



## Evaluation 16<sup>th</sup> World Congress Ergonomics IEA2006

### Status of the evaluation

The congress organizers have made a limited evaluation, which mainly provides a qualitative opinion. It is based on experiences, talks and interviews with participants, exhibitors, and other stakeholders. The evaluation was made in September 2006.

### Basis for the evaluation: the business plan

The in 2002 written business plan was the basis for the evaluation. In this document the goals of the organization were:

The goal of the “business IEA2006” is to organize the triennial world congress on ergonomics. Sub goals are: to stimulate ergonomics in the Netherlands, and potentially in Belgium and Germany. Means are: extra publicity; to enhance the sense of belonging to a valuable group that organizes successfully a large event; new membership for the ergonomics society. The evaluation is first on general headlines; later more specific aspects are reported.

### Over all evaluation

IEA2006 was a great success. The preparations and the organization were performed without considerable problems. The participation of 1,400 people was slightly lower than the over the years grown expectations, though above the budgeted break even point. But the number was certainly enough for a lively and interactive conference, that had a full program.

### Evaluation indicators

- The practical organization of the IEA meetings before and during the congress, including meetings of Executive Committee and of the IEA Council.*
  - These meetings were held according to plan. Despite thorough attention, facilities did require last minute improvements. The organizers have evaluated these points with the hotel. The hotel management stood open for the criticism, and the reckoning was adapted for the inconveniences. For IEA a learning point maybe to draft written specifications of the facilities that must be arranged for each kind of meeting.
  - Communication in the years before the congress did not always go smoothly. Presumably due to the trust that IEA had in the Dutch organizers, there was only little contact. The internal structure of IEA can be improved, such to ease the work of the local organizers. This may benefit any formal IEA meetings. The fact that the half year before the congress is the final year of the IEA board’s term (which requires a lot of each of the IEA EC-members), indicates that as clear as possible procedures can be of great help to all. For the organizers it was not always clear which items should be arranged with whom of the Executive Committee.
- Timely and sufficiently communication and announcement of the congress*

Much attention was paid to these matters, like:

  - two printed and mailed announcements;
  - intensive promotion at IEA2003 in Seoul, Korea;

- at many smaller conferences by one of the congress chairs;
- editorials during five years in each of the issues of the Dutch journal (Tijdschrift voor Ergonomie);
- a minimum of two editorials provided to the newsletters of all IEA federated societies;
- not in the last place: a well-designed and frequently updated website, answering most of the questions that potential participants might have.

3. *The practical organization and registration of workshops, master classes and so on, to be held on Sunday 9 July 2006*

These so-called 'pre congress activities' were dropped. Based on the experiences of IEA2003, and after consultation of experts from several countries we skipped this unofficial part of the program. There was no balance between certain costs and uncertain income.

4. *The organization of the congress program*

This part of the organization went well. The program of an IEA congress is very complex: 18 keynotes, each day a continuous program of 18-20 parallel sessions; interactive workshops; 300 posters; several social events. Many sessions could be organized in close collaboration with IEA Technical Group's chairs, or with moderators that took over much of the work, and who organized mini symposia or complete sessions.

The poster presentations did not do justice to the efforts of the authors. Several circumstances caused this. The poster boards were placed in the gangways, but the exposition and catering attracted many participants in the breaks to the exhibition hall. There was no order in the boards. Many boards remained empty, as authors apparently did reject their poster without notice. The program did not provide special time slots for poster presentations.

During the congress week the professional congress organizer CAM has shown its capacities to organize practical matters very well. Staff was well reachable and visible, and their control was sufficient. The daily briefings could be short of time, and only few matters had to be discussed.

The content of the program seems to have met the expectations of the participants. The scientific level was, in line to previous IEA congresses, not really high. A trend from basic research towards practical oriented research and case studies can be noticed. For a broad and large congress, this is a reality, we expect.

5. *The organization of a largely commercial exhibition.*

Thanks to much effort we succeeded to get the whole exhibition floor filled with exhibitors. The opening reception, coffee, tea and lunch breaks were held at this sponsor market. This turned out to be a golden formula; many participants liked it, and the exhibitors were most positive about the high quality of the contacts, in which they received most valuable feedback on their products.

