

IEA'97

IEA'97

**International Ergonomics Association**  
**13th Triennial Congress**  
June 29 - July 4, 1997 Tampere, FINLAND

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**REPORT of the IEA'97 Congress**

January 1998

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## Summary

*The International Ergonomics Association 13th Triennial Congress IEA '97 took place in Tampere, Finland from June 29th to July 4th 1997. It attracted more participants than ever, about 1600 ergonomists from 54 different countries all over the world.*

*The congress was a success in several ways. The several symposia as well as the special sessions proved to be a fruitful structure for a congress. For that part of the program the technical groups of the IEA under encouragement and coordination by Professor Holger Luczak made especially valuable contribution to the local programme committee chaired by Dr. Pentti Seppälä.*

*The congress' scientific programme spread to 20 parallel sessions. The programme consisted of 21 keynote speakers, 20 symposia, 73 special sessions altogether 259 sessions. The sessions were chaired by 293 chairpersons and they included 1582 presentations, from which 1178 oral presentations and 404 posters.*

*The promotion of the IEA '97 Congress proved to be successful. One essential part of it was internet. There has been over 22000 visits to the IEA '97 home pages, nearly 300 abstracts were received through internet and nearly 150 registrations came in using the ready made registration form.*

*The congress proceedings consist of 7 volumes including total of 4600 pages. The proceedings are on sale, and they can be ordered from:*

*Finnish Institute of Occupational Health  
Department of Publications  
Topeliuksenkatu 41 a A  
FIN-00250 Helsinki  
FINLAND*

*tel: +358 9 474 7543  
fax: +358 9 474 5071  
email: [seija.muinonen@occuphealth.fi](mailto:seija.muinonen@occuphealth.fi).*

## 1. Organization

### 1.1 Organizational Structure

The International Ergonomics Association decided in 1988 based on the initiative of Finnish Ergonomics Society to Nordic Ergonomics Society, that the IEA '97 congress will be organized in Finland and hosted by the Nordic Ergonomic Society (NES). The NES board delegated later the practical organizing responsibility to the Finnish Ergonomic Society (FES).

The FES invited professor Markku Mattila in 1990 to act as the chairman of the organizing committee, and the chairman of the IEA '97 Congress.

Following organizational bodies were established for the Congress:

- Organizing committee
- Program Committee
- Nordic Collaboration Group
- Scientific Advisory Committee
- International Scientific Advisory Board
- Industrial Co-operation Group
- Honorary Committee

The composition of each committee listed above are presented in annex 1.1. Duty descriptions for some of the main officials and committees are presented in annex 1.2.

The Honorary Committee was as follows:

Director General J. Rantanen, Finnish Institute of Occupational Health, Chairman.  
Research Director J. Hattula, the Academy of Finland  
Secretary General M. Lehto, Ministry of Social Affairs and Health, Finland  
Director General J. Ollila, Nokia Ltd  
Mayor J. Rantanen, The City of Tampere  
Managing Director P. Rehnström, Finnish Work Environment Fund  
Director General J. Routti, Commission of the European Communities  
Secretary General P. Sorsa, Ministry of Labour, Finland

The Organizing and the Program Committees appointed a Congress Management Committee to arrange practical organizational matters and to make practical decisions. The Congress Management Committee consisted of following members:

Prof. Markku Mattila, Conference Chairman  
Dr. Pentti Seppälä, Chairman of the Scientific Program Committee  
Mr. Hannu Stålhammar, Chairman of FES, NES board Member  
Dr. Clas-Håkan Nygård, Deputy Chairman of the congress, NES board member  
Ms. Tuulikki Luopajarvi, Secretary of the Scientific Program Committee  
Mr. Markku Leppänen, Secretary General  
Mr. Simo Arra, Treasurer

The Patron of the IEA '97 Congress was Mr. Martti Ahtisaari, The President of Finland. A Professional Congress Organizer, Tampere Congress and Export Service Ltd (TAVI) was hired to provide planning and administrative services, and to operate the IEA '97 Secretariat.

## **1.2 Planning timetable**

The original timetable for organizing matter was mainly based on the IEA '91 and IEA '94 reports and IEA Guidelines for planning Triennial Congresses.

Table 1. Indicative timetable for organizing the IEA'97 Congress

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<b>1. August 1994 Toronto IEA '94</b>	
-	Distribution of "Preliminary Announcement and Intention to Participate"
<b>2. Up to end of September 1994</b>	
-	Distribution of "Preliminary Announcement and Intention to Participate"
-	First announcements to the international professional magazines
<b>3. Up to end of November 1994</b>	
-	Letter to federated societies and organizations asking for contributions to the scientific program
<b>4. Up to end of May 1995</b>	
-	First meeting of the international experts and the scientific program committee
<b>5. Up to end of September 1995</b>	
-	Distribution of the "First Announcement and call for papers"
<b>6. Up to end of March 1996</b>	
-	Letter to the invited speakers
<b>7. Up to end of June 1996</b>	
-	Distribution of the "Second announcement and call for papers"
<b>8. Up to end of August 1996 (deadline for abstracts)</b>	
-	Receiving abstracts, analysis by Nordic experts
<b>9. Up to end of October 1996</b>	
-	Second meeting of the international experts, the executives and the scientific program committee in order to examine and classify the abstracts definitively
<b>10. Up to end of November 1996</b>	
-	Letter of acceptance/modification/refusal to the authors of abstracts accompanied with the writing instructions from the publisher of "Proceedings" including the questionnaire about required AV equipment
<b>11. Up to end of February 1997</b>	
-	Deadline for final papers
-	Distribution of the "Preliminary program and notification of registration"
<b>12. Up to end of April 1997</b>	
-	First press release
<b>13. Up to end of May 1997</b>	
-	Distribution of a dossier to the session chairs with the text of all the communications in the session
<b>14. Beginning of June 1997</b>	
-	Press release to general press
<b>15. IEA '97 CONGRESS June 29 - July 4, 1997</b>	

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### **1.3 Budget**

The first budget draft was made in co-operation with the PCO and one basis for the budget were the IEA'91 and IEA'94 budgets. First budget drafts were calculated for 800 and 1000 delegates.

Later the NES board required to do the budgeting for 600 delegates. This was because they assumed that no more ergonomists will ever come to Finland and especially to Tampere and the dates of the congress were unproper. The planning of the congress based on too small participation expectations caused many troubles and also extra costs, when the amount of participation finally climbed up to 1600.

The original budget structure is presented in annex 1.3. The budget items were varying during the whole congress planning. Some items never materialized, some were added.

## **2. Venue**

The site of the congress was Tampere Hall, the largest and newest congress center in Finland. The main auditorium can accommodate up to 1800 delegates in one session. Additional meeting rooms were reserved both from Tampere Hall and from the University of Tampere, which is next to the Tampere Hall. The combination of Tampere Hall and the University of Tampere gave ample space to arrange 20 parallel sessions, if needed (and it was).

## **3. Promotion and publicity**

### **3.1 Brochures**

Special emphasis was made in promotion of the congress.

"Preliminary Announcement and Intention to Participate" -brochure was printed in summer 1994. The size of the printing was 9000 copies. They were delivered in the IEA '94 congress in Toronto and to IEA federated and affiliated societies as well as to some contacts persons of the IEA '97 organizers.

IEA '97 Posters were also printed at the same time, 500 copies. These were distributed to IEA federated and affiliated societies and to some contact persons. Posters were sent to the members of the International Scientific Advisory Board. They were also used for promotion in different events before IEA '97.

"Announcement and Call for Papers" brochure was printed in the summer 1995. The size of the printing was 32000 copies. They were delivered to IEA federated and affiliated societies, to persons who had expressed their interest to the IEA '97 congress, as well as to some contacts persons of the IEA '97 organizers.

