

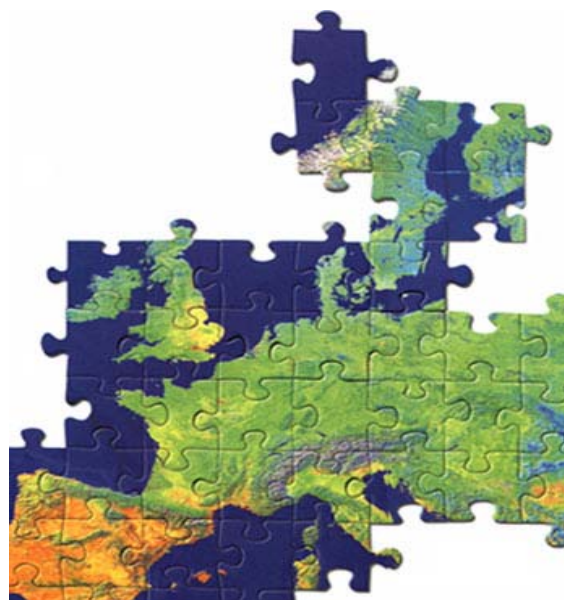
eye - Contact

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The Journal of the European Young Engineers

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Insight EYE**EYE Conference Cologne**

In the weekend November 14-16th, European Young engineers gathered once again, to share knowledge on their common interests.

The program was very organized and no time wasted, and except for some peculiar German carnival music Saturday night, everything worked well. But the good long nights sleep on Saturday, meant a great cultural experience on the historical tour of town on Sunday to the impressive cathedral and the remains of the old roman town.

The company visits on Friday went to Deutche Welle and WDR which both are related to radio/television and to Ford, Deutz and the German federal highway institute.

The Saturday program was laid out so you had a choice between five all-day workshops:

- WS 1: Decision making within Teams
- WS 2: Doing Business in Europe
- WS 3: Presentation skills/Presentation techniques
- WS 4: It's the customer, not the technology!
- WS 5: Intercultural competence-an asset for culturally diverse project teams

Besides that there was a parallel program for the 90-100 German students attending.

The Danish delegation consisted only of three people this time - we hope more will join us next time - and below are a summary of the workshops we covered. Looking forward to see everybody in London! ☺

WS 1 – Decision making within teams

The focus of this workshop was to clarify how difficult it is in real life to make decisions in groups without a formal leader. (This was the definition of a team in this workshop).

Through some simple cases as "lift a full length folding ruler by one finger from each team member", "make all team members touch two balls with both hands as fast as possible" and "move a ball into a bucket with most of the team blindfolded"; the workshop participants experienced and felt some crucial points.

- Team members have different knowledge and competences – use that advantage
- Listen to the other team members with an open mind
- There has to be leadership, who take on the task should change according to the situation
- Agree on rules within the group and make plans of what to do
- Leadership gets even more important if not everybody has access to the same information or someone is deprived of their possibility to act on their own.

The points are easy to understand, but often forgotten because everyone gets involved in the project. It was

interesting to see how all the participants instantly put on the individual autopilot of how to find solutions, and we got a few things to think about while we were playing and enjoying ourselves throughout the day.

WS 4 - It's the customer – not the technology

This workshop was lead by Felix and Ralf who for the occasion chose to introduce themselves without their last names – in a very non-German fashion. The workshop was kept as a mind-map session where all participants took part in the discussion. Twelve persons participated in this workshop.

To break the ice the participants were asked to consider whether they would invest a XXX of 100.000€ in their company. There were two possible answers: yes or no. Each participant should argue for his or her choice.

During the next exercise the participants were asked to pinpoint three reasons why they were unique to their company. Next exercise was to gain consensus about a categorization of the answers. In the beginning this seemed quite easy – nonetheless the discussion continued until lunch.

In the afternoon there was a similar exercise – however, this time we were asked to line up three reasons why our customers would choose our company compared to our competitors. This exercise was slightly extended compared to the morning exercise since we were asked to add the source for the reasons given. Was the source the customer, was it the sales or marketing department or just guessing?