6. *Catering*

The caterer, Maison Van den Boer, did do a great job. One minor problem was the food supply directly after the opening reception, before the world cup soccer final projection. A misunderstanding was less quickly solved than we had hoped, but for which the caterer revenged fully in the following days. The lunches provided for anybody something they like.

#### 7. *The social activities*

- Already at the IEA Council dinner an informal atmosphere grew, resulting in collective singing and individual performances.
- The opening reception was a fine start. The simple act of the 'Rembrandt group' portraying the famous painting 'Night watch', impressed many.
- The special setting, arrangements and programming of the opening session offered enough content, and entertainment to satisfy most of the participants.
- The visit to Holland Casino attracted 150 participants. The program on site was limited, but sufficient. Pricing was low, and most of the participants have enjoyed the evening.
- The congress party was a roaring success. Participation of more than 60% is unknown for the banquets that are held traditionally, and may set a trend for future congresses. The high degree of participation was further reached with a low pricing, and by the great atmosphere of the previous days. Due to safety rules, unfortunately tens of people had to be rejected at the ticket office when the maximum number of 800 participants was reached.
- The fine weather attracted many people to the famous Maastricht terraces, many of which stayed there till late in the night.
- The closing ceremony was perhaps the least of the activities with a social character. The summaries by four experts did vary in quality and style; we are aware of the degree of complexity of summarizing. Since all speakers kept the tight schedule during the opening session, this went not so well during the closing. Attendance was high; about 400 people stayed till the end. The in conjunction held informal warm lunch offered excellent opportunities to say goodbye. Nevertheless, it remains a problem that many participants leave after the fourth day, resulting in gaps in the program of the final day.

#### 8. *Publishing of proceedings.*

- Selection of a Publisher turned out to be more difficult than expected. It was hard to convince publishers of our ideas. The choice for Elsevier turned out to work perfectly. Collaboration was good, the publisher kept all arrangements, and was supple where we met some problems in scheduling. Nevertheless a congress organizer can be confronted with (too) many personal changes at companies. The Cd-rom is user friendly, though some miss page numbers (which was after the congress solved with a key, published on the website).
- The special issue of Applied Ergonomics is excellent, both editorially and technically.
- A book, based mainly on contributions at the congress, is now in progress of publication (planning: mid 2007).

#### 9. *Hotel bookings*

- The choice to outsource this activity completely saved the organizers a lot of time. Only few complaints were heard.

#### 10. *Professional visits*

- A difficult item in the organization. We choose to limit the number. Nevertheless, and despite many registrations, attendance was low. The problem is that people have to register for the visits, before the final program for the congress is available. The (low) registration fee for the visits was a too low threshold to prevent disappointing low numbers of people visiting the hosting companies.

## 11. Finances

- The chosen organizational model worked well. In 1999 the IEA delegated the organization to the 16<sup>th</sup> world congress to the Netherlands Ergonomics Society (NVvE). NVvE established a legal body (foundation), the so-called 'Stichting Ergonomie Congres IEA2006', and arranged thus that the NVvE could not be held legally responsible. The 'Stichting' appointed three congress chairs in unpaid positions, and these three men did most of the organizational work.
- The total budget was more than 1,1 million Euros. The financial balance allowed paying back to IEA and NVvE their seed money (\$ 20,000, resp. Euro 25,000) as well as paying the capitation fee (appr. \$ 20,000). Besides the total costs of all IEA meetings, council dinners (incl. partners) were paid from the congress budget (value of \$ 13.400). Besides council members and EC members were supported in their travel or lodging expenses.
- After all these costs the financial balance shows a small surplus, which is spent to goals that correspond with the goals of the legal body.