"Invitation and Call for Papers" brochure was printed in summer 1996. The size of the printing was 20000 copies. The distribution was primarily as described already above.

### **3.2 WorldWideWeb**

In February 1995 the IEA'97 Congress got it's own WWW -home page. From the beginning it was a success. All the time most up-to-date information was first added to these home pages, as well as forms for sending abstracts, requests for further information and at the end the registration form.

The use of WWW to promote the congress was successful. Statistics show that the home page had been visited over 22 000 times at the beginning of August 1997. Nearly 500 persons left their message to the Guest book which was included to these home pages. Through Internet the organizers received nearly 300 abstracts and about 150 registrations came in using the ready made registration form. However, the transmission and the quality of received abstract-prints were rather poor in many cases.



### **3.3 IEA '97 in Toronto 1994**

In Toronto the IEA '97 Congress had its own booth. Promotional material about Finland and Tampere, some extra "Preliminary Announcement and Intention to Participate" -brochures, open heart and lots of Fazermint sweets were available. Because of fine material and tasty sweets, there were many visitors in the booth. Overall it was a good investment.

### **3.4 Announcing in professional magazines**

By: Tiina Niskanen /Finnish Institute of Occupational Health

As early as autumn 1994 and then again autumn 1995, the announcements of the Congress and the request to include the announcement to the congress calendars of the journals were sent to the scientific newsletters and journals. The number of these journals and newsletters was around 30, covering the leading international journals in the field of ergonomics and other related fields.

Before the Congress the general information about the Congress was sent to the press both in Finland and abroad. The list of press addresses of the FIOH covers some 350 national newspapers, radio and TV, 150 regional and local media, 150 professional journals and 350 company newsletters. The information of the Congress was also sent to about 50 medical or ergonomics newsletters around the world and to about 15 news agencies.

Also personal contacts were taken with a few journalists of the Finnish press, television and radio and a pre-symposium press conference was organized for invited journalists.

21 keynotes of interest to the great public as well as other papers were selected, summarized and translated into Finnish. The edited material and the invitation to the Congress and to the press conferences were sent to the press.

The invitations to the Congress and to the press conferences were also sent to foreign journalists who were interested to join the Congress.

The press releases and some extra material about the topics were also available at the Tampere Hall. Also some photographs were available for the press. The English versions of the press releases were available. Two extra press releases were written and faxed for the press during the Congress.

About 40 different press releases made by the exhibition companies, organizations and institutions were also available both in English and Finnish.

## 4. Scientific Program

### 4.1 Technical program

By: Pentti Seppälä, Chair of the IEA '97 Program Committee  
Tuulikki Luopajarvi, Secretary of the IEA '97 Program Committee

The planning of the Technical Program was started already during the 12th IEA Congress in Toronto when some preliminary discussions were carried out with the representatives of the Nordic Ergonomics Societies. In September 1994 the Nordic Program group had its first meeting in Sweden. In addition to the Finnish chairman and secretary, the Nordic group consisted of a member from each other NES country, Denmark, Norway and Sweden. The task of the group was to participate in the planning of the IEA '97 Technical Program together with the Finnish Program Committee and to promote the congress in the respective country.

In winter 1995 a letter was sent to the chairmen of the IEA Technical Committees and IEA member societies asking for program ideas, members to the International Scientific Advisory Board of IEA '97 as well as promotion of the IEA '97 Congress.

The deadlines of the different phases of planning of the Technical Program were:

The key-note speakers invited	01.03.1996
Their replies of acceptance from the invited speakers	01.05.1996
Proposals and invitations for symposia and special sessions	30.06.1996
Instructions for organizing a symposium or special session	30.09.1996
Abstracts to the Program Committee	30.08.1996
Information about the acceptance of abstracts together with the instructions for preparation of the camera-ready manuscript	15.12.1996
Camera-ready manuscripts	15.02.1997
Invitations of chairmen of sessions	30.04.1997
The Proceedings books ready for print	05.05.1997
The Program book ready for print	30.05.1997

Altogether 1806 proposals for symposia, special session or workshop, oral and poster presentations were received. In practice the deadlines had to be extended rather much. Although written instructions were sent to every organizer of a symposium or special session, people did not always read or mind them, which caused plenty of questions, correspondence and unnecessary work. Also the use of e-mail and faxes, even in connection of sending the camera-ready manuscripts, caused much confusion and problems. Some computer programs were almost incompatible and there were also many defects in the quality of the copies and prints.

The abstracts of free papers were reviewed by 37 scientists, who were given ready forms to be completed. The organizers of the symposia and special sessions reviewed and accepted themselves the papers of their sessions. The instructions from IEA and NES were that also practical papers should be accepted and the rejection criteria

should be kept rather modest. The primary aim was to place as many papers as possible into oral sessions. The papers were placed into an oral session, if there were enough papers on a topic so that a relatively coherent session could be formed. However, due to the huge number of abstracts and to the fact that many authors wished to have a poster presentation, poster sessions were established. Further more, if the chances of the author to participate in the Congress seemed rather uncertain, the paper was placed into a poster session. As accustomed in the Nordic countries, the poster sessions were classified equally scientific and the papers were included into the Congress Proceedings.

The final Technical Program consisted of

pre-congress workshops	8
keynote speakers (listed in annex 4.1)	21
symposia with the total of 97 sessions	20
special sessions, workshops, roundtable discussions	70
free paper sessions	69
poster sessions	23
oral papers	1178
poster papers	404

The scientific program by topics is presented in annex 4.2.

The primary principle of the Program Committee, that each participant could have only one oral presentation, was impossible to follow in every case. Some prominent scientists were invited by several symposium and special session organizers. The rejection of their papers by the Program Committee would have made things very complicated. As a result of this goodwill, the contents of some sessions overlapped and the organization of the schedule of the entire Technical Program became tremendously troublesome.

The IEA '97 Proceedings book included both oral and poster presentations. The total amount of manuscripts was 1383, which were published as seven volumes organized by the 18 topics of the Congress. The authors received quite particular written instructions with an example article. They were asked to submit a three-page long, camera-ready manuscript by ordinary mail. Because the number of papers was so extensive the limitation of the length of the paper was unavoidable, and in order to manage the printing in time, the given rules and instructions were very important. However, some people sent longer papers or used e-mail or fax. The quality of the copies received was often too poor to be printed and caused extra correspondence in a hurry.

In the planning of the Technical program a data base program called Access was used. The program was of great help when lists of speakers in e.g. alphabetic, numerical, topic- or country-order were needed. Also in preparation of the Proceedings books the program was an excellent tool. On the other hand, entering the data into the program and maintenance of the data required a lot of very precise work, because one mistake in spelling of a name or title mixed up the data. A careful technical assistant who knew the program and its use was of enormous importance and great help.

According to the feedback, the technical Program of the IEA '97 Congress was successful as a whole. The number of parallel sessions seems to be a perpetual problem. The field of Ergonomics, the number of researchers as well as appliers in practice are expanding world-wide. The Triennial Congresses seem to become bigger and bigger. Solving the problem of too many parallel sessions is one of the main tasks of the organizers of these Congresses in future. Having more poster sessions could be one solution, but obviously a poster presentation is not yet scientifically as appreciated as an oral paper in many countries. Some kind of mixed sessions could be worth of consideration.

## **4.2 Student program**

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### 4.2.1 Aims of the student program

The main objective was to provide the students a program, included in the normal program of the congress, which would help students to find and to get new knowledge and ideas from a scientific congress and to learn how to present his/her own study.