In general this was a very interesting workshop. The following conclusions were made:

- Every single person in the company contributes with something unique to the company.
- If the company should have success it is necessary that everybody in the company contribute with their special knowledge and work together.

WS 5 - Intercultural Competence

This workshop was presented by Dr. Katja Petereit, a doctor in business psychology. The workshop focused on the potential for disaster whenever different cultures meet, doing teamwork and travelling abroad:

- How to recognize the differences
- How to avoid the pitfalls, and
- How to benefit from the differences.

The intercultural competences were defined by the participants as: understanding the "coding" (what people mean, not just what they say/do) and adjusting ones reactions accordingly, without losing ones own values.

After a brief discussion on the mechanics of teamwork in general, smaller groups discussed the possible problems and benefits from intercultural teamwork. For instance one group discussed the need for planning in different cultures, and what happens when someone, who believes in (and is used to) rigid planning meets someone who believe plans are guidelines, to be followed or not as one

sees fit. If the two can discuss/understand their differences from the outset the benefit could be a rather loosely set schedule, with a definite deadline, but without the rigidity that so often destroys creativity.

Next the workshop focused on the culture shock one encounters when living abroad for a while. How the shock “hits you” differently dependent on whether the foreign culture is very different from your own (drops on you hard and fast) or very similar to your own (sort of sneaks up on you). We also discussed how to cope with this shock – diving in to the foreign culture and/or accepting a relatively short period of needing to retreat to one's own roots.

Also the shock of returning home was discussed. How everything seems to have changed and how this shock is harder to deal with because there is no home/roots to retreat to and because it is so unexpected.

All in all a fine workshop with a very interesting topic and a bunch of very interested participants.

Susanne Rasmussen, Tine Gertsen, Mette B. Hansen

Intercultural Competence

Ever been in a meeting with more than one nationality that went smoothly? A big change you haven't. Most meetings are full of small or big misunderstandings and irritations. But why can we meet with people from our own nationality so easily and have so much trouble with an international group? The answer is, as you already expected, the cultural differences that we as different nationalities and cultures have.

How you can recognize conflicts due to cultural differences in a beginning stage and how to manage a team or meeting with different cultures was the topic of the workshop I attended at the EYE congress in Cologne. We not only learned to recognize different behaviour but we also learned to look at the behaviour from different perspectives. From here we learned to plan a correct response to keep a positive situation. Now we are on the field of intercultural competences.

Sounds pretty spooky, doesn't it. But after the workshop I have been better in dealing with difficult situations with both people from my own nationality as with other nationalities.

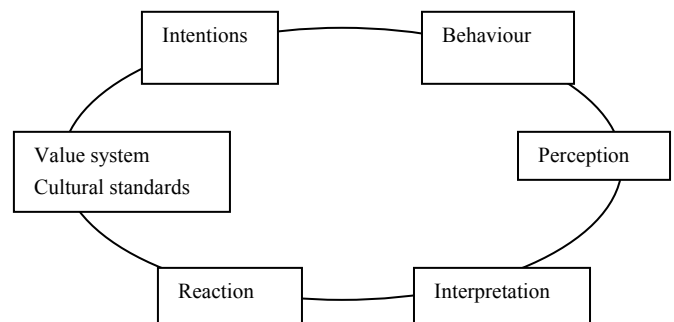
Before you can use intercultural competences you need to understand the cycle of cultural differences.

What we see is the behaviour of the people we meet. And all of you know that someone from Thailand has another behaviour in the same situation as someone from the USA. Therefore behaviour is one of the most visual aspects of cultural differences.

What we also know but not always realize is that someone from Germany or someone from China will have a different view on the behaviour of the Taiwanese or the American. They have a different perception of the behaviour. Besides the differences in perception, “how to see the

behaviour”, they also have a different interpretation, “how to explain what they see”. Therefore they can have a totally different reaction on the same situation.

Going back to the behaviour of the people from Thailand and America: they both want to reach the same goal with their behaviour. Their intentions are the same. In their behaviour and intentions they fall back on their own value system and their own cultural standards.



The result can be that even if we all want to achieve the same goal, a meeting can result in a total mess, due to differences in behaviour, perception, interpretation and reaction.

