absence of medium and long term vision.

Sociedade Portuguesa de Simulação Ambiental e Avaliação de Riscos

PROPOSITION OF IMPROVMENT

- **National Improvement**

A new start is being designed with a new agenda and new board members by late 2017

- **International Improvement**

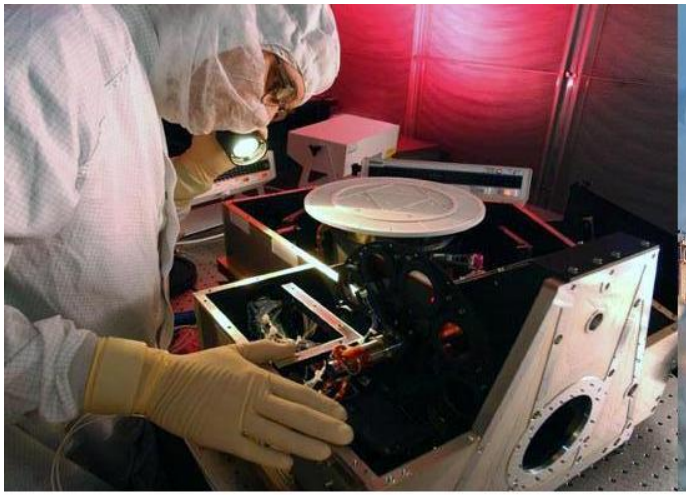
To strength cooperation with CEEES members (namely joining EU project consortiums)

- **Request to EU Commission**

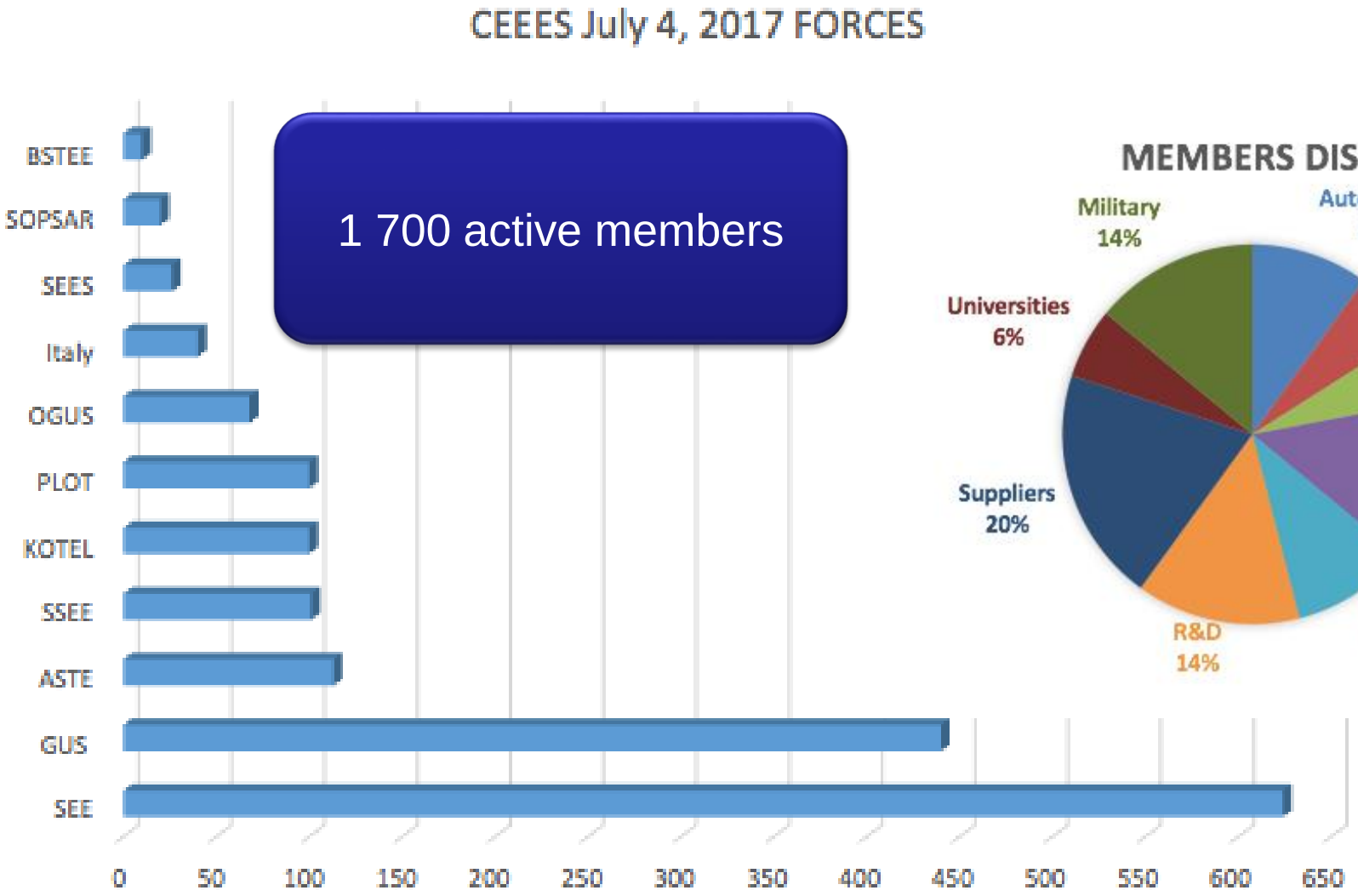
Identification of EU financing possibilities in environmental testing and life cycle analysis