### Realization of ambitions

- *Attractive theme and logo.*  
The congress theme was developed in close interaction with tens of people all over the World. The theme 'Meeting diversity in ergonomics' worked well, and was quoted in many of the presentations. The logo was well recognizable, and it turned out to be transferred to a three dimensional sculpture.
- *Well designed and easy accessible website.*  
The fact that we received only a few comments, may indicate that the website worked well. Ergonomists are critical, and if there were sincere complaints, they would certainly have reported these. However, the software that the professional congress organizer used for registration and abstract submission did not work as properly as we expected.
- *Much useful information in due time available for anybody.*  
Especially the website, and later also the newsletters provided sufficient information.
- *Strong involvement of IEA Technical Groups.*  
This worked very well. Most of the IEA TG's organized sessions or symposia. New TG's were started on the basis of IEA2006. A small Group of very active moderators and a larger Group of more remote moderators, have saved the organizers much work. Thank you all for that!
- *Collaboration with the German and Belgian Ergonomics Societies*  
From scrap it was decided that the responsibility and all Financial matters were Dutch matters. With regard to the programming, collaboration was an ambition. A Regional Program Committee, with members from the three countries was founded, and several of the members were of valuable help. However, the collaboration at Society level has been relatively low, which is understandable: after all efforts to give the congress a European flavour, it remained a Dutch enterprise.
- *Interaction promoting structure.*  
As could be expected, the Dutch were in the forefront of interactive working methods. A large part of the interactive sessions was organized by Dutch ergonomists. In discussions many people participated actively.
- *Compact congress, under one roof.*  
The choice for the Maastricht Exhibition and Congress Center, and for Maastricht was excel-

lent. The formula “all under one roof”, worked very well, and was highly appreciated. Several rooms turned out to be rather small, while other rooms were very large. For an IEA congress a center with most rooms for 80 - 100 people, seems to be a good choice.

The warm weather made it clear that the center’s air-conditioning needed renovation, which actually the day after the congress started.

The city of Maastricht has illustrated its image as ‘most cosy town of northern Europe’.

- *Impulse to ergonomics in the Netherlands, and growth of NVvE membership*

Within the group of Dutch participants at the congress an impulse was certainly created. It is unclear if that impulse goes further amongst non-participating members. Here lies a task for the board of the NVvE. Publicity did not work as well, as hoped for. A with much effort edited newsletter, which was sent to 65 journals, was not very successful.

## **Evaluation of strengths and weaknesses**

### ***Strengths***

- *Small team of ‘pullers’ that know each other well; amongst whom at least experienced congress organizers and relevant experience with IEA congresses.*

The choice for a small team, delegating tasks, was an excellent one. Though fragile for drop out, such a small Group Works very efficient. The division of tasks and responsibilities were crystal clear. Mutual respect and trust within the team were basic conditions for impeccable operation and collaboration.

During the congress the three congress chairs were very visible and accessible. At each occasion they were in the front to actually welcome their guests.

- *Building on previous experiences.*

This was an advantage. The organization of such a large congress, turned out to be more different than the members of the Core Team had expected. Important things that were different than expected: quickly rising costs, resulting in the need of more sponsoring; the long period of preparation (6 years) in which continuous attention is required; the intensive communication (tens of e-mails per chair per day, running up to more than one hundred per chair per day over the last five months); the unpredictable work load, especially when peaks would come; the communication with IEA, which over the final months before the congress was more complex than expected. The very experienced Professional Congress Organizer was surprised by the complexity of an IEA congress. Looking back, it would have been better if the First responsible person of the professional conference organizer (PCO) had joined the trip to IEA2003. She could have got a better idea of what an IEA congress is, which would have saved much time and misunderstandings.

- *All previous IEA congresses have been more or less successful.*

However this is a fact, it is no guarantee for success. In the years preceding IAE2006 several smaller conferences were cancelled due to lack of interest.

- *At least six preceding IEA congresses had a positive financial outcome.*

The same as above counts for this. Over the years 1999-2006 the increase of costs in Western Europe has been larger than expected. Meanwhile the congress fees were fixed in a very early stage.

- *Technology: electronic information, electronic registration, and payment, electronic abstract en full paper handling would be possible.*

The organization of 1,600 abstracts, more than 1,000 full papers, 300 posters, and about 1,400 participants, many of whom expecting tailor made communication, would have been

impossible without modern technology, and would certainly have been prohibitive. However, technology did not work as properly as hoped for. The abstract handling, full papers submission required a lot of extra attention. Payments via credit cards took much time, and turned out to be less reliable than one might expect.