To realize that what you think you see is not always the intention of the person opposite of you is the first step in a long way. Really being able to read and correctly react to the behaviour in the group you are meeting with is your first goal with intercultural competences. Another thing you need to realize is that people with excellent intercultural competences can predict the behaviour of different persons and can use this knowledge to manipulate the situation.

But how do you react correctly? The main handholds that were offered to us during this workshop were to remain loyal to your own personal value system and to have the other understand you according to his cultural standards.

For composing a project team, insight in intercultural competences can be a real advantage since it will help you to select the most suitable characters and to compose a synergy!!

Peter van Hattum

Professional workshops, the EYE catcher of a conference!

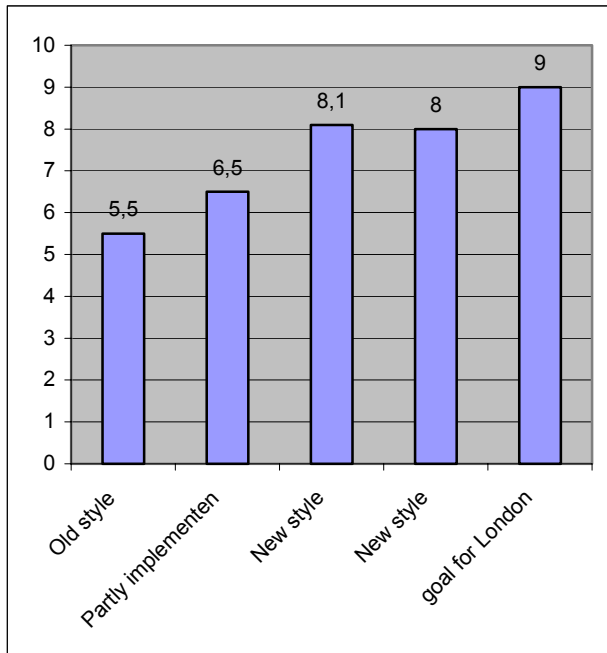
Make the workshops interesting for all participants!

That was one of the first goals of the taskforce after the introduction in Helsinki 2000.

And that was necessary since most participants did not enjoy the workshops that were mainly discussion groups to work on the development of EYE. The main focus in this project was to give the participants something they and their companies could benefit from. Therefore the focus in the new style workshops is on personal development of the participants. The workshops are selected carefully, lead by professional and experienced workshop

leaders, and all have an international aspect.

In the last four conferences we have seen the results. Two have fully implemented the professional workshop including the professional trainers. One has partly followed the advice of the taskforce by using outside lecturers, but no professional trainers. Leaving one conference using the "old" system of workshops done by non-professionals.



The result of the workshops can be measured by the evaluation given by the participants. Starting with the "old" system workshop the average is clearly insufficient. The conference using outside lecturers showed a better score. But in the top where the two conferences that followed the advice of the taskforce and made full efforts to get professional workshops with professional trainers. The workshops were rated as one of the best parts of the conference. We can conclude that the path we have taken is the right one! So don't miss the workshops in London where you can gain experience with "People skills for engineers", "Leading teams" and "Networking and Negotiation skills". See you in London!

Peter van Hattum

EYE Family

Martha Tuts – New Council Member for the VIK

Hi, everyone!

Some of you might be surprised, but Bart Vandezande, yes yes, the 'Belgian Bart', decided to quit his job as Council Member for the VIK (Belgium) due to other personal activities. I was asked to take over and here I am, ready to join!

My name is Martha Tuts, I'm 25 years old and I live in Kortrijk, West-Flanders, near the French border. I graduated in June 2000 as Industrial Engineer Industrial Design, but since then I've been working as a Production Methods Engineer for Picanol. Picanol produces weaving-machines and has about 1700 employees. As the only female engineer in the Assembly-area, I still find it every day a real challenge to help develop the construction-process of such a complex machine and to coach the operators that are building it!



I'm active member of the VIK since 2001 and the same year Bart talked me into my first EYE-event in Copenhagen. I didn't regret it for one moment!

Why didn't I miss one EYE-weekend since then? Well, I like meeting people from all over Europe and having the chance to exchange knowledge and experience with them, both

on a professional and personal level. Being able to do this in different European countries and cities makes it each time a unique and exciting event!