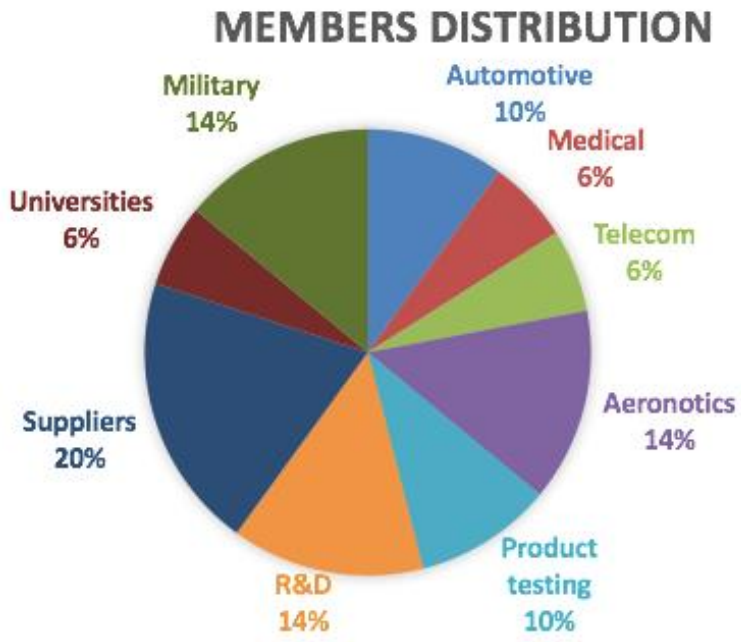
European Presidents Day
4th July 2017
in Brussels