### 4.2.2 Participation

The primary target group was postgraduate students (doctoral students) but also others (e.g. PD students, master of ergonomics students etc.), who's interests were in ergonomics. Their original training was in engineering, designing, medicine, public health, physiology, psychology, economics etc. The number of students who participated was 83. There were 9 tutors, one coordinator and one assistant in the program (annex 4.3).

### 4.2.3 Program

The main part of the program was derived from the scientific program of the IEA 97 congress. In addition to that, the students program (annex 4.4) consisted of special tutorial sessions for students and time for discussions with an tutor. The students were divided into groups with 6 to 11 students in each, led by a tutor. The students were asked to plan his/her congress-week in advance, i.e. to choose 2-3 main lines in the program and follow them during the congress. In practice, the congress week was planned during the first meeting of the students on Sunday afternoon, because the scientific program was not available to them before that. Each student kept a diary during the week of the presentations he/she has chosen to follow. About 70 % of the students presented an oral paper or a poster in the congress. Their presentations (either

oral or poster) were afterwards commented by the tutor according to a ready-made checking list. In addition to that every group chose a topic or a problem, during the first meeting on Sunday, which they discussed during the congress week and reported in the last session on Friday.

The program was designed to correspond to 1-2 points in Ph.D. studies at a university. One point corresponded to attending the student program and keeping a diary. Two points corresponded to attending the congress, keeping a diary of the scientific program and giving a paper or a poster in the congress.

#### 4.2.4 Evaluation

The following evaluation is based on the experiences of the coordinator and the assistant and on the answers from an evaluation form, which was distributed to the students and the tutors during the last session.

The evaluation by the students:

Some general comments may be summarized in the following way: In general the students were very satisfied with this new kind of program and especially it was pointed out that this is a good possibility to start a congress and to learn to know people in advance and to discuss with people, especially if you not have attended congresses before. The small groups with a tutor seemed to attract the students, although the groups were too big. The feed-back from the presentations the students received in the congress was noted as very important.

The students suggested among other that the following parts should be developed:

- instructions on how to prepare a presentation before the congress
- the scientific congress program should be sent to the students early enough before the congress, to give time for planning
- more informal and less formal meetings -more homogenous and smaller groups
- daily meetings with tutors
- more time before and/or after the congress for discussions
- more international groups

My own evaluation of the program, as the coordinator, may be summarized in the following way:

The general feeling is that there is a need and interest for such a program even in future congresses. One big problem in planning the program was the diversity of the students, which in one way reflects how wide and broad ergonomics is today. We asked the students before the congress about their field of interest and background, but the respond rate was very low (about 35 %), and it was therefore impossible to use the data for e.g. forming homogenous groups. Thus, I think myself that one should take the opportunity to be in a heterogeneous group, which may widen ones aspects in ergonomics, which many times are too narrow.

The informal meetings were very much appreciated (e.g. the sauna-evening on the lake) and that may be something to develop, that is arrange places and time for

informal meetings (clubs, meeting points etc.). The tutors in the program used much time for this program, but many of them had also other duties (chairing sessions, presentations), which gave them a stressful congress week, but most of them seem to have enjoyed to be a tutor, although there were only limited possibilities to give them any benefits for this. Because the IEA Triennial Congress is a scientific congress, it seem to be important for the quality and acceptability of the student program that the tutors are seniors or professors, or at least very known in their field. Some economical benefits for the tutors should be in the budget, although it seem not to be a hinder for such a program.

Keeping a diary through the congress week was for the majority a good idea but it seems to be a strange form of learning for most students, because the quality of the diaries for major part was poor. About 40 % of the students returned a diary. The best diary from Ms. Minna Kallionpää is presented in annex 4.5

The number of student in a student program should be restricted to avoid too big groups. There should not be more then 4-6 students for one tutor.

As a conclusion, I suggest that some form of student program should be planned for the next IEA congress because there seem to be a need for it. Also because of that the number of students in IEA congresses is high. In Tampere there were more than 300 people registered as students and more than a fourth of them took part in the student program. In the Nordic Society there have been some discussions about such a program in the annual meeting in 1998. It will also increase the interest of students to participate in conferences.

## 5. IEA'97 Congress

The amount of participants became much higher than expected beforehand. There were altogether 1558 persons participating the IEA'97 Congress. Almost 300 participants registered as students. A small amount of persons, 53 registered as one or two day participants.

Table 2. IEA '97 participants by categories

Delegates	965
Students	278
One day	22
Two day	31
Free and supported	185
<b>Delegates total</b>	<b>1481</b>
Accompanying persons	77
<b>Number of participants</b>	<b>1558</b>

Congress participants came from 54 different countries, which is more that ever at IEA previous congresses. The biggest delegations came from Finland 313, U.S.A. 127 Sweden 116, Japan 115, Germany 84, Denmark 72, France and Brazil 70. The grants

from HFAC/ACE as well as from the Ministry of Labour of Finland were available to support 72 delegates from industrially developing countries. In annex 5.1 the actual number of delegates from each country is presented.

### ***5.1 On-site arrangements***

The registration and info-stands were centrally located in the Tampere Hall. There was also an info-stand in the University of Tampere.

In the Tampere Hall's main lobby there were also a bank and post office. The latter seemed to be very useful, when nearly 400 delegates mailed their proceedings.

IEA 2000 organizers had a booth in the main lobby.

There were speakers' room both in the Tampere Hall and in the University of Tampere.

When registering the delegates received first an envelope, where were vouchers for proceedings and gift, name tags and if they had ordered extra trips, workshops or the dinner, vouchers for them. If payments were clear the delegate then received his congress bag.

### ***5.2 Social Program***

All delegates and accompanying persons were cordially invited to attend the social events as follows:

Welcoming Reception, Sunday, June 29, 19:00 - 21:30  
Included in the registration fee.

Reception hosted by the City of Tampere, Monday, June 30, 19:00 - 21:00  
Included in the registration fee.

Conference Dinner, Thursday, July 3, 20:00 - 24:00  
Dinner Address: Dr. Iikka Kuorinka  
Price: FIM 400/person

### ***5.3 Program for Accompanying persons***

Accompanying persons we mostly welcome to attend the opening and closing ceremonies of the congress. They could also participate to the Welcome reception on Sunday evening and the Reception by the city of Tampere on Monday. Every accompanying person received also a gift.

Following arrangements had been made for the accompanying persons:

Included in the registration fee.

Sunday, June 29

City tour of Tampere, 13:00 - 16:00

Monday, June 30

City tour of Tampere, 13:00 - 16:00

Shopping tour in the city center, 13:00 - 16:00

City walk, 13:00 - 15:00

Tuesday, July 1

Museum tour, 9:30 - 12:30

Shopping tour in the city center, 13:00 - 16:00

Wednesday, July 2

Lake cruise, 9:30 - 12:30

Shopping tour in the city center, 13:00 - 16:00

Thursday, July 3

Shopping tour in the city center, 13:00 - 16:00

Special Tours for Accompanying Persons (extra fee)

Monday, June 30

Excursion to Hukianhovi, 9:00 - 17:00

Tuesday, July 1

Excursion to Helsinki, 9:00 - 17:00

Visit to Hämeenkyrö, 10:00 - 15:00

Excursion to Rantavirkkula, 16:00 - 22:00

Wednesday, July 2

Hämeenlinna Tour, 9:00 - 17:00

Finnish cuisine, 11:00 - 13:30

Thursday, July 3

Visit to the Helvetinjärvi National Park, 9:00 - 14:00

Friday, July 4

Visit to Spa Hotel Tampere, 10:00.- 13:00

#### **5.4 Technical visits**

There were be two technical visits organized during the congress. They took place on Wednesday (July 2) afternoon.