Looking forward to seeing you all in London!!

Martha Tuts, marthatuts@hotmail.com

Penny Thompson – organiser of EYE@London

Penny Thompson is currently a Fast Stream Engineer at the Ministry of Defence, based in London. Before this she completed her graduate engineering training through the MoD and has spent time seconded both to industry and other Government departments. She has worked on projects which have varied from RF engineering, to software cost analysis, to communications and computer security.

Penny holds a Masters degree in Electronic Engineering with Computer Science from the University of London and got involved with the Institution of Electrical Engineers (The IEE) whilst at university. She currently sits on



the IEE Younger Members Board and is responsible for their relations with other engineering associations, both in the UK and overseas.

Paris 2001 was Penny's first EYE conference and since then she has become the FutureNet deputy on the EYE Council and is currently co-organising EYE London 2004 with Lisa Kelvey.

Penny Thompson

EYE President Lisa Kelvey

EYE President, Lisa Kelvey, is a Senior Civil Engineer working in the Maritime and Infrastructure teams of multidisciplinary consulting firm, Ove Arup and Partners. She joined Arup from university in 2000 has had a wide range of experience in maritime and infrastructure works, particularly in project management and design co-ordination for multidisciplinary projects.

Lisa studied civil engineering and French at the University of Manchester and spent a year studying at Hautes Etudes Industrielles in Lille, France. Since graduating she has worked briefly in many European countries but would love a longer placement overseas.



Lisa has been actively involved in the UK Institution of Civil Engineers since university. She first became involved in EYE at the conference in The Hague in 2002 and is currently the EYE Council Member for FutureNet.

Lisa says "I am really looking forward to hosting the EYE conference in London in June. Recent conferences have been excellent so we have a lot to

live up to but I'm confident that everyone will really enjoy the programme we have planned."

Lisa Kelvey

Europe EYE

E-merge "Co-operation on European level"

The overall objective is to ensure the availability and functioning of vehicle based emergency call systems from any vehicle anywhere in Europe via the development of a harmonised extended vehicle E-Call (Ecall). The key objective of E-MERGE is therefore to develop, test and validate common specifications for the vehicle emergency call at all levels along the vehicle emergency call chain and to ensure that the technical, organizational and business structure is available for a European wide take-up of the solution.

Other main objectives are to remove current cross-border and language problems and to make an interoperable solution covering the whole of Europe and including all European vehicle manufactures, which after the project will be adopted by the involved vehicle manufactures, E-Call service centres, PSAPs and emergency agencies.

To have Europe-wide consensus on this solution we need to define technical specification and a lot of operational procedures and arrangements. Before we are able to

achieve any progress and development we probably will be a few years further.

Mariska van Cronenberg

REACH- a highly controversial proposal for the regulation of chemical substances

One of the most controversial propositions for a regulation ever was published by the European Commission on 29 October 2003. The proposal aims to a completely new approach to chemical substances in the European Union. The present system for general industrial chemicals distinguishes between existing substances and new substances. The so called existing substances are all chemicals which were already placed on the market in September 1981. Under the current system only new substances must be tested and assessed for possible risks to human health and the environment before they are marketed in volumes starting at 10 kg.



This means that currently more than 99% of the total volume of all substances are existing substances and therefore were never subject to extensive testing requirements. This has proved to be a market advantage for old chemical substances and is believed to have slowed down innovation and the substitution of old chemical procedures by new ones. Another problem is the slow and resource-intensive risk assessment process, which does not allow authorities the react quickly in case a particular substance is under the suspicion of being dangerous to human health.

The current proposal aims to introduce a system for the Registration and Evaluation of Chemicals (the so called REACH system) and creates a European Chemicals Agency.

REACH consists of the following elements:

- Registration - there is a general obligation to register substances manufactured or imported in quantities starting at 1 tonne.
- Evaluation (includes testing)
- Authorisation - a system for uses of substances is established for substances of very high concern.

This approach was strongly criticised by the European Chemicals Industry which claims that REACH will be to expensive and complicated. It is now for the European Parliament to decide how the proposal will be altered. The focus of the heavy lobbying by industry and NGOs will now concentrate on the Members of the European Parliament.