Synthesis

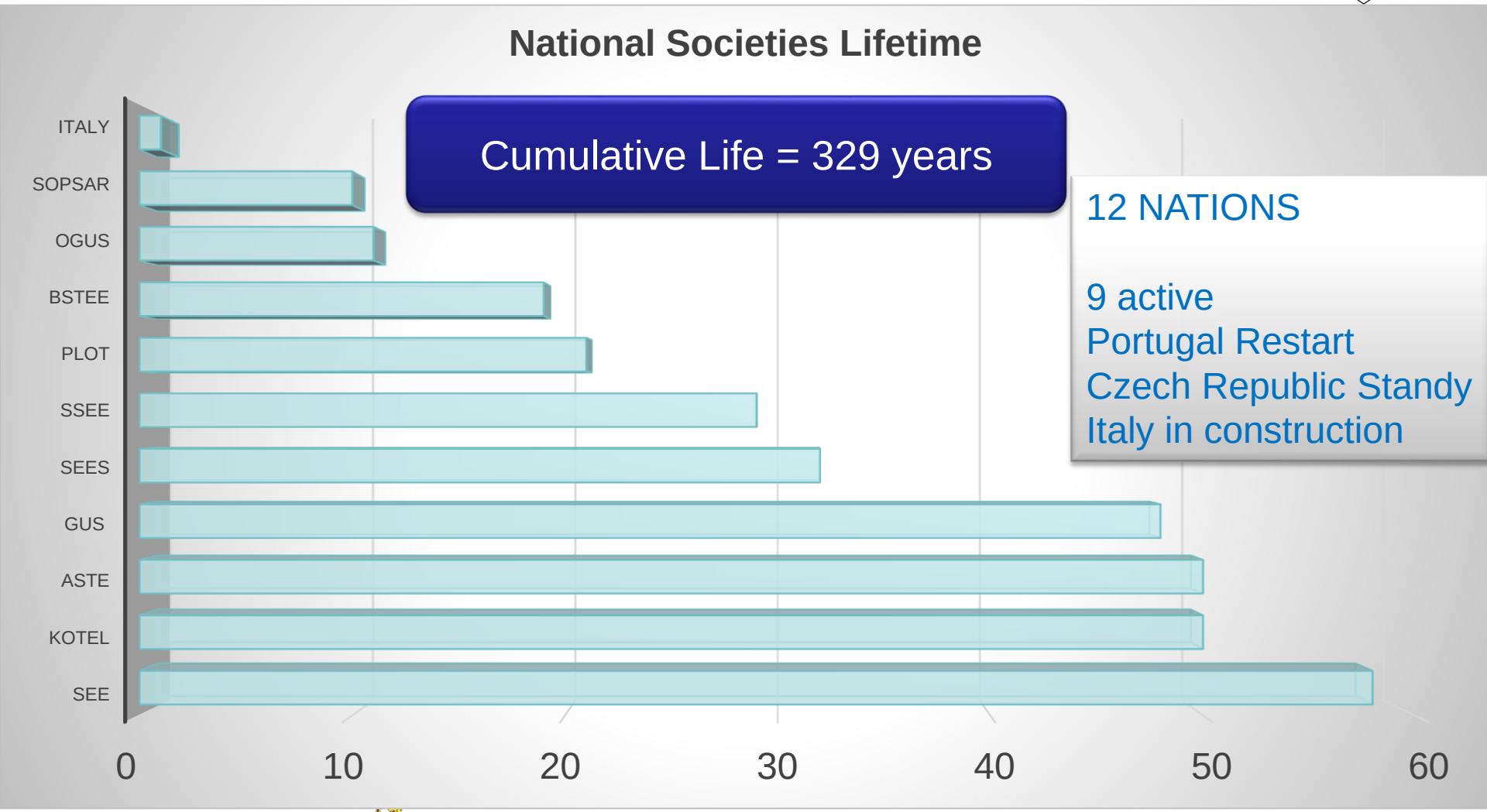


MAPPING


CEEES July 4, 2017 FORCES
1 700 active members
BSTEE
SOPSAR
SEES
Italy
OGUS
PLOT
KOTEL
SSEE
ASTE
GUS
SEE
0
50
100
150
200
250
300
350
400
450
500
550
600
650


MEMBERS DISTRIBUTION
Military 14%
Automotive 10%
Medical 6%
Universities 6%
Telecom 6%
Aeronotics 14%
Suppliers 20%
Product testing 10%
R&D 14%