- Modern paper factory
- Manufacturing plant

#### **5.5 Pre- and Post Congress Tours**

Following Pre and post congress tours were organized:

- The Savonlinna Opera Festival
- Lapland and Nordkapp
- Tallinn



- St. Petersburg

### **5.6 Proceedings**

Proceedings consisted of 7 volumes and they were given to all delegates. A total of 1800 sets of proceedings were printed.

Proceedings can be obtained after the congress from the following address:

Finnish Institute of Occupational Health  
Department of Publications  
Topeliuksenkatu 41 aA  
FIN-00250 Helsinki  
FINLAND  
tel: + 358 9 474 7543  
fax: + 358 9 474 5071  
email: seija.muinonen@occuphealth.fi

Prices:

All 7 volumes together FIM 900

1 proceeding FIM 150

Please note that mailing costs will be added to these prices.

### **5.7 Other material for delegates**

In addition to the proceedings the delegate's congress kit consisted of:

Congress bag  
Technical program -booklet  
Participants-booklet  
Exhibition catalogue  
Writing pad (sponsored by UPM-Kymmene)  
Pen (sponsored by Fujitsu-ICL)  
Congress gift (sponsored by Fiskars Consumer Ltd)  
Invitations to the Welcome reception and the Reception hosted by the city of Tampere  
Maps of Tampere  
Some brochures

### **5.8 Congress attendants**

There were nearly 100 congress attendants. They received no pay for their work, but we gave them free meals and IEA '97 T-shirt. They were also able to arrange their work so, that they could attend the program according to their interest.

We arranged two ½ day training sessions for all attendants before the congress.

In addition to these attendants, 30 persons from the Tampere University of Technology were working as attendants during the congress.

## **5.9 Press**

By: Tiina Niskanen /Finnish Institute of Occupational Health

### **5.9.1 Press center at Tampere Hall**

There was a press center open daily at the Tampere Hall during the Congress. A possibility to use a computer, a printer and a telephone was organized for the press. A press conference was organized daily during the lunch break.

### **5.9.2 Press conferences**

The experts who were invited to the press conferences gave a short summary (5 to 7 minutes) of their topic for the journalists. There were altogether 24 invited experts with different topics, 4 to 6 themes per each press lunch. The major sponsoring companies, Kinnarps and Fiskars, were also invited to the press conferences as speakers.

Press representatives were able to attend the Congress free of charge by showing their press cards at the reception at the Tampere Hall.

### **5.9.4 Articles and news in the media**

According to the press follow-up, 49 articles were written about the Congress. Most of them were at the daily newspapers. About 10 radio programs and 2 local TV-programs were also broadcasted. The most interested topics for the press were aging, computer work and traffic safety.

The information of the Congress spread across Finland mostly through the Finnish News Agency. Most of the journalists who participated in the press lunch or lunches were from the Tampere region. Few journalists came from the Helsinki region and some phone interviews outside the Tampere region were made. Only one foreign journalist, Swedish, participated in the press conferences. Some material went abroad with the Congress participants who visited the press center. Articles about the Congress will be published in the African, Asian-Pacific and Estonian Newsletters which all are edited by the Finnish Institute of Occupational Health (FIOH).

### **5.9.5 Evaluation**

The process as a whole proceeded quite smoothly. Compared with the other press conferences organized by the FIOH the number of the articles written about the Congress was above average; the IEA '97 was of course a big event. Where we also succeeded was the material for press. There was a lot of edited easy-to-read material for the press with many different topics. All the invited speakers were competent and their topics were interesting. Also the lunch arrangements with the Tampere-Hall went fine.

On the other hand, most of the articles were short news at the daily media. The Congress was in the middle of the holiday season and that probably had some influence on the interest in joining the Congress and the press conferences at least for the small professional newsletters.

Probably 2–3 press conferences (with lunch) would have been sufficient to cover the topics during for the Congress week. Despite the changing topics at the press conferences the number of press representatives decreased towards the end of the Congress week.

However, the organizers of the press conferences would like to express their warm thanks to all experts who took part in the press conferences. Without their active contribution and input it would not have been possible to achieve such a result.

### **5.10 Internet corner**

The significance of electronic communication was demonstrated also in the congress. There were 20 Internet-connected PC's, and a total of 1900 individual user accounts were created for the participants. Statistics below show the heavy use of these PC's:

During the IEA'97 congress there were:

Connections to the server using Telnet:	563
Connections to the server using Pop-clients:	1872
Sended e-mails:	1486
Received e-mails:	1074

## **6. Exhibition**

By: Hannu Stålhammar, The Chairman of FES

The exhibition in the field of ergonomics was being arranged the first time in this large scale in connection with the Triennial Congress of the International Ergonomics Association (IEA). The exhibition, covering a total area of 700 m<sup>2</sup>, took place within the Tampere Hall and was easily within the Conference participants reach. The exhibition was allowed both the public and the participants to familiarize themselves with various products, services and new innovations in the wide area of ergonomics and its applications.

There were 61 international and Finnish companies, institutions and organizations as exhibitors. Their products and expertise were concerned with office work and customer service to the professional, research and training service in the field of ergonomics.

The exhibition was open from Monday 30th June to Wednesday 2nd July and during these three days there were visited about 2500 visitors. During the exhibition the visitors had a chance to vote for the Best Ergonomic Product. Among the ten competing products the most of all votes was given to the Ergonomic Mouse from Contour Design Inc. The Best Ergonomic Product Award was given to Mr. Steven Wang from USA.

Both visitors and exhibitors were regarded the exhibition as a great occasion for useful discussions and exchange of views on ergonomics and practical applications.

## **7. After the congress**

The winner of the best ergonomic product, Contour Desing Ltd is promoting its success by using the certificate in advertising. The certificate has been on display on several trade shows, and it has been scanned and added to the company's web-site. The URL is: <http://www.contourdes.com/>.

The Ergonomics-magazine published a special issue on the IEA'97 Congress. It includes extented versions of selected key-note addresses.

Mr. S. Schneider is preparing a special publication based on the Construction symposium. It will be published in the U.S.A.

The International Journal of Occupational Safety and Ergonomics is preparing a special issue on the topic of "Ergonomics and Safety in Total Quality Management" based on the IEA'97 Congress.

The Finnish Institute of Occupational Health is planning to hold a special national symposium based on the IEA '97 Congress in the beginning 1998.

The FES is planning to translate selected papers from the IEA proceedings to finish.

## **Annex 1.1 Organizing bodies**

### **Patronage**

The President of Finland, Mr. Martti Ahtisaari was the patron of the IEA'97 Congress.

### **Honorary Committee**

Director General J. Rantanen, Finnish Institute of Occupational Health, Chairman.