However, the decision of the Parliament has been delayed by an internal wrangling over which parliament committee will take the lead in this dossier (environment, industry or legal affairs committee). This might mean that the first reading of the proposal can not be held before the elections of the new European Parliament in June 2004. As the new Parliament will include deputies from the 10 new member states, which are already struggling with the implementation of the existing EU legislation of the European Union, this might mean a victory for opponents of a strict new chemicals regime.

Vera Kessler

Nanotechnologies featured in third edition of research magazine



The third issue of the European Industrial Research magazine focuses on support for research in nanosciences and nanotechnologies in the EU. It surveys the past present and future of this crucial area, examines the effects of nanotechnologies and outlines the activities of EuroNanoForum 2003.

Nanotechnologies are set to play a key role in

improving the everyday life of European citizens. Publicly funded research in this field will ensure that Europe exploits the potentials offered to stay in the race with the USA and Asia, both of which are investing heavily in this field.

The Commission's four-day EuroNanoForum 2003 event, held in Trieste (Italy) from 9 to 12 December 2003, brought together over 1000 stakeholders to examine the state of the art in nanotechnologies and to debate the need for public funding in this area.

Copies of this magazine may be downloaded from the magazine page on this website:

http://europa.eu.int/comm/research/industrial_technologies/magazine_en.html

Roya Ayazi

EYE Opener

Conference: Increasing Human Resources for Science and Technology

Friday 2 April 2004, Brussels, Belgium

No Europe of knowledge...

In March 2000, the Lisbon declaration was approved: Europe should become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion.

... without adequate Human Resources

Scientific and technological development was since then at the core of EU objectives.

In 2002, the EU Barcelona Summit called for an increase in the proportion of European GDP invested in research from 1.9 % to 3 %. In terms of human resources, an extra 0.5 million researchers (or 1.2 million research related personnel) are needed to meet that goal between now and 2010.

As part of the European Commission's broad strategy to address the Lisbon and Barcelona goals, an independent High Level Group on Human Resources for Science and Technology in Europe, chaired by Prof. José Mariano Gago, was appointed by the European Commissioner for Research. The provisional findings and recommendations of the High Level Group will be presented and discussed at this International Conference to be held in Brussels on April 2, 2004. The Conference will address the following topics:

- The need for increasing human resources for the scientific and technological development of the European Union
- Demand and Supply in the Science, Engineering and Technology Labour Market
- Career Perspectives in S&T
- Higher Education and Research Training
- Schooling in Science, Engineering and Technology
- The Social and Cultural Context of Recruitment to S&T Careers

More information:

http://europa.eu.int/comm/research/conferences/2004/sciprof/index_en.html

European Commission

The EUROPE of Knowledge 2020 - A vision of University-based Research and Innovation

25-28 April 2004 - Liège, Convention centre, Belgium

University heads, researchers, industrialists, policy makers and representatives from civil society at large, will gather in Liège, Belgium, in April 2004.

They will chart the best course to take European universities forward to embrace the challenges of the 21st century.

Universities and in particular their research activities have a critical role to play in the Europe of knowledge.

Exploring the issues raised by the Commission's communication published in February 2003 on "The role of universities in the Europe of knowledge", the conference will address, in a series of parallel sessions, themes such as

- the creation and certification of knowledge
- the changing nature of research training
- public/private partnerships
- the role of university for
- research in the regions
- the challenge of inter-disciplinary research

Further information:

http://europa.eu.int/comm/research/conferences/2004/univ/index_en.html

Jörg Niehoff

EYE Forecast

EYE@London Update



The first EYE event of 2004 is to be held in London/UK from the 25th - 27th June. The theme of the conference is "Managing People: Engineering the Business" and builds upon the previous conferences in The Hague

and Cologne.