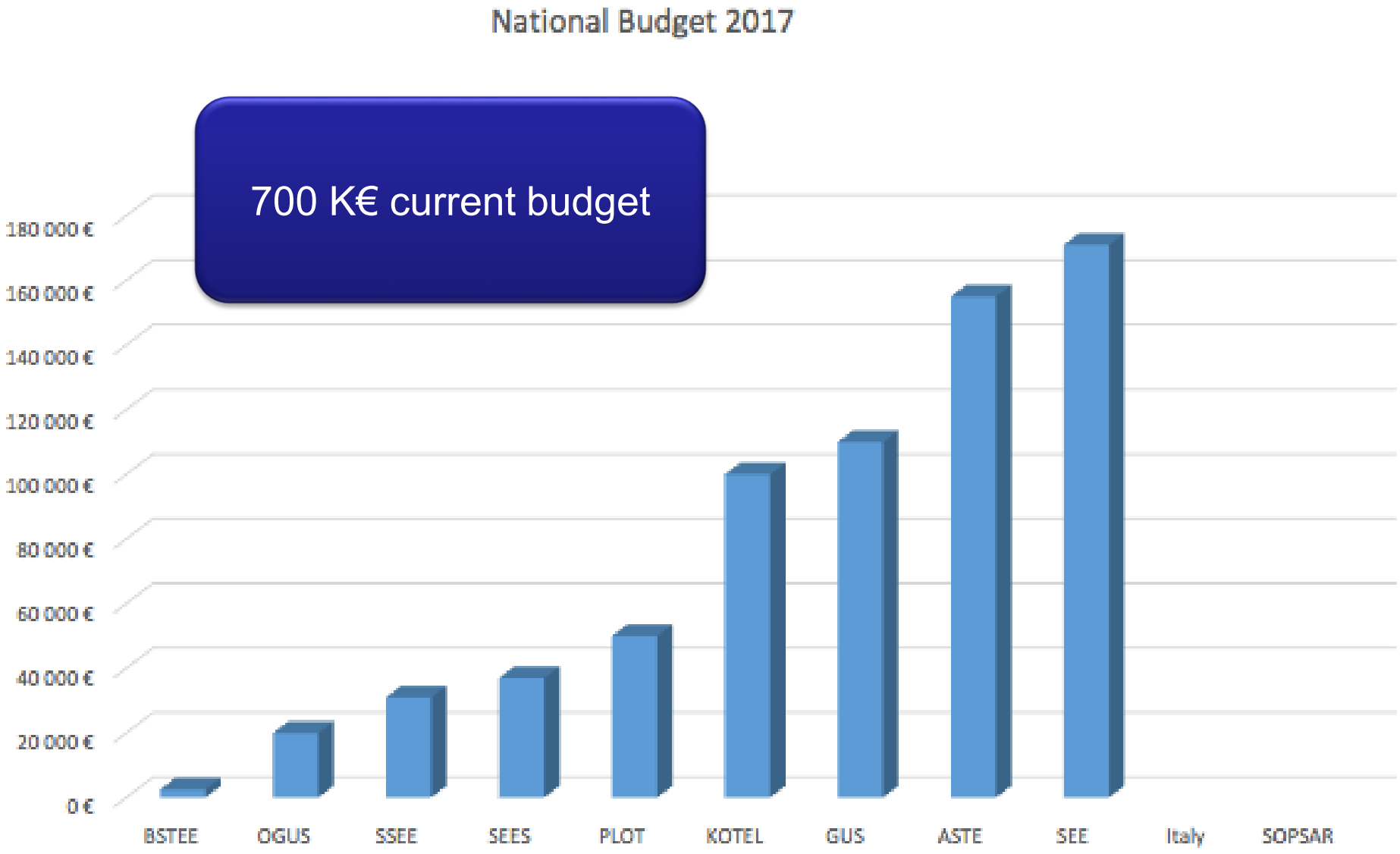
MAPPING

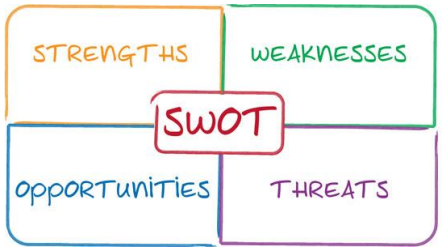


12 NATIONS

9 active
Portugal Restart
Czech Republic Standy
Italy in construction

MAPPING


National Budget 2017
700 K€ current budget
180 000 €
160 000 €
140 000 €
120 000 €
100 000 €
80 000 €
60 000 €
40 000 €
20 000 €
0 €
BSTEE
OGUS
SSEE
SEES
PLOT
KOTEL
GUS
ASTE
SEE
Italy
SOPSAR



- Motivation
- Flexibility
- Diversity
- Interdisciplinary
- Know-How

- Lack if visibility
- Technical Database
- Networking
- Members passive
- Little infrastructure

- New Methods
- SMEs services
- Round Robin
- Industry 4.0
- Standardization

- Poor ressources
- Insufficient input from CEEES
- Resistance to change
- Competition with other organization

STRATEGY PLAN « 2020 RESTART & RENEW »