Research Director J. Hattula, the Academy of Finland

Secretary General P. Sorsa, Ministry of Labour, Finland

Secretary General M. Lehto, Ministry of Social Affairs and Health, Finland

Managing Director P. Rehnström, Finnish Work Environment Fund

Director General J. Ollila, Nokia Ltd

Director General J. Routti, Commission of the European Communities

Director General A Larsson, Commission of the European Communities

### **Congress Management**

Prof. Markku Mattila, Chairman of the Congress

Dr. Clas-Håkan Nygård, Vice-chairman of the Congress, NES

Board Member

Dr. Pentti Seppälä, Chairman of the Program Committee

Mr. Hannu Stålhammar, Chairman of FES, NES Board member

Mr. Simo Arra, Treasurer

Ms. Tuulikki Luopajarvi, Secretary of the Program Committee

Mr. Markku Leppänen, Secretary General

### **Organizing Committee**

S. Arra

T. Kauppinen

O. Knaapi

M. Leppänen

M. Lundén

M. Mattila

M. Rauko

H. Stålhammar

J. Suokas

M. Syvänen

E. Yrjänheikki

### **Industrial Co-operation Group**

P. Elomaa, Sampo-Yhtiöt

M. Humpila, Suojalaite Oy

M. Huvinen, Outokumpu Oy

L. Jakobsson, Postipankki

O. Knaapi, Metalliteollisuuden työnantajaliitto

T. Kuikko, Teollisuuden ja työnantajain keskusliitto

T. Leppänen, Hartwall Oy

M. Lindfors, ICL Personal Systems Oy

M. Lundén, SAK  
T. Lundmark, Fiskars Consumer Oy Ab  
A. Nojonen, Postipankki  
M. Rauko, Sampo-Yhtiöt  
J. Tamminen, HPY

**Program Committee**

CANADA J. Saari  
DENMARK P. L. Jensen  
FINLAND H. Anttonen  
M. Elovainio  
P. Harstela  
O. Hänninen  
J. Ilmarinen  
P. Juuti  
P. Järvinen  
J. Kirjonen  
P. Kivi  
M. Lamberg  
S. Lehtinen  
A. Leppänen  
V. Louhevaara  
T. Luopajarvi  
C.-H. Nygård  
J. Salovaara  
P. Seppälä  
V. Teikari  
M. Vartiainen  
H. Virokannas  
S. Väyrynen  
NORWAY I. Lie  
SWEDEN L. Sperling

**Scientific Advisory Committee**

CANADA I. Kuorinka  
I. Noy  
FRANCE F. Daniellou  
GERMANY H. Luczak  
ITALY A. Grieco  
JAPAN M. Akita  
NORWAY K. Vandraas  
SWEDEN M. Helander  
Å. Kilbom  
UK J. Wilson  
USA H. Hendrick  
W. Karwowski  
ILO J. Takala

## International Scientific Advisory Board

AUSTRALIA

M. Bullock

M. Oxenburgh

BELGIUM

J. Malchaire

D. Notte

K. van Wonterghem

BRAZIL

A. de Moraes

CANADA

L. Buck

B. Das

S. Kumar

PEOPLE'S REPUBLIC OF CHINA

Wei Runbai

Rongfang Shen

CZECH REPUBLIC

J. Formánek

DENMARK

J. U. Christiansen

T. Meisner

FRANCE

S. Bogopolsky

P. Falzon

F. Hubault

H. Monod

Y. Queinnec

GERMANY

W. Hacker

P. Kern

K. Landau

W. Laurig

M. Rentzsch

B. Wilpert

GREECE

I. Banoutsos

L. Laios

HUNGARY

J. Hegedüs

INDIA

R.N. Sen

IRELAND

T. Gallwey

ISRAEL

I. Gilad

ITALY

S. Bagnara

A. Bianchi

G. Caterina

JAPAN

K. Aoki

Y. Hayashi

S. Horino

K. Kogi

M. Kumashiro

M. Nagamachi

S. Saito

REPUBLIC OF KOREA

Sang Do Lee

Nahm Sik Lee

MALAYSIA

H. M. Khalid

THE NETHERLANDS

R. den Buurman

J. Dul

E. Koningsveld

NEW ZEALAND  
POLAND

PORTUGAL  
RUSSIA  
REPUBLIC OF SOUTH AFRICA

SPAIN  
SRI LANKA  
SWEDEN  
THAILAND  
TURKEY  
UNITED KINGDOM

USA

P. Rookmaaker  
M. Verduyssen  
C. Slappendel  
H. Cwirko  
D. Koradecka  
L. Pacholski  
L. Barreiros  
A. Redman  
P. Scott  
L. Strydom  
J. L. Mercado  
C. Pinnagoda  
G. Bradley  
Intaranont Kitt  
A. Özok  
R. Sell  
J. Wood  
O. Brown  
C. Drury  
P. Hancock  
A. Imada  
S. Konz  
R. Koubek  
K. Laughery  
S. Parsons  
R. Pearson  
M.J. Smith



## ***Annex 1.2 Duty Descriptions***

### **Duties of the Organizing Committee**

The organizing committee has the responsibility of organizing the IEA '97 congress. It will carry out this task in accordance with the IEA guidelines of organizing IEA triennial congress, and in accordance with the principles and guidelines given by the FES and NES. The main tasks of the organizing committee are:

- 1) To approve and follow-up the congress budget
- 2) To approve the principles for sponsoring, funding and exhibition
- 3) To decide and give the principles and guidelines of:
  - external services for the congress
  - social and scientific program
  - printed material
  - congress organization
  - congress language
  - transportation
  - congress venue
- 4) To promote the international and Nordic co-operation, especially concerning the program and financial matters
- 5) To accept the Honorary committee, Scientific advisory committee, International scientific advisory board, patronage, and accept the principles of inviting participants from industrially developing countries.
- 6) To report of it's activities and decisions to the FES.
- 7) To report the progress of organizing the congress to the IEA Council and to present to the IEA Council for their approval matters of importance like:
  - the structure of the congress
  - congress budget (especially registration fee)
  - publishing policy
  - selection criteria for presentations
  - relations to industrially developing countries

### **Duties of the Congress Management Committee**

The task of the executive committee is to coordinate all activities in the planning and organizing the IEA '97 Congress. The executive committee implements the decisions of the organizing committee and is responsible for practical decisions in organizational, financial and program items, where coordination is needed in accordance with the principles and guidelines decided in the organizing committee.

The executive committee will be aware of current situation in organizing the IEA '97 congress. It is a forum for information exchange and communication between the organizational bodies. The executive committee controls the timetable of the congress planning to keep all critical activities in time.

The executive committee consists of the chairman of the IEA '97 congress, the chairman of the program committee, the chairman of FES, the deputy chair of organizing committee, the treasurer, the secretary general and the representatives of the Congress Bureau and secretaries of the program committee.

#### Program Committee

The Program Committee is responsible for the planning and arranging of the scientific program of the IEA '97 Congress. The planning and development of the program will be carried out as collaboration between the four member societies of NES in close cooperation with the IEA Council, Science and Technology Committee and its various Technical groups. The practical issues will be handled in collaboration with the Organizing and Economy Committee chaired by Markku Mattila. Mattila as well as the chairmen of NES and FES will attend the meetings of the Nordic Program Collaboration Group.

The strategy, theme, main topic areas including keynote speakers and the main approaches of the working methods of the congress are discussed and agreed by the Nordic Program Collaboration Group, which also follows and coordinates the planning of the congress program. The nominated "contact" person of each NES member society will act as the chairman of the respective national program committee, which will be nominated individually in each country.

Per Langaa Jensen, Denmark

Ivar Lie, Norge

Lena Sperling, Sweden

Pentti Seppälä, Finland

The main tasks of the Nordic Program Collaboration Group are:

- acceptance and interpretation of the congress theme, choosing of main topic areas and special interest areas, considering of keynote speakers
- negotiating the acceptance criteria concerning the papers and other presentations
- discussing the structure of the program and approaches of working methods of the congress

The National Program Committees plan and arrange the parts of the program from the country in question activate researchers and other professionals to send papers and other presentations to the program activate participation in the congress promote the congress in their countries

The Chairmen of the Organizing Committee and Program Committee will take care of the communication with to the Presidents of NES and IEA, the IEA Science and Technology Committee, Scientific Advisory Board and International Scientific Advisory Board as well as the IEA member societies. .