The plans for the next EYE conference in London in June are progressing well. The updated programme is:

Friday 25th June

Lunchtime	Registration
	Council Meeting
Afternoon	Industrial visits
Evening	Opening Ceremony
	Dinner

Saturday 26th June

Morning	Interactive workshops – choice of: People Skills for Engineers Leading Teams Networking Negotiating skills
Afternoon	Mini-Symposium: Managing People – Engineering the business
Evening	Traditional English dinner

Sunday 27th June

Morning	Cultural visits - choice of leading London museums and galleries Council Meeting The London Eye
Afternoon	Lunch
Evening	Closing ceremony and transfer of EYE presidency

The detailed programme will be available at www.eyelondon.org at the end of March and the conference registration will open at the beginning of April. The conference registration details will be sent out via the EYE Info System so please make sure your details are up to date.

We look forward to seeing you all in London in June.

Lisa Kelvey, EYE President

Goodbye Piccadilly



Piccadilly Circus has long been an interface between London's future and its past and had an upgrade. A giant, curved, super bright and super smooth TV screen has just been turned on. Wider than wide-screen, it curves around the Regency

architecture and disappears up Shaftsbury Avenue. Its bright, it moves, it's really big and it looks as thin as paper and just as light. It suddenly makes all the other lights of Piccadilly seem very old: The rotating billboard, low res RGB-bulbed LED screen, moving message board.

Piccadilly's screen is different than the famous neon tableaux- it can show anything in hi-res 24 frame/second realism - it can flit between live pictures from Mars, war, executions, a commercial ... it's all the same. It is an intelligent sign, with state-of-the-art computer technology, built-in cameras and an on-board heat sensitive weather station. The sign can respond to weather and movement. Content has been released from the architectural hardware. The first clip it showed was a CGI animation of a giant Coca Cola commercial. "When it's raining, big drops will appear on the screen and when it's breezy, the Coke sign can ripple as if it's being blown by the wind," a spokeswoman for the company said.

"It will also be able to recognise if people are waving at it from the ground below and, eventually, will be able to respond to text messages from mobile phones," she said.

I had always thought that Piccadilly Circus was just the start of a London which would inevitably end up looking

like Blade runner. But really it is the opposite - a carefully preserved fragment of 19th century London. It celebrated commerce with disregard for the grand urban plans that reorganised the other great European cities. It was trade that made London, not kings or revolutions.

Take your change and check it out when you are visiting London!

Mariska von Cronenberg

U&EYE

EYE Task Force Meeting in Brussels

The meeting covered the following topics during the weekend (for details see minutes of the Task Force Meeting under www.e-y-e.org).

- The **debriefing** of the **Cologne Conference** collected remarks and results of the last conference:
- The preparation of the **EYE Conference in London** is running well. Some issues have been discussed in detail. A detailed progress report has been compiled. Some issues need attention like the slightly higher conference fee, a two step registration procedure with mandatory credit card payment and quotas for the participants.



- EYE has its **10th anniversary** in 2004. Certain activities are planned (EYE-contact special anniversary issue, EYE birthday party in London, Invitation of the EYE founders and VIP's).
- The **planning of the Strasbourg conference** makes a good impression. Some aspects have been discussed and will be communicated to the organising team with the request to take them into account.
- The **webpage** is still up to date. We will try to get statistics about the hits to know more about the users

and their interests. Jörg will get an offer for merging the two parts of the webpage (EYE Information System and static EYE web page) into one system (dynamic webpage).

- The **next issue of eye-contact** will be ready end of February 2004.
- The **follow-up of the EYE Action Plan** was a big issue during the meeting and included the following topics EYE Conferences, Seminar for the member organisations, EYE Award, EYE Alumni, PR Material, Folder and Sponsor Package as well Organisation chart
- In Cologne the organisers tried for the first time to compile a **poster presentation** for the member organisations. The result was encouraging, but far from being perfect. For the next conference an improved version will be compiled, based on the updated data and in a larger format.
- The next **TF meeting** will take place 14.-16. May 2004 in Brussels. The Task Force will furthermore meet in London the day before the first council meeting to make the final preparation for the presentations.

Jörg Niehoff

Imprint

The eye-contact is compiled by the EYE Task Force and puts together articles about EYE activities like the EYE-conferences, the member organisations as well as EU activities relevant for young engineers. The circulation of eye-contact is strongly encouraged. Any comments or articles may be sent to the EYE Office in Brussels:

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