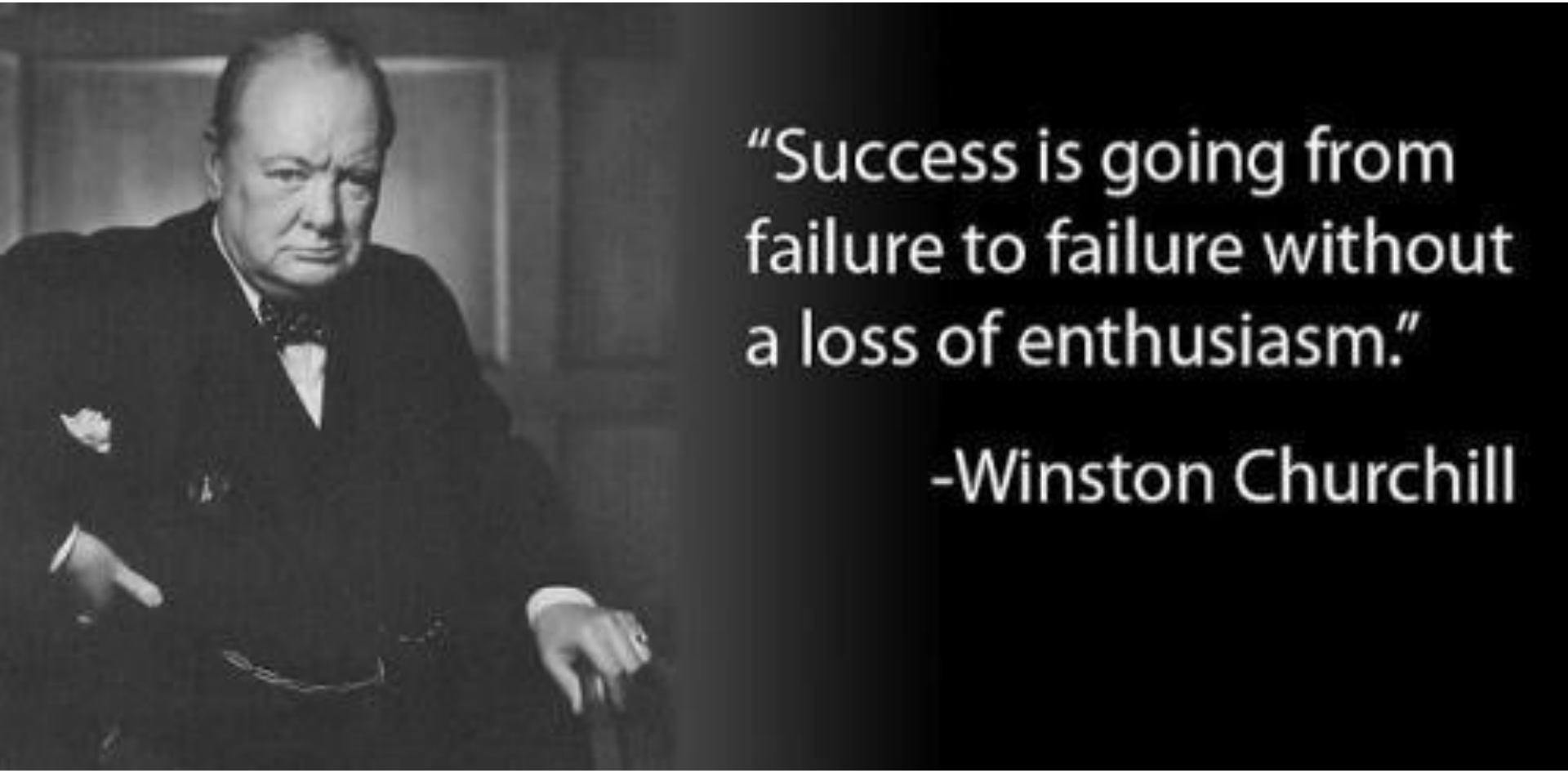
- CONSOLID CONSORTIUM
  - PORTUGAL (SOPSAR restart)
  - POLAND (2018)
  - DANEMARK (2017)

- ANIMATION RESEARCH PROGRAM
  - International collaboration between CEEES members
  - Promote EU program

- EU Commission & USA
  - EU Delegation (5 contacts) : needs & opportunity
  - EU & USA (IEST) delegations : create common opportunities

NEXT MEETING

- September 20 21, 2017 : Vienna
- March 12 13, 2018 : Krakow
- October, 2018 : USA (NASA)


"Success is going from
failure to failure without
a loss of enthusiasm."
-Winston Churchill