The chairman and secretaries of the Program Committee in Finland will take care of the practical arrangements concerning the program with assistance of the Office of

International Affairs of the Finnish Institute of Occupational Health and in collaboration with the Organizing and Economy Committee. The tasks are:

- to coordinate the planning and implementation of the program both on the nordic and on the national level
- to participate (the chairman and secretary) in the planning and organization of the congress as members of the executive committee
- to correspond with the scientific committees, keynote speakers, IEA technical groups and member societies in matters concerning the program
- to register all the abstracts and take care of all the correspondence concerning them
- to take care of the information to the speakers as well as of other similar tasks concerning the program
- to take care of the practical decisions concerning the final program in collaboration with the executive committee
- to participate in the promotion and marketing of the congress

#### TAVI CONGRESS BUREAU

TAVI will be responsible for the following parts of the practical arrangements of the congress:

- Participation in the meetings of the executive committee.
- Planning and budgeting of the congress arrangements in co-operation with the executive committee.
- Bookkeeping, control and collecting of the registration fees, confirmations of the payments.
- Room reservations:
  - Negotiations with Tampere-hall and the University of Tampere, other room reservations, if needed.
- Negotiations with sub-suppliers and co-operation partners, like airline, printing house, visual planner and makes the co-operation agreement with the Official Carrier.
- Registration services:
  - Participation in the planning of the registration form, pre-registration of the delegates and accompanying persons, confirmation of participation, other correspondence concerning delegates' participation in the congress, collecting registration fees, reports to the organisers upon agreement, registration services on site.
- Printed congress materials:
  - Participation in the planning of the printed material for the congress, language consultations, contacts with translators etc., printing of the participation list, production or purchasing of tickets, signs, badges, kits, etc.
- Accommodation arrangements for congress guests: room reservations, changes, confirmations, contacts with hotels, name lists to hotels by agreed dead lines.
- Technical arrangements and services during the congress:

Meeting room reservations, technical arrangements together with the staff of the congress venue; transport arrangements; possible interpretation arrangements (agreements with interpreters, technical arrangements).

- Social programme, pre and post tours:  
Planning, budgeting and executing the arrangements concerning the social programme of the congress (evening events, spouses programme). TAVI plans the pre and post tours together with the executive committee and a travel agency, makes the reservations and charges the tour fees.
- Congress office and registration services on site on 29 June - 4 July, 1997  
4 representatives of TAVI during the congress, being responsible for on-site registration, hand-out of materials, travel information services. TAVI is also responsible for training and co-ordination of assisting personnel during the congress.
- Lunch and coffee arrangements during the congress:  
TAVI asks for offers from different restaurants in the vicinity of Tampere, Hall and the university, makes reservations and practical arrangements after approval by the executive committee.
- Reports concerning TAVI's responsibilities, conclusion Work after the congress.

#### Duties of the Treasurer

- 1) prepares and controls budget and forecasts cash flow
- 2) responsible for all financial records and accounting and for practices and
- 3) accuracy of financial work performed by the professional congress organizer
- 4) approves all contracts and checks invoices
- 5) provides advice to committees
- 6) develops contingency plans for cash flow management and performs what-if scenarios
- 7) institutes accounting system and internal controls
- 8) produces financial reports and projections
- 9) advise on registration fees and other charges
- 10) plans, designs and executes the sponsoring program to official and commercial sources

#### Duties of Secretary General

- 1) To execute the decisions made by Organizing and Executive committee
- 2) To follow up and control the organizational matters:
  - timeschedule
  - budget
  - printing
  - promotion
  - marketing
  - preparations
  - scientific program
- 3) Congress logistics (address management, contacts to all interest groups, reporting to IEA, etc...)

- 4) Congress marketing (mailing of announcements, contacting to IEA federated societies and other groups of interest, individual contacts)
- 5) Part of the congress correspondence, control of all congress correspondence
- 6) Prepare background material for all promoting and marketing activities
- 7) Organizing and updating information about Congress in Internet (WWW) including electronic correspondence
- 8) Support to all organizing bodies in all matters concerning the congress

## **Annex 1.3 Budget composure**

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### **EXPENSES**

#### **Fixed costs**

##### **1. Conference venue**

###### Tampere Hall

- Meeting room rental
- Technical equipment and furniture
- Poster stands
- Exhibition
- Translation (equipment and technical staff)
- Flags and decoration
- Technical staff

###### University of Tampere

##### **2. Printing and promotion**

- Visual planning
- Language consultation
- Preliminary announcement & Poster
- First announcement
- Second announcement
- Registration form
- Guidelines (authors, session leaders etc....)
- Program
- List of participants
- Proceedings
- Letter papers, envelopes, etc...
- Other printed material

- Invitation cards, lunch tickets, etc.

##### **3. Invited speakers and guests**

###### Invited speakers

- Complimentary registration
- Accommodation for 2 nights
- Banquet

###### Symposia Chairpersons

- Complimentary registration

###### NES Board

- Complimentary registration

###### Nordic Collaboration Group

- Complimentary registration

###### IEA President

- Complimentary registration
- Accommodation
- Banquet
- Travel

###### IEA Executive

- Complimentary registration

###### IEA Council

- IEA Council meeting costs

- Gifts, flowers, etc.

##### **4. Administration**

###### Administrative personnel

###### Congress attendants

- Meals
- T-shirt

###### Stationery, copying

###### Travel costs (before congress)

- Promoting
- Nordic collaboration group
- Local travel

###### Technical supplies

###### Mailing costs

- Announcement postings
- Correspondence
- Telephone and telefax costs
- Bank charges
- 5. Opening ceremonies**
- 6. Simultaneous translation, translators**
- 7. Press conferences and press releases**

**Flexible costs**

**8. Participants**

- PCO services
- Congress kit
- Badges
- Refreshments
- Get together party
- Gift
- IEA capitation fee

**9. Accompanying persons**

- PCO services
- Badges
- Get together party

**10. Students**

- PCO services
- Badges
- Refreshments
- Get together party
- IEA capitation fee

**11. Congress dinner**

**VAT**

**Unforeseen costs (15 %)**

**INCOME**

- 1. Registration fees**
  - 2. Congress dinner**
  - 3. Commercial sponsoring**
  - 4. Surplus from exhibition**
  - 5. Official sources of funding**
-

#### ***Annex 4.1 Key-note speakers***

Professor Rudy den Buurman, the Netherlands  
Dr. Mohan Dinesh, India  
Professor Jörgen Eklund, Sweden  
Professor Antonio Grieco, Italy  
Professor Winfred Hacker, Germany  
Professor Erik Hollnagel, Norway  
Professor Juhani Ilmarinen, Finland  
Professor Per Langaa Jensen, Denmark  
Professor Halimahtun Mohd Khalid, Malaysia  
Professor Kazutaka Kogi, Japan  
Dr. Ernst Koningsveld, the Netherlands  
Professor Danuta Koradecka, Poland  
Dr. Ilkka Kuorinka, Canada  
Dr. Michael Llory, France  
Dr. Mitsuo Nagamachi, Japan  
Dr. Y. Ian Noy, Canada  
Professor Michael J. Smith, USA  
Professor Patrick Rabbitt, United Kingdom  
Professor Eira Viikari-Juntura, Finland  
Professor John Wilson, United Kingdom



**Annex 4.2 Scientific program by topics**

TOPIC	Symposia	Oral sessions	Poster sessions
ODAM/Management/Manufacturing	4	42	1
Designing, Standards	2	29	1
Musculoskeletal disorders	3	26	1
Aging	2	15	1
Occupational safety	2	12	1
Complex systems	1	12	1
Traffic/transportation	1	12	1
Occupational fields	2	12	3
Rehabilitation	1	11	1
Countries in transition/ small industries	-	8	1
Environment	-	8	2
Theories/methodologies	-	7	1
Mental load	-	7	1
HCI/vision	-	7	1
Education/training	-	6	2
Materials handling	-	4	1
Occupational health	-	3	1
Special issues/economics	1	15	2

### ***Annex 4.3 Program committee and tutors for student program***

#### Planning and coordination

Clas-Hakan Nygard, associate professor (course leader), Finland  
Åsa Kilbom, professor, Sweden  
Paula Salonen, assistant, Finland

#### Tutors

Veikko Louhevaara, professor, Finland  
Juhani Kirjonen, professor, Finland  
Per Odenrick, docent, Sweden  
Per Langaa-Jensen, associate professor, Denmark  
Bo Veiersted, Dr., Norway  
Pertti Järvinen, professor, Finland  
Matti Vartiainen, associate professor, Finland  
Lena Sperling, docent, Sweden  
Ivar Lie, professor, Norway

#### ***Annex 4.4 Schedule for the student program***

Sunday 29.6.