### **Weaknesses**

- *All work must be done as volunteers' work, next to a full time job.*  
This should certainly have been a big problem. It was great that the employers of the three chairs, TNO, ErgoS, and ING facilitated them over the final two years to spend part of their working time on the congress.
- *Competing smaller conferences.*  
Despite IEA-rules it can happen that conferences are organized that are competitive with such a large congress. It is uncertain if this has played a role with regard to the lower participation than expected. Over the past years people within IEA circuits expected 1,500 to 2,000 participants for IEA2006. The fact that this congress has a broad scope on ergonomics, may have been a disadvantage. Some people attending IEA2006 and some who were not present, reported that it is easier to get funds to attend smaller, and more focused conferences.
- *The organizers have actually no influence on the participation degree. Worldwide economics, health threats, and political strains may be of great influence on the numbers. In between the fixed costs can hardly to be controlled.*  
This is a real weakness. The threat of a worldwide birds flue epidemic has been a reality. World economics has been positive, and international conflicts have played a minor role for IEA2006. For future congresses these factors will always be a potential problem.
- *Risk of too much influence of the IEA board.*  
As the structure of the roles is not formally fixed in documents, this could be a problem. Looking back, we rather experience too little involvement of the IEA board. This was partly caused by the organizers themselves. Their careful and open information and communication, created trust within the IEA board.
- *Risk on insufficient quality of professional staff.*  
Previous experiences made us taken up this point as a weakness. For any congress this is a potential problem. Turnover of staff is a reality; many PCO's employ many young people, including young women. These people change jobs, or have the chance of getting pregnant. IEA2006 has had minor problems in this regard. On the other hand we must conclude that the, without discussion, well-known Conference Agency Maastricht (CAM) sometimes did not know how to deal with three chairs who very well knew what they wanted. Though CAM had experiences with larger congresses, the complexity of a congress like IEA2006 turned out to be unique in its diversity and number of presentations and parallel sessions.
- *Sponsoring can be difficult in economically poor times.*  
This is certainly true, and in the first years we suffered from this. A few large sponsors could be attracted in those years, after which it became much more difficult to convince sponsors of the value of sponsoring a congress like IEA2006. Only a bit more than two years before the congress, a second wave of sponsors came in. The Chair Finances and Facilities has spent hundreds of hours on acquisition of sponsorship, and with success!
- *A real innovative congress is impossible within IEA-rules.*  
Yet, important innovations were introduced, like:

- An exhibition as essential part of the congress, as. At previous IEA congresses the exhibition was more an activity in the margin, that you had to go and visit; one could get the impression that the organizers were slightly ashamed to host commercial exhibitors. At IEA2006 the exhibition was 'the place to meet', and anybody liked it. The sponsors and exhibitors were very positive, and cross selling between sponsors was a daily activity.
- A substantial part of the congress program existed of recognizable symposia and sessions. In fact the congress has become a collection of back-to-back conferences under one roof, and at the same time. This worked well, though some people may have been annoyed to have to choose more than once out of several most interesting sessions.
- Hospitality was a key target, in all activities, in all communication. The Dutch don't have a reputation to be very hospitable. We have tried changing this disadvantage into an advantage. And we are proud that the Dutch participants have understood what it means to be a host.
- New kind of proceedings: next to a special issue and a Cd-rom, a state of the art book will be published (mid 2007), based mainly on IEA2006.
- Website as main medium for communication. The most informative website contributed to a limited number of questions by e-mail or by telephone.
- The introduction of the so-called Easy Ergonomist Finder (ergosearch): a website on which participants could (and still can) register, and so get themselves out of anonymity. A number of characteristics can be added, like specialisation in ergonomics, field of application, sectors in which specific experience. At this moment 364 people have registered. Donation of the software to IEA is being considered.

## **Finances**

### ***Budget versus realisation***

We have tried to compare the original budget plan (2001) to the final outcome. Comparison fails however, even in the headlines, due to changes in categories, made in 2003.