- 14.00-14.15 Welcome Ass.prof. Clas-Hakan Nygard
- 14.15-14.45 How to learn from a congress Prof. Asa Kilbom
- 14.45-15.15 Comments and discussion
- 15.15-15.30 Break
- 15.30-16.30 Preparing for the congress in small groups Tutors

Monday 30.6. Guided tour to the exhibition

- 15.30-17.00 Students poster session Prof. Juhani Kirjonen

Tuesday 1.7.

- 10.30-12.00 Workshop on core competencies for ergonomists  
Prof. Margaret Bullock

Wednesday 2.7.

- 15.30-17.00 Workshop on the certification process for ergonomists  
Prof. Margaret Bullock
- 18.00- Sauna evening in Rantavirkkula, Kangasala

Thursday 3.7.

- 15.30-18.00 Lecture: Human centred systems: Research methods  
Prof. Pertti Järvinen  
Lecture and demonstration: Internet as a learning environment  
Mr. Tahvo Hyötyläinen  
Hypermedia laboratory, University of Tampere

Friday 4.7.

- 10.30-12.00 Closing of the students' program, feed-back, discussion

## ***Annex 4.5 Diary***

Minna Kallionpää  
TTKK/Turvallisuustekniikka  
PL 541  
33101 Tampere

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## DIARY

### THOUGHTS ABOUT THE IEA'97 -CONGRESS WEEK 29.6-4.7.1997

*Sunday 29.6.1997*

*Dear diary*

Finally we shall see how our stand in the exhibition hall looks like. So far we have had our ideas and plans and now it feels good to put the plans into practice. Huh, it's hot. The posters we made seem to suit the stand well. We could use another brochure shelf though. And so we are on our way to get one from the storeroom at our University in Hervanta. We complete building the stand just in time to have a quick lunch before the student program begins.

To begin the congress week and the student program Professor Åsa Kilbom gave advice for an inexperienced congress participant. She presented some very valuable thoughts e.g. that shyness or overcommitment can be obstacles that can stop one from learning in a congress. She told us to spend time on the program and to carefully plan the coming week in advance. Her advice was then to prioritize, to choose sessions from our own topic, overviews and keynotes and not to forget other topics of interest. She also put emphasis on not to overcommitting ourselves in order to avoid congress fatigue.

Professor Kilbom also emphasized the importance of follow-up, asking lots of questions, discussions with the poster presenters and when back at the office to change experiences and discuss with colleagues. She also told that though our own presentations are important and they should be well prepared and practiced even more important is to learn from the congress. Also the fact that every congress participant should learn to tolerate disappointments as not all presenters are as well prepared as they should was brought up. And at least for the congress week we should forget our prejudices. I guess she meant in every sense. After the presentation I was impressed that someone, who no doubt have participated numerous congresses, can give so honest and practical advice. So often the experienced seem to forget the confusement that the inexperienced might feel. This was a good start for the week.

As we, three Finns, one Polish and a Chinese are in our small tutor group we realise that one of the major obstacles in our cooperation will be the language problem. It feels peculiar to ask what is your main interest in ergonomics and to get a smile and yes for an answer. But despite these problems the people seem to be happy and we eventually decide that our topic for the week will be the implementation of ergonomics into the design process. We decide to meet tomorrow after our group members poster presentations.

Now I will go and see that everything is OK in the exhibition hall and to see if Markku and Tanja are there so that I could tell them where we have stored our extra brochures.

Here I am, at home. I decide to go through the program as I think of professor Kilboms' words: plan carefully, do not overcommit yourself. But it is difficult to choose as there are so many interesting sessions running at the same time. The decision making gets easier as I look more closely on the topic titles. Only Wednesday morning is more difficult and I decide to settle it later.

*30.6.1997 Monday*

*Dear Diary*

I head straight to the exhibition hall and have a short meeting with Markku, Tanja and Steve. All seems to be ready for the exhibition to open. Somehow I feel that we did awfully lot of planning for this. Did we really need it all? Probably we did.

It's time for the opening ceremony. The big hall is dimly lit and as usual I find it difficult to concentrate. The speeches are more relaxing than inspiring. Then Kirsti Vandraas in her national costume steps into the stage and a first slide of the beauty of Norway is reflected to the huge screen. I suddenly find myself waiting for her words. After her presentation the pictures of animals from a Safari Park, Zoo and Seaworld in San Diego feel very American.

The stage is backlit with a blue spotlight and a silhouette of a accordion player in the middle of smoky stage is reflected in front of us - the whole world of nationalities. The music starts. How did the information leaflet describe the performance - unforgettable? As the music gets almost too loud I try to look at the impressions on peoples faces. At least the four Asian participants in front of us are now awake. They looked so cute sleeping with their heads lolling in exactly same direction.

One of Mondays keynote speakers is Dr. Halimahtun Mohd Khalid. Her presentation about multimedia production is refreshing. The main human factors to take into consideration when designing a multimedia production are the same as in so many other design processes. One should define what it is, why it is used e.g. for education, when multimedia should be used (interactive training / entertainment) and where it should and could be used. And the good old principle of keeping it simple should be remembered here also.

After the keynotes I go to see Dr. Khalid. A colleague of mine had chatted with her and she had mentioned my name, I'm curious to find out if it is about the Asean ergonomics conference. She is very kind and I'm relieved that I had courage to address

her. I wonder if I can find funding for a trip to Kuala Lumpur to the Asean ergonomics conference. In the break I ran to the exhibition hall again.

I decided to follow the topics mostly related to the designing standards. But in order not to follow too strictly on one topic I chose for the first session "Ergonomics and quality: Mutual influence of each other 1". I decided to follow that session not only because the title was interesting but because I wanted to see Colin Drury and Ram Bishu. One of the advantages of the congresses is that the names behind articles and books come alive. Except that Dr. Bishu was not able to attend. But anyway, no longer the authors seem to live in another planet from where they send us pieces of information.

Dr. Drury's lecture was about the challenges of ergonomics and quality. Ergonomics and quality should interact in a global level as in a wider range of competition, suppliers and customers. Globalization would then also result in lower direct costs to customers and make possible the potential of movement of the work content. The economic benefits of ergonomics are known (Hal Hendrick), but a good survey of how the companies really are using ergonomics is still lacking. Drury raised the question about where the TQM fits in the several levels of ergonomics (project, as in an individual work place, program and process, e.g. embedded ergonomics). When uniting ergonomics and quality management different management techniques can and should be applied.

As I'm working in a project where cold work environment is one of the major issues, I decided to spend the afternoon in a session dealing with the effects of thermal and other environmental factors. As the session began I remembered Åsa Kilboms' words: learn to tolerate disappointments: three of the five presenters had not come. And the remaining two presentations dealt with hot work environments. An interesting subject but the presenters should have prepared their presentations much more. At least I now know how I wouldn't like my presentation look or sound like. I feel a little frustrated.

We still have a tutor group meeting after the sessions. Our tutor gives his opinions about one member's poster. Where is the positive feedback? I found the subject interesting as it was about hand tools as my presentation will also be. The poster was also carefully prepared, maybe it wasn't strictly in a scientific format, but in my opinion it didn't deserve such a hard criticism, not without argumentation anyway.

On the corridor I saw a colleague from Oulu and he informed me that we shall have a project meeting tomorrow at 5.30 p.m. I feel hot and tired. On my way home I found a parking ticket on the car windscreen.

*Tuesday 1.7.1997*

*Dear diary*

I skip the keynotes and instead go to see that everything is all right in our stand in the exhibition. Then I try to find U14 to attend a usability testing symposium. I still don't know what is the difference between congress and conference, symposium, free session and special session except that the latter are all special for the participants. But neither did my tutor.

The classroom is crowded, few people are sitting on the floor, the temperature is more tropical than Scandinavian. Patrick Jordan from Philips is the first presenter. His slides are untraditional but carefully prepared, it is nice to have some change from the ordinary. His topic is interesting: Usability evaluation in industry: gaining the competitive advantage. The presentation is about the importance of usability evaluation in industry. The main issue is that the next step in usability testing should be a holistic approach. He stated that the next challenge for human factors is to move from looking of users, tools and tasks to looking at people, products and relationships. Issues such as people's emotions, values, hopes and fears are often ignored. Dr. Jordan's presentation raised thoughts and gave me ideas which could be applied for my own research of hand tools.

The title of the next presentation is "Usability centered research for everyday product design" by Dr. Kanis. The aspect to usability is somewhat the same but the attitude is much more technical than in the former. The presenter stated that the usability is something in between the functions of the product and the user. And always some effort is required from the user in order to use the product. The effort being the sum of perception, cognition and user actions.

In the rest of the session the topics are more philosophical, like is it better to test usability by giving a carefully defined task for the participants or something else like: "Your aunt is coming to visit, explain to her how the video recorder works". This was something I should think more about when planning the next focus group interview.

In the afternoon the usability testing symposium continues with more practical topics, which I find interesting and decide to look at proceeding more carefully after the congress. After the more theoretical themes in the morning session I find it encouraging to learn that there still are people working with practical problems like missing caps of carbonated drinks bottles. I had began to doubt that my presentation would be naïve as I hadn't developed any theories but made a very practical study. It feels good to know that other researchers are struggling with the same kind of problems as I am. And even better is to get some ideas how some of the problems have been solved.

In the evening after the sessions we have our project meeting. At home I still have to go through my presentation which is due tomorrow and to do some laundry as to have my IEA T-shirt clean for tomorrow. It has been a long day.

*Wednesday 2.7.1997*

*Dear Diary*

The weather is still tropical, at seven o'clock in the morning my thermometer glowed in the sunshine and the temperature was 34 °C. I went to listen to the keynotes, and I can remember nothing of them, not even how the speakers looked like. Then I went to the exhibition hall and met people from Mega Electronics. They kindly promised to update our EMG -system, for which I'm grateful.

After lunch I walk to the university and meet Olavi from Fiskars. I'm glad that he agreed to come to the congress. He tells me that he has 78 overheads with him and is

going to show some of them in his presentation and that's about the planning he had done. Well, he's not going run out of words that's for sure.

My own presentation was about the garden pruners that I've been working with for the past year and half. There are familiar faces in the audience, I'm glad that they came. It is encouraging. Three of the presentations are somehow related to Sandvik and two of them to Fiskars. There's some tension in the air. I suddenly realise the responsibility that I have. The participants are probably familiar with the Fiskars pruners if they had collected their congress gifts. After the presentations I get good questions, I'm relieved that there questions and that I can answer them. In the other presentations Sandvik advertises their products quite freely.

From the session we leave with Minna to buy a huge load of beer, wine and sausages for the students' sauna-evening. It was a long but happy day.

*Thursday 3.7.1997*

*Dear Diary*

I decide to skip the keynotes and get some sleep. Then again to U14 to listen a session of development of design process. There is a presentation about the "Implementation of a systematic ergonomics in design program: lessons learned and conditions for success" by Dr. Sullivan. She told us about a SEED program and the seven phases it has. Something that I must remember to read more carefully later on. There are so many interesting topics that I would like to learn more of, I hope that I can find time to at least go through some of the articles in the proceedings books.

Later in the day I learn of selecting a voice for a telephone service for the elderly and see a new design for a snow scraper. In the following session one of the main issues seemed to be the fact that ergonomists often prefer numeric data and tables as the designers are more interested in drawing sketches and having pictures. And they want to know what to do, not what the study results are. There are education and practice differences between the ergonomists and the designers. Often the differences emerge when dealing with variables. The presentation was concluded on the remark that communication between engineers and designers can be a problem and communication between the two groups should be encouraged during the training of new professionals.

One of the most interesting presentations today was the presentation given by John Bonner with the title of "How intelligent should an intelligent product interface be?". He mentioned that we are already using intelligent products but often not realising it. For an example he mentioned a copy machine which recognises the size of the paper on the copy screen.

The use of intelligence is still at a primitive level on consumer products. In future there are many questions to be solved in order to develop intelligent interfaces for consumer products. These questions include issues like: How should an intelligent interface be developed and evaluated? How difficult it is for users to develop mental models of intelligent products? Does the interface need to explain how intelligent it is? How easy it is to evaluate prototype intelligent interfaces without developing all the functionality? What are the consumer perceptions of intelligent products?



It was a very interesting presentation. It gave ideas of an fascinating opportunities related to the intelligence but on the other hand, would I really want to laundry by first selecting numerous parameters and to see how the graph on the screen changes from square to circular, from blue to red and spins more wildly in order to describe the spinning speed.

*Friday 4.7.1997*

*Dear Diary*

It's fourth of July, aren't the American participants supposed to be dressed in US flag or something? It was a good thing that Steve noticed that the American flag was hang upside-down on the other day. It's already Friday, the congress week has passed very quickly.

Dinesh Mohan is one of the keynote speakers. He gave some lectures in one Niva - course that I attended. I quite like his way of reminding the people working in their fancy laboratories what reality is like in the less developed countries. As I sit in the dimly lit hall I think of all the things and events of the past week. I realise now how much this congress has widened my perspective on ergonomics, there are many fields which I would like to find out more about. I also felt happy that there are people working with the same kind of problems as I am. In the future panel I think that one subject of was more or less missing from the program. A lot of research has been done on the field of aging, but where were the child ergonomics? Isn't anybody interested? Well, I would be. Maybe this something to think more about. And then I realise that I'm already thinking of the coming weekend...

**Annex 5.1 IEA '97 delegates by countries**

Algeria	1	Lithuania	2
Australia	30	Malaysia	6
Austria	10	Namibia	1
Belgium	20	New Zealand	9
Brazil	70	Norway	31
Bulgaria	1	Pakistan	1
Canada	38	Poland	35
China	5	Portugal	23
Croatia	2	Republic of Korea	14
Cuba	1	Romania	4
Czech Republic	4	Russia	22
Denmark	72	Saudi Arabia	1
Estonia	8	Singapore	1
Ethiopia	1	Slovakia	3
Finland	313	Slovenia	5
France	70	South Africa	3
Germany	84	Spain	9
Great Britain	68	Sri Lanka	1
Greece	1	Sweden	116
Hong Kong	5	Switzerland	13
Hungary	4	Taiwan	9
India	5	The Netherlands	59
Indonesia	1	Turkey	4
Ireland	4	Ukraine	10
Israel	7	USA	127
Italy	28	Vietnam	1
Japan	115	Yugoslavia	2
Kenya	1		