Important lessons are:

- Congress centre: the first contract may not be as clear as it looks. Organizers will be charged for many extras, like cleaning, extra rooms, and even for the electronic infrastructure.
- Costs of beamers, sound, and the, besides very well working system of a central computer for all power points. The costs are substantial: about 10% of the total budget!
- Costs of printed matters were far below what was expected in advance. Also the costs for the proceedings are a small portion of the total costs (less than 4%).
- The costs for the Professional Conference Organizer (PCO) were much higher than originally budgeted. However, the final costs were slightly lower than budgeted in 2003, when the final contract with the PCO was signed.
- Financial support of participants from IDC's covers a substantial amount of money. IEA has supported these costs substantially (in the range of 35% of the total support).
- The costs of the IEA meetings were not planned to be part of the congress budget. Though IEA rules ask for hosting, renting rooms in a commercial hotel, combined with facilities, catering and so on, results in relatively high expenses. We are happy that, after all, IEA2006 could pay for all of these costs, and that we could support IEA council members and EC members in their expenses.

- The choice for a low entry fee for the congress party (25% of the actual costs) turned out to be a good one with respect to the number of people that registered for the party. Yet, the success became almost a big problem when an unexpected large number of people wanted to participate.
- The income by registration fees were according to what in 2001 was expected.
- Sponsorship was much higher than planned; in fact the first budget proposal did not count on any sponsorship at all.
- After having paid all the dues, including the capitation fee to the IEA and the payback of seed money to IEA and the Dutch Ergonomics Society, the congress ended with a financial surplus. The board of the legal body decided to grant an extra 10,000 Euro to the IEA. The Federation of European Ergonomics Societies (FEES) was granted an amount of 3,500 Euro and the Center for the Registration of European Ergonomists (CREE) an amount of 2,500 Euro, both for specific goals to promote ergonomics on a European scale. The small amount of money that will be left after rounding off the legal body will be granted to the Netherlands Ergonomics Society.

### ***Liquidity***

In the first years of the organization, liquidity has been a major topic. Costs come as soon as one starts, and rise quickly to a substantial level, while income comes very late. Sponsorship is essential to survive the first years. The first few sponsors started immediately to pay their first terms, which solved the liquidity problems largely. When two sponsors paid all their dues at once, the problems were solved completely.

### **Evaluation of the congress' organization's goals**

Above a mostly positive evaluation is given, together with some lessons. When we look back to the goals that the Dutch Ergonomics Society had, the experiences are less positive. :

- Organizing the congress at itself was largely most successful. The members of the Dutch Ergonomics Society played an important role. They have been hospitable, good organizers, and many Dutch people participated, were active as speakers, moderators, and session chairs, with a high quality. In fact the Dutch delegation was the largest: 15% of all participants.
- The ambition to empower ergonomics in The Netherlands was partly successful. Within the field of ergonomics, there was much extra attention. Many Dutch people have acted at the congress, many of whom don't do this regularly.
- The groups' interaction was positive amongst those participating. But that effect has hardly reached those not participating. The NVvE could (have) benefit more if the momentum could be used as a power for the future.
- The congress did not result in new membership of the NVvE. The Society has not taken action to attract new members.
- Publicity was not successful. Despite an inviting media brochure, sent to almost 80 editorial boards, only very little attention was given in the media. The with regard to publicity most prominent papers were selected for this. The lesson must be: ergonomics (as it is nowadays reported) is not news! Of course the fact that the congress was held in school holidays, may have played a role.
- An extra attention for ergonomics in Belgium or Germany seems not to be effected. The 24 Belgians and 80 Germans participating are not impressive enough to state that an impact at the national level was reached.



**Discussion**

This evaluation is made by the three congress chairs, but agreed by the Board of the 'Stichting Ergonomie Congres IEA2006', and by the Board of the Netherlands Ergonomics Society NVvE. Although a self-evaluation is actually not the best, there seems to be no grounds that make an evaluation by a third party necessary.

5 January 2007

Ernst Koningsveld, Ruud Pikaar, Paul Settels